Teachers' Scaffolding and Preferences of Display vs. Inferential Questions: Initiation-Response-Follow-up (IRF) Model

Ehsan Narimani Vahedi¹ & Seyyed Nasser Mousavi^{2*}

- 1. Department of English, Tabriz Branch, Islamic Azad University, Tabriz, Iran. narimani.ehsan@yahoo.com
- 2. Department of English, Ardabil Branch, Islamic Azad University, Ardabil, Iran mousavi.nasser1981@gmail.com

Abstract

This study explored the referential or display questions used in teachers' scaffolding and investigated if they conform to Initiation-Response-Follow-up model. To do so, 6 teachers in young-adult and 6 in adult department, in each department 3 experienced and 3 inexperienced were analyzed. Being full-time teacher or 3-year period one was considered to distinguish the experienced from inexperienced teachers. Three Reach 2 classes with experienced and 3 with inexperienced teachers in young-adult department, and in adult department, 3 Pre-intermediate 1 classes with experienced and 3 with inexperienced teachers were recorded and analyzed through IRF model. The frequency of referential and display questions and uptakes of scaffolding between teachers were also compared. Results indicated experienced teachers used more display questions in scaffolding adult students, while inexperienced ones preferred referential ones. Conversely, experienced young-adult teachers used more referential questions, and inexperienced counterparts used display questions. Moreover, IRF model was met by referential and display questions in adult classes, while it was violated in young-adult classes. Finally, much of the scaffolding in adult classes was more successful than youngadult classes. This study raises teachers' awareness toward their choice of questions in the classroom to trigger a genuine interaction and its conforming to IRF framework.

Keywords: Referential Question, Display Question, Initiation-Response-follow-up Model

Introduction

In the hay day of interaction-based instruction which was emerged through *pushed output* and *interaction hypothesis*, most Iranian teachers try to masquerade a kind of pedagogical intervention to involve students in interaction and get rid of pedantic use of language which was so prevalent in traditional language classes. However, the teachers' preoccupation with the grammar teaching obliges them to make use of interaction as a way to elicit targeted grammatical features that doesn't allow the production of a genuine interaction (Ellis, 2008).

Considering explicit and implicit teaching extremes in continuum, there are many input- and output-based techniques to raise students' awareness and make them notice the gap between their interlanguage and target language. While in Krashen's *input-hypothesis*, the students' production stage is postponed to the time that they feel cognitively ready, Long's *interaction hypothesis* and Swale's *output hypothesis* put emphasis on urging students to produce from the early stages of learning through providing prefabricated patterns or formulaic expressions (Schmidt, 1990).

In the L2 classroom, according to Xu (2009), the feature of talk is of high importance in that language is not only the means through which learning is mediated but also a crucial characteristic of the pedagogical goal in it. Alexander's conceptualization of dialogic teaching included three collections of talk recommending that a dialogic teacher should not only ask assessment questions to draw out review and recitation. Rather he or she requires adopting discussion and scaffolded dialogue to promote genuine interaction of views. Changing the conventional framework of IRF, such as initiating with a negotiatory question, revoicing and strategic reformulation, follow-up that encounters learners to explain, contrast or clarify can also conclude into the initiating of classroom talk, thus producing more beneficial and facilitative conditions of learning. In addition, teachers in the dialogic classroom do not always carry out the primary knower role; instead their dependable and institutional role can be delayed in order to encourage genuine dialogue and different voices in the language classroom (Xu, 2009).

Facilitation is usually suggested as a distinct option for the teacher-fronted classroom. On the other hand, while teacher talk has been related to the utilization of the IRF pattern, interactional patterns for facilitator talk have ended up being trickier to Clifton (2006). Through the utilization of naturally-occurring classroom data, facilitator talk can be characterized in practice. However, since the facilitative classroom paves the ground for the teacher to provide more dependence on the learners, this suggests a more liberated pattern of interaction in which who says what to whom and when is less compelled. Subsequently, facilitator talk cannot be secured to any one single pattern of interaction (Clifton, 2006). Respectively, this paper sheds light on certain interactional questions which could be depicted as facilitative.

