Interactional Characteristics of Contingency in Dyadic Teacher-Student Scaffolding Interactions: A Case of Iranian Novice and Experienced Language Teachers

Mohammad Khatib*1, Amir Kardoust2

^{1*}Professor in TEFL, Department of English Language and Literature, Faculty of Persian Literature and Foreign Languages, Allameh Tabataba'i University, Tehran, Iran. mkhatib27@yahoo.com

^{2*}PhD student of TEFL, Department of English Language and Literature, Faculty of Persian Literature and Foreign Languages, Allameh Tabataba'i University, Tehran, Iran. kardoustamir@yahoo.com

Article Info	ABSTRACT
Article Type:	Contingency has been claimed to be the central component of scaffolding. By contingency, a calibrated amount of help is provided for the
Research Article	learner. Different methods have been used to study contingency. In this study, contingency has been examined from the conversation analysis perspective in dyadic teacher-learner scaffolding interactions. To reach this aim, a
	convenience sample of Iranian novice and experienced English language teachers were studied in a non-governmental language institute in Tehran.
Received:	Three novice and three experienced teachers were video-recorded for a 90-minute session each to yield a 9-hour corpus. After meeting official protocols, the recordings were transcribed using conversation analysis conventions. The
29/03/2022	results revealed differences between novice and experienced language teachers. Novice language teachers were less contingent towards their
Accepted:	learners as they used more high-support moves like exposed corrections, while experienced language teachers used more low-support moves. Novice language teachers initiated more other-initiated-other-repair interactions but
06/07/2022	experienced language teachers initiated other-initiated-self-repairs. Claims of understanding were also treated differently in scaffolding interactions. Novice language teachers treated these claims as demonstrations and did not follow them, while experienced language teachers followed learners' claims of understanding to ensure learning. Implications for language teachers and educators are then discussed.
	Keywords: Contingency, Conversation Analysis, Experienced, Novice, Scaffolding

Cite this article: Khatib, M., & Kardoust, A. (2022). Interactional Characteristics of Contingency in Dyadic Teacher-Student Scaffolding Interactions: A Case of Iranian Novice and Experienced Language Teachers. *Journal of Modern Research in English Language Studies*, 9(4), 169-190.

DOI: 10.30479/jmrels.2022.17053.2043

©2022 by the authors. Published by Imam Khomeini International University. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0) https://creativecommons.org/licenses/by/4.0





1. Introduction

Contingency has been claimed to be the central characteristic of scaffolding interaction. Wood et al. (1976) believed that in providing scaffolding, the teacher needs two types of knowledge. The first is knowing about the task and its successful accomplishment. The second is the moment-to-moment following of the learner to provide appropriate feedback for a particular learner in a particular task in a particular moment. This characteristic is called contingency. By contingency an adapted level of help is provided for the learner to enhance joint comprehension (Bosanquet & Radford, 2019). This adaptation of support guarantees the success of scaffolding, improves learners' internalization of doing a specific activity, and enhances generalizations of learners' knowledge to similar situations (Puntambekar, 2022).

The inception of contingency by Wood et al. (1978) emphasized the superiority of providing contingent support for learners. The follow-up studies by van de Pol et al. (2012) developed the topic by advancing the contingent shift framework. The framework examined contingency in teacher-learner interactions in small groups. The basic criticism leveled at this model was that the analysis neglected the nuances of the interaction (van de Pol et al., 2012). Therefore, there is a need for examining the details of contingency in teacher-learner interactions.

Despite the claims on the centrality of contingency, a close examination of the studies on the topic reveals that interactional characteristics of contingency has received scant attention in the literature. Stone (1998, p. 355) believed no account is available of the "moment-tomoment contingent relationship between child behavior and [teacher] support". In fact, the interactional characteristics of contingency in dyadic teacher-learner interaction in language classes is largely unknown. Furthermore, teachers' expertise has been claimed to affect the communicative practices that they adopt (Fagan, 2012), and experienced and novice teachers react in different ways to the exigencies of the classroom (Losser et al., 2018). Therefore, this study purported to examine nuances of contingency in dyadic interactions of novice and experienced language teachers.

To reach the aims of the study, conversation analysis (CA) was used to elaborate on the differences between the novice and experienced language teachers' patterns of contingency in their scaffolding interactions. First, based on proposals in the literature on dividing teachers to novice and experienced, the participants were divided to two groups of novices and experienced.

Then, the video-recordings of their classes were used to compile a corpus. This corpus then was transcribed based on CA findings and analyzed to find out how novice and experienced language teachers enacted contingency.

2. Literature Review

Scaffolding was originally conceived of as a dynamic interaction between teachers and learners to foster learners' independence (Wood et al., 1976). From its inception, dynamicity was at the heart of the metaphor. Wood et al. (1978) called this dynamicity contingency. They tried four strategies to help three to five-year-old children master a construction task. The strategies they used were demonstration, verbal instruction, swing, and contingent. Their results demonstrated the superiority of contingent strategy and on the basis of which they advanced a contingency rule which consisted of two parts. The first was to increase the amount of control in the case of learner failure and the second decrease the amount of control when the learners succeed.

Based on this rule, van de Pol et al. (2012) developed the contingency shift framework to measure contingency between teachers and small groups. They believed that the framework can be used to analyze teacher-student dyads as well as teacher and small groups. As the learner's responses were crucial in making decisions, this method was believed to take into account the interactive dimension of scaffolding. Although the model seemed systematic in describing the scaffolding from a contingency perspective, the basic criticism was that it was qualitative and general and used preconceived categories rather than providing micro-analysis of teacher-learner interactions (van de Pol et al., 2012). Similar studies have also used this framework (van de Pol et al., 2018 in studying small groups in science classrooms; Pino-Pasternak et al., 2010 in studying parent-child interactions; Oh, 2005 in analyzing mentors situated assistance).