Late communicative approaches have proposed that one objective of English language teaching should be to recreate 'genuine' or 'natural' as opposed to "typical" or "traditional" classroom communication (Seedhouse, 1996). In his opinion, such an objective can be both contradictory and unachievable, and that there are important

shortcomings in the assumptions underlying the communicative orthodoxy concerning ELT classroom interaction. The following assumptions:

- 1) Genuine or natural communication,
- 2) Teachers' replication of genuine or natural communication in the classroom, but not succeeding to do so,
- 3) Teachers' interaction production with the IRF cycle and display questions; typicality of traditional classroom interaction which is rare in genuine or natural communication.
- 4) Teachers' training to replicate genuine or natural communication in the classroom; have made a lot of teachers feeling at fault about the communication in their own classrooms, and distrustful of the researchers recording their lessons. It additionally discusses that it would be more appropriate to take an institutional discourse approach, where classroom discourse is viewed as an institutional variety of discourse, in which interactional components relate perfectly to institutional objectives (Seedhouse, 1996).

According to the aforementioned underlying issues, teachers' adopt different' questioning techniques to trigger a real interaction or elicit targeted language features. To this end, different question types correspond with each other which are as follows: leading questions, funnel questions, rhetorical questions, chunking questions, open-ended questions. In addition, referential questions and display ones are two more examples used in teacher-initiated interactions (Vanlier, 1988).

Triggered by Clifton's facilitation (2006) and Seedhouse's (1996) communicative assumptions explaining classroom discourse different from genuine interaction, the researchers' of this study were curious to explore classroom language in facilitating the instruction process and acting as mediators. In addition, it is attributed into scaffolding the learners through simplified language accompanied with display questions or referential ones to examine the communicative language teaching principles.

Related to classroom language and discourse, looking for recurring patterns of interaction, Sinclair and Coulthard (1975) proposed I (initiation), R (response), F (follow-up) model to analyze the teacher-pupil interaction and produce a well-fabricated framework to cover all class interactions. This model examines the reflection of contextual features in structural features, it incorporates transaction, exchanges and moves which are hierarchical. In reaction to inadequate objectivity of IRF model, Politzer (1980) proposed a more sociolinguistically oriented model named *Conversation Analysis*. And in order to determine whether classroom language can be embedded in a prefabricated pattern like IRF model or not, this research aims at exploring the referential questions which may trigger unpredictable pattern of interaction in contrast to artificial display questions without neglecting to scaffold the learners.

Out of thesresearchers' observation and informal interviews, most Iranian teachers in order not to disturb their authority and because of their not having confidence in the case of material coverage and linguistic knowledge and sometimes wrong assumption from discipline and class management, they try to dominate the class and prefer a traditional, teacher-fronted lessons. This may lead to the intension of knowledge transmition through

asking the learners display questions. Actually, these are the questions which the teachers already know their answers. In this case, students to somehow are engaged in some sort of activity and urged to produce language which is the main focus of 'pushed output' and 'interaction hypothesis' but only for the sake of facilitating instruction. Therefore, this study can be related to scaffolding the learners in terms of IRF model and check the role of teachers' experience in this process. To this end, this study is an attempt to investigate the different interaction patterns that experienced and inexperienced teachers may trigger through referential and display question types according to IRF model and to what extent these lead to a genuine interaction or scaffolding the learners through referential and display questions.

Numerous studies (Xu, 2009, Clifton, 2006, Seedhouse, 1996, Guk, & Kellogg, 2007, Lee, 2006, Chin, 2006, Kirchhof, & Klippel, 2014, Behnam, & Pouriran, 2008) have attempted to explain the difference between classroom discourse and a genuine interaction. However, far too little attention has been paid to teaching aspect of classroom discourse which may vary according to different variables like teachers' experience having been tapped in this study. In addition, this study attributed the scaffolding aspect of teaching to the classroom discourse and teachers' questioning types.

Teachers' Question Types and Related Metaphors

Here different questions are explored to understand the main focus of this study:

Leading Questions: One way of influencing a person is to ask them questions that are deliberately designed to make them think in a definite way. 'Leading questions' involve the answer; guide the listener in the right path, or some form of clues to guide them to the right answer. Leading questions are often directional in that, while they do not indicate an answer, they block unwanted options and guide the person in a favored direction. Various questioning techniques and principles can be manipulated in leading questions like, assumption principle, association principle, linked statements, implication questions, agreement questions, tag questions, and coercive questions (Nunan, 2009).

Divergent and Convergent Questions, Funnel Metaphor: 'Funnel questioning' seeks further information in order to make it either more specific or more general. These types of questions can be used to find out increasing detail about some particular topic of interest. This narrowing the funnel gives more information about a smaller area. Increasing detail is similar to deductive reasoning, where thinking goes from general to more specific. Asking "tell me more about" as an open-ended question allows the other person more leeway in what they say and gets you more detail. This causes a slower convergence. The reverse of narrowing the funnel is to broaden the funnel and asking questions that give you less specific information and more general information about more general topics. Decreasing detail is similar to inductive reasoning, where thinking goes from specific to more general. Using precision words and broadening words like "specifically", "actually" and "what other", "who else" can help maintaining the flow of interaction. Using vague questions may cause divergence in contrast to convergence (Lowenberg, 2009).

Rhetorical Questions: Rhetorical questions are not really questions, but statements given in question format. Public speakers often use rhetorical questions in the middle of

speeches. Of course, the audience cannot all answer, but the intent is to engage them in thinking and consider what answer they would give if they could. *Hedging* as a type of rhetorical questions is used to make a statement but is not confident enough to assert a point. This type of question allows others to disagree, but is not necessarily seeking agreement. *Self talk* questions are answered by the speaker immediately after posing them without waiting for response. *Terminating statement* is the way of stopping the other person from answering by putting a statement of some sort immediately after the question. Thus, there is no space for the person to answer the question and they are directed more by the final statement than the question. This is the case that mostly this research is going to be referred in classroom discourse (Long, 2009).

Referential and Display Questions: Referential questions and display questions as the main focus of this study are utilized in different setting that correspond with some characteristics of aforementioned questioning techniques. Referential questions are mostly adopted in genuine interaction which the speaker doesn't know the answer and can be seen in real-world context while display questions are specific to classroom setting and the answers are known to both speaker and listener (Brock, 1986).

Studies Related to Classroom Discourse and Scaffolding

According to Guk and Kellogg (2007), Vygotsky's `zone of proximal advancement (ZPD)' has gotten to be connected with the individual `scaffolding' of learners. Thus, in light of the fact that educators need to instruct the entire class, numerous state funded teachers have needed to release the idea as unworkable. Yet Vygotsky himself was essentially concerned with state funded school showing and immovably dismisses the thought of a 'pedagogical two-part harmony' between learner and instructor. He likewise released the instructor who endeavored to give the troupe of learning substance by him or herself as a 'rickshaw puller', contending rather that a teacher ought to be a 'tram driver', who composes the social environment of learning. Restricted in which the teacher may do this is by interceding a learning task for a solitary learner or a gathering of learners, who then intercede the undertaking for their schoolmates in gathering work. We present proof that in this circumstance the path in which learners intervene tasks varies from the route in which instructors do, and contend that this proposes learner-to-learner intervention is in imperative courses closer to what Vygotsky termed 'internalization'. We accept that T-S and S-S interactional intervention don't make two separate ZPDs yet might rather exist in a solitary, entire class ZPD (Guk, & Kellogg, 2007).

Regarding scaffolding related to teachers' experience, Heron and Webster (2018) examined instructional objectives which may be supported by experienced teachers' classroom talk in pre-sessional and in-sessional EAP lessons. A framework which specified scaffolding for metacognitive, cognitive and affective activities was utilized to check the four teachers' support of pre-sessional and in-sessional students' understanding of academic language and discourse practices. Video recording of four teachers' EAP lessons in two pre-sessional and two in-sessional lessons indicated that despite scaffolding of language and affect prevalence in classroom talk in all four lessons, goal-focused metacognitive scaffolding was significant in in-sessional EAP lessons. So, more

scaffolding focused on objectives can be provided to pre-sessional EAP teachers through connecting activities to the general EAP objectives.