In order to study nuances of interactions, apart from taking preconceived categories, a more dynamic view is needed. In this interpretation, there is a departure from adopting preconceived categories to study contingency towards taking a dynamic view, therefore, the dynamicity of the teacher and learner utterance is taken into account. Then, the question is how an utterance in dyadic teacher-learner interaction is contingent (Koole & Elbers, 2014). To study contingency from this perspective, CA seems an appropriate method.

CA is inspired by analyzing the nuances of interactions as they are produced in the contingent course of interaction. In taking turns in ordinary conversation, participants to the interaction make references to the talk produced in previous turns to show how they made sense of them (Sacks, 1989). Any subsequent turn displays the interactants' varied comprehensions

of what happened before this turn. Therefore, understanding in the interaction is analyzed through the nextness of turns i.e., the sequentiality of productions. This knowledge is "a natural phenomenon in that conversational sequencing is built in such a way as to require that participants must continually [...] demonstrate to one another that they understood or failed to understand the talk that they are party to" (Moerman & Sacks, 1988, p. 85). An action produced by the first party in the interaction makes an array of contingent actions relevant. In response to the first party's perception, the second party evinces his grasp of the previous turns. All these actions are done by the parties to maintain the intersubjectivity (Schegloff, 1992) of the interaction as it unravels with time (Goodwin, 2002).

The achievement and maintenance of this intersubjectivity are specified by context as it utilizes the contingencies provided in the very fabric of the social interaction (Schegloff, 1992). The contingency of the parties' actions makes it impossible to predict what trajectory the interaction would take (Schegloff, 1996). In this way, it is the contingencies rather than the content of interaction that matters (Garfinkel, 1967). Based on Heritage (1984) the basis of intersubjectivity is the turn-by-turn analysis of the talk in interaction. Using this analysis "a context of publicly displayed and continuously up-dated intersubjective understandings is systematically sustained" (Heritage, 1984, p.259). Extending this conception to education, the contingencies of interaction are not random characteristics but crucial analytic sources for interactants to capitalize on the teachable moments and show learners' knowledge (Lee, 2010).

This interpretation of contingency has been analyzed in a number of research studies. The study by Curl and Drew (2008) is an instance of underlining the importance of contingency in analyzing interaction. They analyzed the syntactic forms the interactants used in making requests specifically using *modals* and *I-wonder-if* constructions. They studied telephone calls to friends and out-of-hour calls to doctors. Their analyses showed that the contingencies and exigencies of interaction rather than the sociolinguistic setting of speech were associated with the use of different request formats. They concluded that the parties' perception and evaluation of the contingencies were the basis for granting the request. In using modal verbs, the participants conceived of their request as non-contingent as they were sure of the fulfillment of their request. On the contrary, in using *I-wonder-if* constructions, they paid attention to the contingencies that may influence their request as they were unsure of the contingencies associated with their request.

In examining contingency in pedagogical discourse, Lee (2007) studied the third turn position in the initiation-response-evaluation (IRE)

construction in the classroom. Unlike the previous studies that used functional categories to study the third turn, Lee used CA to analyze these constructions. He focused on the local contingencies that teachers show in providing their third turns. He concluded that the third turn is an important construction as its design and relevance is shaped by the contingencies of the learner's second turn which is itself contingent on the teacher's initiation, therefore, this position emphasizes the contingent details of teaching.

Koole and Elbers's (2014) study is an instance of studying contingency in scaffolding from a CA perspective. They studied a group of secondary school students learning math. They video-taped the dyadic teacher-student interactions. The interactions then were transcribed using the CA conventions. They took each IRE interaction between the teacher and the learner in which math was dealt with as an instance of scaffolding. They analyzed the interactions in three categories of teacher's response to claims of not-understanding, demonstration of not-understanding, and finally teacher's response to the learner's tokens of understanding. They concluded that in claims of not-understanding, the teacher was not responsive as he addressed the problem that the learner had not indicated in his claim. In the case of demonstrations of not-understanding, again they showed that the teacher was not responsive to the learner's not-understanding as the teacher did not deal with the problem that the learner evinced. In the case of tokens of understanding, these interactions arose mostly in response to the teacher's questions in which the teacher used the mechanism of preference organization to direct the learner towards a special answer. They concluded that in these contexts, the teachers were more contingent as they treated these answers not as the end product rather as further explanation was needed.

Teachers' expertise has also been claimed to affect their enactment of contingency. Bosanquet and Radford (2019) in a qualitative study examined the quality of scaffolding provided by the teacher assistants in working with students with special needs and disabilities. Classes were recorded and CA was used to study the interactions. Results indicated that in comparison to teachers, the teacher assistants' scaffolding was unsuccessful because of the lack of contingency. Turn-by-turn analysis of the interactions of teacher assistants and students revealed that teacher assistants used more correction strategies instead of encouraging self-repair and drawing on learners' resources in providing the answer. In addition, teacher assistants constructed more topics rather than collaborating with the learners to construct topics. Bosanquet and Radford (2019) believed that these interactions could not be regarded as instances of scaffolding since they lacked contingency and therefore could not lead to fading or transfer of responsibility. They recommended teacher assistants should receive training in scaffolding. In fact, in scaffolding, there should be efforts to develop learning experiences in students instead of focusing on task completion (Radford et al., 2011). This requires involving learners in self-repair rather than providing correction, providing less heavy support, avoiding skilled scaffolding, and trying to draw more on the learners' resources. This way contingency is maintained (Bosanquet & Radford, 2019). Support should be kept the least in interactions to enhance learner independence (Wood & Wood, 1996).