Putting the teacher-student interaction in a structure, Jaeger (2019) explored the discourse patterns that arise when a tutor provided feedback to student's mistake. The study is designed based on Bakhtin's notion of dialogue in which communication is affected by the interlocutors' features of identity and how it influences a dialogic teaching setting. This study used excerpts from eight already tutoring studies served as a basis. Audio-recordings of 40 hours of instruction with two fourth grade readers constituted the first data source. Having had open coding, a covering classification like questioning, providing information, and demonstrating strategy use and within these issues more detailed codes were conducted over the transcripts. The results indicated that: (a) the tutor's moves were diverse and proportional and varied among individuals (b) some interactional stages seemed more effective than others related to the topic and child, and (c) interactions in this context differed in important ways from the ones in the research literature. This study suggests that the dialogic characteristics of tutor/tutee interactions can serve the children involved.Lee (2006) explored that past examination into teachers' questions has concentrated on what sorts of questions are more favorable for developing students' communicative language use. In this respect, display questions, whose answers the teacher knows, are viewed as less powerful on the grounds that they constrain open doors for students to utilize genuine language use (Long & Sato, 1983). In spite of the fact that the examination into teacher questions has been refined lately, it is not sure the amount we think about how display questions work, particularly how they are delivered and followed up on sometime during classroom interaction by language teachers and students. This article utilizes a sequential analysis to inspect teachers' display questions. Sequential analysis considers how classroom talk is the result of the unforeseen coordination of interactional work of normal comprehension (Moerman & Sacks, 1971/1988, as cited in Lee, 2006). Through examination of transcribed interaction in an English as a second language (ESL) classroom, this article contends that display questions are focal assets whereby language teachers and students arrange their lessons and produce language pedagogy (Lee, 2006).

The reason for Chin's (2006) study was to (a) add to an analytical framework that speaks to classroom talk and questioning in science, (b) figure out how teachers utilize questioning to draw in their students in considering conceptual content that empowers the development of knowledge, and (c) recognize the different manifestations of feedback given by teachers in the follow-up of the IRF arrangement of teaching experience. A few lessons from Year 7 classes were observed over a mixed bag of lesson structures, for example, expository teaching, whole-class discussions, laboratory exhibit, and hands-on practical work. The lessons were audiotaped and recorded. Transcripts of the lessons were made and investigated, with specific consideration paid to interactions that included questions. Utilizing the "questioning-based discourse" analytical framework grew in this study, four separate sorts of feedback were recognized. Interactional issues identified with methods for talking and scrutinizing that triggers student reactions and speculation are tended to. This data gives a portrayal of what constitutes powerful discourse in science teaching and learning, and will likewise be helpful for both teachers and teacher-educators

in recognizing a suitable collection of aptitudes for consequent teacher education and expert improvement.

Kirchhof and Klippel (2014) reported initial phases in an analysis of teacher language in ELT classrooms which are being taped in German secondary schools. With the devices of discourse and conversation analysis the attention is on teachers' questions in their instructional setting. Teachers' questions can perform a scope of diverse uses both in the different communicative and pedagogical circumstances in a lesson and inside the IRF cycle. They contend that even cognitively basic questions ought not to be ignored as they may serve a critical use in the language learning process. At last, they recommend a reassessment of the IRF cycle on the premise of our discoveries and they propose a reworking of Nunn's (1999) framework for question analysis as a state of takeoff. The data from this research demonstrate that there are significant differences between model and pedagogic lessons. Regarding external features, the model lessons would appear to be taking after a common arrangement that could be seen by an observer, and the subtle elements are moderately clear. The internal features are likewise significant, in that they are organized and give clear proof of the different classroom modes. However, the external features of the pedagogic lessons are less clear-cut, giving a fluctuated picture of exercises and interaction. Internal features are likewise more complicated, with a lot of mode switching, and strikingly the strength of managerial mode for teacher A, in spite of the fact that classroom context mode is absent in both. Despite the fact that it is impractical to analyze teachers and lessons straightforwardly, it is intriguing to note that both model lessons include significantly more words in the same time period than the pedagogic classes, demonstrating a conceivable hunger to exhibit control and competence (Kirchhof, & Klippel, 2014).