From the CA perspective, contingency is represented as "local interactional responsiveness" (Koole & Elbers, 2014, p. 60) in which what the teacher and students make observable to each other rather than the interpretations that they keep for themselves is the main point. Concerning the theoretical underpinning of CA, the meaning of an utterance is created in the course of the interaction following the contribution. Therefore, in this study by contingency, it is meant local interactional responsiveness in ongoing exchanges between the teacher and the learner.

Concerning this view of contingency, and the fact that contingency and its interactional characteristics have not received due attention in language teaching, this study is purported to fill this gap. Therefore, the present study is to examine how novice and experienced language teachers maintain the interactional characteristics of contingency (i.e., repair sequences, high and low-support moves, types of understanding, and interaction space) in their scaffolding interactions with their learners. In specific, the study seeks answer for the following research question:

RQ: What are the interactional characteristics of contingency in teacher-student interactions in novice and experienced teachers' scaffolding in the Iranian EFL classes?

3. Method

3.1. Corpus and Participants

Three novice and three experienced teachers' classroom teachings were video-recorded for the present study. They were four females and two males. Three female and two male teachers held an MA in TEFL and another female had a BA in English translation. Of widely used criteria for dividing teachers into novice and experienced has been their experience in teaching language. Different measures have been adopted to divide novice and experienced teachers (Adjei-Boateng & Amadpu, 2018; Mulder, 2016; Tsui, 2009) although 3 years of teaching experience has been taken as a more realistic measure (Farrell, 2012). Alongside this claim, in this study novice teachers were selected from those with up to 3 years of teaching experience and experienced ones from those with more than 5 years of experience.

The learner participants of the study were six classes of mixed male and female adult learners in a non-governmental language institute in Tehran. Each class comprised up to ten learners. They were mainly undergraduate university students between the age range of 20 to 25. They were preintermediate, intermediate and upper-intermediate language learners learning English for seating international tests, migration, and education purposes.

3.2. Data Collection Procedures

All teachers worked in an institute in Tehran. Each teacher was recorded for a 90-minute session making a nine-hour corpus. Official protocols were observed for using the recordings and the teachers agreed that their classes be used for study purposes. The recordings were then transcribed using CA conventions. The conventions can be found in Appendix 1. The transcripts were checked with another expert to check for consistency and further corroboration. The final database of the study yielded a corpus of more than 75,000 words. The scaffolding episodes were identified in the corpus for further analysis.

The criteria proposed by Walsh (2011) were applied to locate the scaffolding episodes. Walsh (2011) believes that an episode is an instance of scaffolding if there happens to be a breakdown in the flow of discourse necessitating the teacher's timely intervention based on the learner's needs. In this process, the teacher listens attentively and makes wise use of language. Furthermore, in some cases, scaffolding is marked by latched modeling when the teacher immediately intervenes at the end of the previous turn using alternative phrasing and prompting. The result of this joint construction of discourse is a longer and more complex turn by the learner.

4. Results and Discussion

4.1. Contingency in Novice Teacher's Interactions

The extracts in this part are drawn from the dyadic interactions between the teachers and learners focused on varied tasks. The analyses were done through CA. Three extracts were analyzed using this procedure.

Extract 1

In the following extract, the teacher and pre-intermediate learners are discussing a reading passage they have read in the previous session. The text is about the use of new technologies in Japan to help old people live longer. The teacher makes a rapid review of the text the learners have been required to read for this session.

```
757 T: part d aha part d was interesting reading yes\approx 758 L3: \approxves
```

```
759
      T:
          what was the reading about shayan can you tell
me very
760
      quickly
761
     L3: about some technologies that help elderly people
linger
762
     T: aha how does this help them P 
763
      L3: some robots like biorobots ((mispronouncing))
and some pet
764
      robots≈
765
     T: ≈aha pet robots
     L2: something was
766
767 L3: \nablatake care of\nabla (1.70) elder people
768
     T: elder elderly
769
    L3: el:der:ly
    T: elderly people and in what country was they
770
(1.26) tried it
771
     L3: japan
772
     L1: japan ((mispronouncing))
     T: in japan ha very good and it had some (1.18)
773
vocabulary yes⊅
```

In line 757, the teacher localizes the point of focus by asking the learner about the topic of the reading they have read recently. In 759, the teacher asks an open question as he prompts the learner to elaborate on the topic of the reading. In 761, the learner demonstrates his understanding (Sacks, 1992) of the question by giving a detailed answer to the teacher's question. In 762, the teacher corroborates the learner's response and increases his level of control by asking a more nuanced question. The teacher interprets the learner's turn as a sign of understanding; therefore, he introduces the next topic. In 767, the learner initiates his turn to talk about how bio-robots and pet robots take care of elderly people but he is hesitant of his turn as he utters it slowly and has a long unusual silence (Jefferson, 1987) searching for the appropriate word to finish his turn. He finally uses the wrong word.

Upon his incorrect word usage, the teacher provides him with the exposed correction (Radford, 2010). As exposed corrections are done in a way that the learner has to choose them (Radford, 2010), the learner incorporates it in his next turn. The model provided by the teacher also hinders the learner from initiating a self-repair. The repair offered here is an instance of other-initiated-other-repair (Schegloff et al., 1977). The repair in this turn is a correction that is believed to be non-contingent from the CA perspective and strips away the learner from drawing on his resources (Radford et al., 2012). The learner's downward and slow repetition of the teacher's model shows the corrective status of the exposed correction (Radford et al., 2014).