Xu (2009) inspected teacher questions in the Intensive Reading (IR) classrooms at the tertiary level in China. It has been observed that teacher questions were chiefly used to obtain factual reports or recitation derived from the factual information in the text and those they seldom confirmed students' assistance by involving their reactions and aids into succeeding questions. This is the typical monologic classroom discourse. To face the superiority of monologic discourse and trigger classroom talk so as to facilitate learning conditions in the IR classroom, possible explanations are recommended in two main facets: first, inclusion of teacher questioning techniques that change the established IRE format; second, reconceptualization of classroom teaching as dialogue instead of monologue. The first viewpoint mainly concentrates on the micro level of this problem while the second its macro extent.

Related to the effect of teachers' questions on the learners' involvement in interaction, Al-Zahrani and Al-Bargi (2017) checked the impact of questions on encouraging interaction and specified questions features which enhance optimal classroom interaction. Out of analyzing the transcription of the video-recordings of participating classes in intermediate level, the questions were categorized into two types: questions triggering classroom interaction and questions failing in conducting classroom interaction. Therefore, the questions cognitive level, complexity, type – referential or display – and the communication pattern were taken into account. The findings reflected that verbal questions asked, produce different interaction levels according to the questions' features.

In other words, some question types significantly improved classroom interaction while others failed to do so.

Wright (2016) focused on display and referential questions related to the frequency of output considering researchers' ideas about SLA merits. To this end, fifty-two Japanese adult EFL learners' output was recorded during a communicative activity in which display and referential questions were used to elicit output. Using units of length and complexity of Brock (1986) and Chaudron (1988) as cited in Wright Brenda (2016), the output was analyzed quantitatively. The effects of the question types on output were checked and excerpts of pushed output communication for meaning were also explored. A qualitative analysis of students' views about their output for the two question types showed the same differences and insights related to motivation. This study demonstrated that referential questions generally in the interactive context of a communicative classroom may be advantageous in eliciting output, negotiation and SLA.

Behnam and Pouriran (2008) explained the most important difficulty in ELT as getting the learners ready to use the English language to participate in conversations inside and outside the class. Six classes at intermediate level (nine hours) were recorded in their total. The study surveyed frequent patterns of questioning activities and their interactive effects were monitored through nonparticipant observation. The results of this study showed that display questions were used by the teachers more repeatedly than referential questions. Also, it was inferred that all referential questions could not create enough interaction.

Methods

The aim of this paper is to determine and compare the frequency of referential and display questions used by experienced and inexperienced teachers in adult and young-adult classes according to IRF model. To this end, the type of interaction, a genuine or classroom, can be inferred. Furthermore, regarding referential-display questions, IRF model and teachers' experience, different teachers' scaffolding can be checked to tap their learning aspect. Therefore, this paper seeks to address the following questions:

- **Q1:** To what extent do experienced and inexperienced teachers in adult and young-adult classes use referential and display questions? And do these uses conform to the IRF Model?
- **Q2:** Which teachers' scaffoldings lead to uptake in terms of referential-display questions, IRF model and experience?

Classroom discourse consists of a teacher and the students. Twelve experienced and inexperienced teachers at the ILI (Iran Language Institute) were taken account of this study. Therefore; six teachers in young-adult and six in adult department, in each department three experienced and three inexperienced were analyzed. Full-time teacher with six classes and teachers' 3-year period qualification to transfer from teaching to young-adults to adults at the adult department were considered to distinguish the experienced from inexperienced teachers. This study avoided the large age-range between the teachers and among the students. Therefore, 3 *Reach 2* classes with experienced and 3 with inexperienced teachers in young-adult department (pre-intermediate proficiency

level), and in adult department, 3 *Pre-intermediate 1* classes with experienced and 3 with inexperienced teachers were recorded and analyzed through IRF model. The EFL learners as convenient samples were at different ages, between 15 to 28, male and Iranian. The number of learners in each class was between 14 and 22.