As it is clear in this interaction, in response to the learner's failure to use a construct, the teacher immediately increases the level of his help abruptly without using other levels of help like providing hints or prompts. This way it can be said that the teacher is not contingent on the learner's contribution. Bosanquet and Radford (2019) believe that use of corrections and providing high-support moves diminish the contingency of the interaction as through these strategies learners are not given the opportunity to draw on their own resources.

Extract 2

In this extract, the teacher and pre-intermediate learners are talking about the advantages of having relationships with others. In fact, in this part of the lesson, there is a free discussion about valentine and giving and receiving gifts. The learner in interaction believes that there is no point in having relationships with others and the teacher is trying to convince him to the contrary.

```
47L3: why teacher what the advantage of be (1.45) couple couple couple 48T: what do you mean by advantage of being in couple 49L3: i don't i think i mean it's not it doesn't any advantage
50T: who said it doesn't have any advantage really 51L3: what's the advantage for being in a relationship guys
```

In this extract, the leaner in line 47, initiates a turn to talk about the advantages of having a relationship with others. In this turn, he has a long unusual silence and his turn has grammatical mistakes. In the next line, the teacher restates the learner's turn by providing models of the correct usage for the learner. The models provided for the learner are embedded models (Radford et al., 2015). The embedded model provided is to redress the problem in the learner's previous turn but it is delivered in a way that upon learner's failure, the teacher increases his help suddenly. This sudden increase is noncontingent as in response to the learner's problem, the teacher provides the highest level of help through models to the learner (Radford et al., 2014). In line 49, the learner's turn is a hesitant one as he has a problem in choosing the right word although at the end of the turn, he completes his turn. The teacher in the next turn scaffolds the learner's turn by reformulating the turn by adding the verb to the sentence. Again, this scaffolding is provided in the form of models and can be called noncontingent. Upon the learner's difficulty in using the right word to complete the turn, the teacher directly provides the model instead of using self-initiated repair strategies (Schegloff et al., 1977). The provision of correction closes down the opportunity for the learner to initiate self-repair (Radford et al., 2014) as the learners are deprived of using their own resources.

Extract 3

In this extract, the teacher and pre-intermediate learners are talking about the pros and cons of social networks and being in a relationship with others through social networking sites. The learner has a problem with using the right collocation. She also is not able to use the English equivalent of wise.

```
281 L4: it it becomes you (1.54)
282 T: it makes you
283 L4: it makes you uh (3.30) fahmideh ((Persian equivalent of wise))
284 T: wi:ser
285 L4: wiser yeah
286 T: interesting wiser ok
```

In line 281, the learner misuses the verb becomes instead of make. The learner uses the verb become and through a long unusual silence is going to continue her turn. The teacher in the next turn stops the learner from going ahead by providing him with an exposed correction (Radford, 2010). This correction prevents the learner from going ahead as the teacher rushes into the interaction to provide the correction. These types of corrections are believed to curb the learner from having a space for interaction (Skinner, 2019) as the correction is provided in a way that the learner has to accept it without doing any interactional work to reach the correct meaning. The learner in 283, besides incorporating the teacher's exposed correction, has another unusual silence and is not able to find the suitable word to complete her turn and uses the Persian equivalent instead. The teacher in the next line provides the English equivalent and at the same time provides the learner with the comparative form of the adjective which is suitable for this part of the sentence. As it is evident, the teacher simultaneously provides two models for the learner, the first is the equivalent and the next is the right form of the word for this slot in the sentence. Therefore, the teacher's provision of models for the learner is not contingent based on the learner's evinced contribution. Based on Bosanquet and Radford (2019) use of models instead of hints or any other low-level supports closes down the opportunities for self-correction leading to the loss of contingency in the interaction.

4.2. Contingency in Experienced Teacher's Interactions

The extracts in this section were drawn from the experienced teacher's classes. Three extracts in dyadic teacher-learner interactions were analyzed in this part. The tasks have different foci.

Extract4

In this extract, the teacher and upper-intermediate learners are talking about the ways of communicating with others. Learner4 is talking about the ways he uses to communicate with his friends and customers.

```
L4: ok prefer i use (2.49) by my friends by text
293
message
294 T: aha
295 L4: social network and but my (3.21) by my by my
296
     T: [customer]
     L4: customer yeah i use (1.89) call from call to
297
them
298
     T: we don't say we use call to them we say call
them
299
     L4: yeah
     T: because call is a verb ok on t usually use
that we call
301
       them
```

In line 293, the learner is talking about his preferences in being in relation with his friends but he is not able to construct his intended sentence. The long silence (Jefferson, 1987) in this line shows his inability in composing the sentence. Despite his inability, the teacher, in the next line, signals him to go ahead without intervening or initiating a repair. This nonintervention provides the learner with space to have more interaction (Skinner, 2019). In line 295, the learner initiates another topic, being in contact with his customers, which again turns out to be problematic as he is unable to find the word customer to complete the sentence. In 296, the teacher provides her with the model. The model provided here is based on the assessment by the teacher that she is not able to find the right word to complete the turn. The learner's long silence and her repetition leads the teacher to provide assistance for her to go ahead with her turn. In 297, he appropriates the teacher's scaffolding but again is unable to use the correct verb. In subsequent lines, the teacher elaborates on the use of the verb call and gives direct explanations on the usage.

This part of the interaction can be claimed to be contingent as the teacher, upon the learner's partial understanding, increases her support through giving models of right usage (Radford, 2010). As it is clear, the teacher tries to withhold her temptation to intervene to let the learner use his resources to keep the interaction go ahead. In line 294, there is space for the teacher to intervene but she allows the interaction to unravel. In 296, she just

intervenes minimally by a single word aiming not to interrupt his flow of interaction. In 298, upon the learner's misuse of the preposition with the verb, she provides the model for the correct usage of the verb plus preposition. In fact, at this point of the interaction it cannot be claimed that the teacher is contingent towards the learner as she suddenly increases her level of support (Radford et al., 2014). In line 300, upon the learner's claim of understanding (Heritage, 1992), she further increases her assistance by giving more models in the form of direct explanations. Lines 298 and 300 of this interaction show the difficulty of maintaining contingency in the interaction (Wood, 2003) despite the teacher's attempts to keep her support contingent on the learner's comprehension.

Extract 5

In this extract, the teacher and upper-intermediate learners are talking about the numbers people save on their contact list. They believe that there is no need to save all the numbers we see on the networking sites to our contact list.

```
L1: umm i think there is no need to uhhh (3..21)
746
choose (2.22) a
      lot of numbers for example in social networks
748 T: uhumm
749 L1: when you contact someone (1.83) you i need to
save them in
750
        social network network but unnecessary numbers
are necessary people
     that i didn't i don't (1.04) know [him or her]
751
752 T: |you don't need| they are strangers
753
     L1: yeah
          yeah they are strangers but sometimes we add
754
them
755
     L1: ummm
```

In line 746, the learner is talking about the necessity of keeping only a few numbers on the contact list. In this line, the learner has difficulty composing her intended sentence. The teacher's turn in the next line acts as supportive feedback (Radford et al., 2015) and signals the learner to continue with her intended sentence. In lines 749 to 751, the learner is trying to assert the unnecessity of saving any numbers we encounter in social networks. This long turn poses some challenges for the learner. First, in line 749, there is a long silence and misuse of the subject pronoun *I* and *you*. In line 750, he misuses the *necessary* and *unnecessary* as he is not able to convey his meaning. The teacher's scaffolding in line 752 provides the learner with a candidate offer (Radford, 2010). One characteristic of the candidate offers is that they can be accepted or rejected by the learner. In the next line, the

learner accepts the teacher's candidate. In this line of the interaction the teacher, sensing the learner's difficulty, provides the required support to help the learner convey his meaning in the form of a candidate instead of exposed corrections or models. In 753, the learner claims understanding (Sacks, 1992) of the teacher's scaffolding. In 754 the teacher, based on the learner's claim, again models her answer to the learner. In fact, based on the learner's claim she still maintains the level of support high.

Extract 6

In this extract, the teacher and upper-intermediate learners are talking about personal possessions. There is then a digression to the use of positive and negative infinitives. The teacher sensing the learner's difficulty in using negative infinitives, explicitly teaches this construction at the end of the extract.

```
476
      T:
          later ok good and omid uhh (3.14) your sister
has been
        secretly using your phone to send text messages
477
what would you do↗
    L3: (7.73) i ask her to (2.42) \nabladon't use\nabla
479
     T: yeah
480
     L3: i ask her to
481 T: yeah
482 L3: i ask her to her
483 T: you know i
484 L3: ask
485 T: ask [her]
486 L3: |her| to
487
     T:
         to
488
    L3: don't use
489
    T: to don't use
490
     L3: don't use my cellphone next time
491
    T: ((writing the learner's sentence on the board))
is it ok⊅
    L3: i ask her to
492
493
    T: so after ask we always use (1.70) use to plus
verb infinitive
494 yes P it's a positive verb but when we make it
negative we have to
    use not to (1.64)
496
     L3: aha
497
     T: plus verb so i ask her to use I ask her [not to
498
     usel
     L3: | not to use | aha
499
500
     T: don't is not a good verb here ok you never use
the
501
     negative form of infinitive [is not to]
502
     L3: |not to | not to use
```

In response to the teacher's open question in line 476, the learner initiates a turn to elaborate on his answer. In line 478, the learner has a long unusual silence searching for the right word to complete his turn. He is hesitant about his use of the negative construction as he utters it slowly. Despite his hesitance, the teacher by using supportive feedback through the use of acknowledgment token (Radford, 2010) signals him to go ahead. In 480, the learner tries to complete his turn which is again acknowledged by the teacher. In 483, the teacher hints the learner to start his sentence by the personal pronoun I. In 485, by incorporating the learner's previous contribution, the teacher provides another hint for the learner to use ask her which is accepted in the next overlapping turn by the learner. In 489, the teacher repeats the learner's utterance to highlight the structure he has constructed up to that point of the interaction. In 490, the learner composes his intended sentence and the teacher upon failure of her hints writes the learner's sentence on the board and asks the learner to elaborate on it. Asking this open question provides the least support for the learners (Bosanquet & Radford, 2019) as it asks them to use their resources to come up with the answer.

In 493, the teacher first asks a question to ensure the learner's knowledge that *infinitive plus to* should be used. After maintaining the direction, she introduces the model for the learners. In 497, unsatisfied with the learner's claim of understanding (Heritage, 1992) in the previous turn, she provides more follow-ups by providing the learners with more models. As it is evident in this extract, the teacher first exercises a low and high-level support strategy (Pentimonti & Justice, 2010) adroitly. First, she uses hinting and shadows the learner's production in some subsequent lines before exercising the provisions of models or giving direct explanations. In fact, she behaves contingently on the learner's production. Her contingent provision of help gives the learner space for interaction (Skinner, 2019) to use his resources to complete her turn. This way the continuity of interaction is warranted and intersubjectivity of the interaction is maintained.