The required data for this study were recorded, transcribed and then analyzed through IRF (Initiation-Response-Follow-up) model. The textbooks being taught were *English Time 5* for young-adults with a *Work Book* and a *Supplementary Book* and *Pre-intermediate 1* with a *Work Book* for adults. Each unit of *English Time 5* includes different sections of *Conversation Time, Word Time, Focus Time, Practice Time, Reading Time,* and *Your Time*. And specifically, conversation time, word time sections cover a picture description task and your time has a pair work. And each unit of pre-intermediate 1 consists of *Vocabulary, Dialog, Reading, Grammar,* and *Listening* sections.

Procedures

Since this study is an attempt to investigate the Iranian teachers' experience in using referential and experiential questions, each experienced and inexperienced groups of teachers should be homogeneous within themselves. This condition was met through the criteria of full-time teacher and 3-year period for teaching to the adults. Therefore; 12 teachers (young-adult = 6, adult = 6), in which 3 were experienced and 3 inexperienced ones, were chosen as the participants. Since asking questions by teachers without students' response may be nonsense therefore, there should be students with logical proficiency level and capable of answering questions to let the teachers ask the targeted questions and provide the researcher with the ample of data. To this end, pre-intermediate proficiency level students in Reach 2 classes of young-adults and Pre 1 classes of adults were taken into account. Then 6 successive sessions of every teacher, which is around different topic prompts were recorded. Since the data were recorded by the researcher observing the class, the first three sessions before starting the record were not taken into account to control the teachers' and learners' expectancy and any possible halo effect. Moreover, in order to achieve authentic data record, no instruction was given to the teachers on using different question types (referential and display). At last, a three-part process of Record-Transcribe-Analyze (R-T-A) was done to specify and compare the frequency of the referential and display questions occurrence in different experienced and inexperienced teachers' classes according to the IRF model. To this end, Chi-Square formula was run in the SPSS.

Results

Chi square test was used to answer research questions. In table 1, frequency of the application of referential questions based on teachers' experience and class type (adult, young-adult) was reported

Table 1	. Frequency	of Referential	Questions Based	l on Teachers' E	xperience and Class Type	e

	adult classes		young – adult classes		Total
	Frequency	Percent	Frequency	Percent	
experienced teachers	29	36.25	51	63.75	80
inexperienced teachers	68	71.58	27	28.42	95
Total	97	•	78	•	175

The chi square test of differences between experienced and inexperienced teachers in adult and young-adult classes in the application of referential questions is significant at 0.001 alpha level ($X^2 = 21.94$, p < 0.001). So it may be concluded that there are significant differences between experienced and inexperienced teachers in adult and young-adult classes in the application of referential questions. According to table 1, experienced teachers in young-adult classes used referential questions (63.75%), more than their inexperienced counterparts that the employment of this question type was (28.42%). Also According to table 1, inexperienced teachers in adult classes used referential questions (71.58%), more than experienced teachers that the employment of this question type was (36.25%). In table 2, frequency of the application of display questions based on teachers' experience and class type was reported.

Table 2. Frequency of Display Questions Based on Teachers' Experience and Class Type

	adult classes		young – adult classes		Total
	Frequency	Percent	Frequency	Percent	
experienced teachers	75	72.82	28	27.18	103
inexperienced teachers	55	38.19	89	61.81	144
Total	130		117		247

The chi square test of differences between experienced and inexperienced teachers in adult and young-adult classes in the application of display questions is significant at 0.001 alpha level ($X^2 = 28.87$, p < 0.001). So it may be concluded that there are significant differences between experienced and inexperienced teachers in adult and young-adult classes in the application of display questions. According to table 2, experienced teachers in adult classes used display questions (72.82%), more than their inexperienced counterparts that the employment of this question type was (38.19%). Also as shown in table 2, inexperienced teachers in young-adult classes used display questions (61.81%), more than experienced teachers (27.18%). In table 3, frequency of the conformation of IRF model based on teachers' experience and class type was reported.

Table 3. Frequency of the Conformation of IRF Model Based on Teachers' Experience and Class Type

	adult classes		young – adult classes		Total
	Frequency	Percent	Frequency	Percent	
experienced teachers	73	50.34	25	23.58	98
inexperienced teachers	72	49.66	81	76.42	153
Total	145		106		251

The chi square test of differences between experienced and inexperienced teachers in adult and young-adult classes in the conformation of IRF model is significant at 0.001 alpha level ($X^2 = 18.42$, p < 0.001). Based on this significant result it may be concluded that there are significant differences between experienced and inexperienced teachers in adult and young-adult classes in the conformation of IRF model. According to table 3, both experienced and inexperienced teachers conformed to IRF model in adult classes, (50.34%) and (49.66%) respectively. But in young-adult classes inexperienced teachers conformed to IRF model (76.42%), more than experienced teachers (23.58%). In table 4, frequency of the application of scaffolding based on teachers' experience and class type was reported.