4.2. Discussion

The original characterizations of scaffolding regarded contingency as the most important characteristic. Contingency was claimed to lead to fading and consequently to the transfer of the responsibility to the learner (van de Pol et al., 2010). This concept was first introduced by Wood et al. (1978) who introduced the contingent shift principle. Following studies led to the introduction of the contingency shift framework (van de Pol et al., 2012). The framework claimed to conduct a quantitative microanalysis to measure scaffolding. Besides these quantitative methods, CA is also capable of

elaborating on the concept. This method does a turn-by-turn analysis of the interaction. Due to the lack of studies on the interactional characteristics of contingency, CA was used in this study to pinpoint the interactional characteristics of the contingency. Although contingent tutoring is easier said than done due to the intricacies and intellectual demands that it puts on the teacher (Wood, 2003), the study was to provide a better picture of scaffolding in novice and experienced language teachers' scaffolding interactions.

The findings in this study indicate that there are differences between novice and experienced language teachers in providing scaffolding and maintaining contingency in their dyadic interactions with their learners. The first point is that despite the difficulty of maintaining contingency in the interaction (Wood, 2003), experienced teachers were more contingent towards their learners in comparison with novice teachers. Wong and Waring (2010) claim that maintaining contingency is difficult for novice teachers. The reason may be that maintaining contingency in interaction requires a good knowledge of the needs of the learners, tasks the learners are to do and the curriculum to be covered in the classroom (Radford et al., 2014), skills which are difficult to master by novice teachers (Losser et al., 2018). The analyses showed that the novice teachers were not totally contingent towards the learners as instead of using low-support moves like hinting and prompting, they used high-support moves like providing models (Pentimonti & Justice, 2010). This provision inhibits learners from drawing on their own resources and increases the learner's dependence on the teacher (Radford et al., 2014). As it is evident in the extracts, maintaining the contingency in interaction was even difficult for the experienced teachers as in some points of the interaction, they were not totally contingent towards the learners.

The second point with regard to the findings is that experienced teachers provide more interaction space for their learners than novice teachers. The novice teachers in the study provided more exposed and direct corrections while the experienced teachers initiated more self-repair strategies. In providing exposed corrections, the teachers provide a model that the learner has to accept in the next turn (Radford, 2010). By provision of exposed corrections, the learners are deprived of space for interaction and drawing on their own resources. The experienced teachers, on the contrary, provided more spaces for interaction by initiation of self-repairs. From among the three types of repair initiations proposed by Schegloff et al. (1997), other-initiated-self repairs makes the learner draw more on their resources (Bosanquet & Radford, 2019) than other-initiated-other-repairs. The repair initiations by the novice teachers in this study were instances of other-initiated-other-repairs as the teachers themselves initiated repairs and rapidly provided the support for the learners in the next turn. The enactment

of these types of repairs by the novice teachers highlight one feature which has been ascribed to novice teachers that they use more latching and overlapping turns to provide corrections for their learners (Skinner, 2019). The analyses of further extracts in the corpus corroborated that novice teachers used more latching and overlapping turns. This strategy is believed to take away the precious opportunities to interact (Skinner, 2019). In contrast to novice teachers, experienced teachers provided more space for their learners by use of discourse continuers.

Another difference between novice and experienced teachers was their treatment of claims of understanding. In the extracts analyzed, the novice teachers were satisfied with these claims and did not take any followup moves to ensure learning. They treated these claims as tokens of understanding rather than claims while experienced teachers followed the claims by providing more support to ensure learners' mastery. This corroborates the findings of previous studies. Koole and Elbers (2014) concluded that the teachers they studied were less contingent towards claims of understanding and claims of not-understanding but they were more contingent towards tokens of understanding, although they did not include the teacher's expertise in their analyses. The novice teachers in this study treated any claims by the learners as tokens of understanding as they did not take any follow up moves while the experienced teachers treated claims as demonstrations of not-understanding and took measures to follow-up the learners to ascertain learning. The novice teachers' treatment of these claims and their concern with task completion rather than learning process (Radford et al., 2014), can hinder the success of scaffolding.

As successful scaffolding is dependent on contingency (van de Pol et al., 2010), the treatment of claims as tokens of understanding hampers contingency. In claims of understanding, the real learning does not happen but the learner just shows that he has grasped (Heritage, 1992) while in demonstrations the following turns shows that learning has happened. In the extracts analyzed, the learners used some tokens to claim that they have comprehended. Upon these claims, the novice teachers decreased their support. On the contrary, the experienced teachers maintained their support to ensure comprehension has occurred. Therefore, it corroborates the claim that experienced teacher's talk is more in line with scaffolding theory than teachers with less experience (Bosanquest & Radford, 2019).

Concerning the above claims, it is not an easy task to sustain contingency in interaction. Empirically, it has been observed that most face-to-face interactions between teachers and students or even parents and children are in no way maximally contingent (Wood & Wood, 1996). Even

trained adults on contingency cannot be claimed to stick to contingency rules perfectly (Wood et al., 1978). This non-responsiveness may be a characteristic of classroom interaction as the institutional context of the classroom is different from other institutions (Koole & Elbers, 2014). The teacher's non-contingency may be related to the teacher's institutional role of addressing the whole class while participating in dyadic interaction.

5. Conclusion and Implications

The present study examined interactional characteristics of contingency in novice and experienced language teachers' scaffolding interactions. The findings revealed differences between novice and experienced language teachers in managing repair sequences, shadowing learner understanding, using high and low-support moves, and creating interaction space. The findings enhance our knowledge of how teacher expertise impacts the use of interactional characteristics of contingent scaffolding.

Although this study did not represent an exhaustive list of interactional characteristics used by experienced and novice teachers due to the limitations of the corpus used, the limited number of extracts analyzed, and the lack of longitudinal data, the findings can have a number of implications. First, they can raise awareness of how teacher expertise surfaces in real-time classroom interactions. Despite general guidelines in language teacher education attributed to the discourse of novice and experienced teachers, the findings can help fine-tune the boundaries between the discourse of novice and experienced language teachers. Second, successful patterns of interactions used by experienced teachers can be used as models to train novice teachers. This way, novice teachers can be trained to provide more high-quality scaffolding. Third, by close scrutiny of teacher-learner interactions, a better picture of both experienced and novice teachers' instructional practices is provided. Thereby, teacher educators can utilize CA to examine how teachers in situ actions improve or hinder learner participation in classroom interactions.

Further research can be conducted on contingency using larger corpora and longitudinal research designs to amend the shortcomings of this study. In this way, a more vivid picture of contingency in classroom interactions is developed. Furthermore, using CA to study other key characteristics of scaffolding and the effects of teacher expertise on their enactment in real-time teacher-learner interactions can be a venue for future studies.

References

- Adjei-Boateng, E., & Ampadu, E. (2018). Collaborative learning as a pedagogical tool to improve students' learning. In J. Keengwe (Ed.), *Handbook of research on pedagogical models for next-generation teaching and learning* (pp. 118-134). IGI Global. https://doi.org/10.4018/978-1-5225-3873-8.ch007
- Bosanquet, P., & Radford, J. (2019). Teaching assistant and pupil interactions: The role of repair and topic management in scaffolding learning. *British Journal of Educational Psychology*, 89(1), 177-190. https://doi.org/10.1111/bjep.12231
- Curl, T. S., & Drew, P. (2008). Contingency and action: A comparison of two forms of requesting. *Research on Language and Social Interaction*, 41(2), 129-153. https://doi.org/10.1080/08351810802028613
- Fagan, T. K. (2012). School psychology. In D. K. Freedheim, & I. B. Weiner (Eds.), *Handbook of psychology* (Vols. 1, History of psychology, pp. 413-431). John Wiley & Sons, Inc.
- Farrell, T. S. (2012). Novice-service language teacher development: Bridging the gap between preservice and in-service education and development. *TESOL Quarterly*, 46(3), 435-449. https://doi.org/10.1002/tesq.36
- Garfinkel, H. (1967). Studies in Ethnomethodology. Polity Press.
- Goodwin, C. (2002). Time in Action. *Current Anthropology*, *43*(4), 19–35. https://doi.org/10.1086/339566
- Heritage, J. (1984). Garfinkel and Ethnomethodology. Polity Press.
- Heritage, J. (2007). Intersubjectivity and progressivity in person (and place) reference. In N. Enfield & T. Stivers (Eds.), *Person Reference in Interaction: Linguistic, Cultural and Social Perspectives Linguistic, cultural and social perspectives* (pp. 255-280). Cambridge University Press. https://doi.org/10.1017/CBO9780511486746.012
- Jefferson, G. (1987). On exposed and embedded correction in conversation. In G. Button, & J. R. E. Lee (Eds.), *Talk and social organization* (pp. 86–100). Clevedon, UK: Multilingual Matters [Originally in Studium Linquistik, (1983) vol.14, 58–68.].
- Koole, T., & Elbers, E. (2014). Responsiveness in teacher explanations: A conversation analytical perspective on scaffolding. *Linguistics and Education*, 26, 57-69. https://doi.org/10.1016/j.linged.2014.02.001

- Lee, Y. A. (2007). Third turn position in teacher talk: Contingency and the work of teaching. *Journal of Pragmatics*, 39(6), 1204-1230. https://doi.org/10.1016/j.pragma.2006.11.003
- Lee, Y. A. (2010). Learning in the contingency of talk-in-interaction. *Text & Talk An Interdisciplinary Journal of Language, Discourse & Communication Studies, 30(4), 403–422.* https://doi.org/10.1515/text.2010.020
- Losser, J. L., Caldarella, P., Black, S. J., & Pate, P. E. (2018). Factors affecting service-learning implementation: a comparison of novice and veteran teachers. *Teachers and Teaching*, 24(6), 659-672. https://doi.org/10.1080/13540602.2018.1464906
- Moerman, M., & Sacks, H. (1988). On "understanding" in the analysis of natural conversation. In M. Moerman (Ed.), *Talking culture: Ethnography and conversation analysis* (pp. 180–186). University of Pennsylvania Press.
- Mulder, M. (2016, April). The competence construct in educational practice: A critical review of global critiques. In *WERA Focal Meeting*, Washington DC, United States
- Oh, P. S. (2005). Discursive roles of the teacher during class sessions for students presenting their science investigations. *International Journal of Science Education*, 27(15), 1825-1851. https://doi.org/10.1080/09500690500239714
- Pentimonti, J. M., & Justice, L. M. (2010). Teachers' use of scaffolding strategies during read alouds in the preschool classroom. *Early Childhood Education Journal*, 37(4), 241-248. https://doi.org/10.1007/s10643-009-0348-6
- Pino-Pasternak, D., Whitebread, D., & Tolmie, A. (2010). A multidimensional analysis of parent-child interactions during academic tasks and their relationships with children's self-regulated learning. *Cognition and Instruction*, 28(3), 219-272. https://doi.org/10.1080/07370008.2010.490494
- Puntambekar, S. (2022). Distributed Scaffolding: Scaffolding Students in Classroom Environments. *Educational Psychology Review*, *34*(1), 451-472.
- Radford, J. (2010). Practices of Other-initiated Repair in the classrooms of children with specific speech and language difficulties. *Applied Linguistics*, 31(1), 25-44. https://doi.org/10.1093/applin/amn046
- Radford, J., Blatchford, P., & Webster, R. (2011). Opening up and closing down: How teachers and TAs manage turn-taking, topic and repair in

- mathematics lessons. *Learning and Instruction*, 21(5), 625-635. https://doi.org/10.1016/j.learninstruc.2011.01.004
- Radford, J., Bosanquet, P., Webster, R., Blatchford, P., & Rubie-Davies, C. (2014). Fostering learner independence through heuristic scaffolding: A valuable role for teaching assistants. *International Journal of Educational Research*, 63(1), 116–126. https://doi.org/10.1016/j.ijer.2013.02.010
- Radford, J., Bosanquet, P., Blatchford, P., & Webster, R. (2015). Scaffolding learning for independence: Clarifying teacher and teaching assistant roles for children with special educational needs. *Learning and Instruction*, 36, 1–10. https://doi.org/10.1016/j.learninstruc.2014.10.005
- Radford, J., Ireson, J., & Mahon, M. (2012). The organization of repair in SSLD classroom discourse: How to expose the trouble-source. *Journal of Interactional Research in Communication Disorders*, *3*(2), 171–193. https://doi.org/10.1558/jircd.v3i2.171
- Sacks, H. (1989). Lecture four: An impromptu survey of the literature. *Human* Studies, 12(3/4), 253–259. https://doi.org/10.1007/BF00142769
- Sacks, H. (1992). Lectures on conversation: Volume I. Blackwell.
- Schegloff, E. A. (1992). Repair after next turn: The last structurally provided defense of intersubjectivity in conversation. *American Journal of Sociology*, 97(5), 1295-1345. https://www.jstor.org/stable/2781417
- Schegloff, E. (1996). Turn organization: One intersection of grammar and interaction. In E. Ochs, E. Schegloff, & S. Thompson (Eds.), *Interaction and Grammar*, Studies *in Interactional Sociolinguistics*, (pp. 52-133). Cambridge University Press. https://doi.org/10.1017/CBO9780511620874.002
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The Preference for Self-Correction in the Organization of Repair in Conversation. *Language*, 53(2), 361–382. https://doi.org/10.2307/413107
- Skinner, B. (2019). Let's move on: second language trainee teachers' talk and its impact on learner interaction, *The Language Learning Journal*, 49(5), 513-526. https://doi.org.10.1080/09571736.2019.1642371
- Stone, C. A. (1998). The metaphor of scaffolding: Its utility for the field of learning disabilities. *Journal of Learning Disabilities*, *31*(4), 344-364. https://doi.org/10.1177/002221949803100404

- Tsui, A. B. (2009). Teaching expertise: Approaches, perspectives, and characterizations. In A. Burns & J., Richards, J. (Eds.), *The Cambridge guide to second language teacher education* (pp.190-197). Cambridge University Press.
- van de Pol, J., Mercer, N., & Volman, M. (2018). Scaffolding student understanding in small-group work: Students' uptake of teacher support in subsequent small-group interaction. *Journal of the Learning Sciences*, 28(2), 206-239. https://doi.org/10.1080/10508406.2018.1522258
- van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher-student interaction: A decade of research. *Educational Psychology Review*, 22(3), 271-296. https://doi.org/10.1007/s10648-010-9127-6
- van de Pol, J., Volman, M., & Beishuizen, J. (2011). Patterns of contingent teaching in teacher-student interaction. *Learning and Instruction*, 21(1), 46-57. https://doi.org/10.1016/j.learninstruc.2009.10.004
- van de Pol, J., Volman, M., & Beishuizen, J. (2012). Promoting teacher scaffolding in small-group work: A contingency perspective. *Teaching and Teacher Education*, 28(2), 193-205. https://doi.org/10.1016/j.tate.2011.09.009
- Walsh, S. (2011). Exploring classroom discourse: Language in action. Routledge.
- Wong, J., & Waring, H. Z. (2010). Conversation analysis and second language pedagogy: A guide for ESL/EFL teachers. Routledge.
- Wood, D. (2003). The Why? What? When? and How? of Tutoring: The Development of Helping and Tutoring Skills in Children. *Literacy Teaching and Learning*, 7(1), 1-30.
- 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
- Wood, D., Wood, H., & Middleton, D. (1978). An experimental evaluation of four face-to-face teaching strategies. *International Journal of Behavioral Development*, 1(2), 131-147. https://doi.org/10.1177/016502547800100203
- Wood, D., & Wood, H. (1996). Vygotsky, tutoring and learning. *Oxford Review of Education*, 22(1), 5-16. https://doi.org/10.1080/0305498960220101

Appendix 1

```
Conventions used in the transcripts
         shift to high pitch
              shift to low pitch

n rise to mid

                level
                latching
               top begin overlap
               top end overlap
                bottom begin overlap
               bottom end overlap
        \nabla
               slower
        ??
               unsure
                softer
               louder
()silence
```