Table 4. Frequency of the Scaffoldings Leading to Uptakes Based on Teachers' Experience and Class Type

	adult classes		young – adult classes		Total
	Frequency	Percent	Frequency	Percent	
experienced teachers	94	67.63	45	32.37	139
inexperienced teachers	79	81.44	18	18.56	97
Total	173		63		236

The chi square test of differences between experienced and inexperienced teachers in adult and young-adult classes in the application of scaffolding is significant at 0.05 alpha level ($X^2 = 5.57$, p < 0.02). So it may be concluded that there are significant differences between experienced and inexperienced teachers in adult and young-adult classes in the application of scaffolding. According to table 4, in adult classes both experienced (67.63%) and inexperienced (81.44) teachers used scaffolding more than experienced (32.37) and inexperienced (18.56) teachers in young-adult classes.

Sample of Referential (RO), Display Questions (DQ), IRF, and Scaffolding: Extract 1:

- T: OK- As you saw in the movie- when the teacher was asking questions and interacting with his students, he moved around to all of them.
- T, (DQ): what did the teacher do when the learners did not understand his questions? (I)
- S1: Generally the teacher did not ask too much questions in class. (R)
- T, (DQ): much questions? (F) Scaffolding
- S1: Too many questions (uptake), when he had a question, the students were already prepared for the question and the group leaders were responsible for answering the questions. (R)
- S2: yes, so the teacher generally did not ask so many questions in class. (R)
- S3: the teacher moved around and asked some questions in order to assess them. (R)
- T, (DQ): you mean the teacher just managed the class without interacting with students? (F)
- S2: you know, uh.., here, the teacher clearly depended on group leaders to complete the tasks.

T, (RQ): what is your idea [to all students]? Do you agree with our friend [S2]? (I)

S4: yeah, S2 is right... actually, he used group leaders as task-doers and he did not try to interact with other students. He seemed to isolate himself from them. (R)

T, (DQ): can you explain more? What do you mean by your last sentence? "He seemed to isolate himself from them"???? (I)

S4: he did not try to have conversation with other students except group-leaders, so he did not notice whether all the students got the task or not. (R)

S3: Yeah, for example, two boys didn't understand, what the teacher just said. They didn't ask the teacher any questions and they just ...uh, they try not...they did not participate at some points. (R)

T: Um.

S5: And I thought they did not understand what the teacher said. But they were in groups so they were there. (R)

T: Um, um (silence) Yeah, that's, ah, surely, this is going to be sometimes, when, when the fact that the students don't understand, scares the teacher, the teacher didn't notice and this is really, his responsibility, which is, I guess, it's his own negligence. Ah, he should've tried to address that. You're right. (F)

Extract 2:

T, (RQ): Today's discussion topic is television and I want to start the discussion with this question. Is television dangerous? This is my question. (I)

S1: Somebody say watching TV is bad for our children and our family. (R)

T, (DQ): Somebody say? (F) Scaffolding

S1: Yes, It's bad. (R)

T, (RQ): Why? Let's go back and remember when I was child. There was no TV, no cellophane, no computer or things like them. (I)

S2: We had to go out of home and play with our friends just that. And our brain was growing very slowly. But at the moment our children teach everything by watching TV. Bad or good.(R)

S3: but it is important to know which programs are good and which of them are bad. (R)

T, (RQ): ok, good, what else? (I)

S4: Our children have civilized ourselves. (R)

T, (DQ): ourselves? (F) Scaffolding

S4: themselves. (*uptake*) They learn science, art, music, sport and act. They can find their life and their future easily by open eyes. They'll understand the problems of social. They can see different people from every place of earth. (*R*)

T (DQ): earth or...? (F) Scaffolding

S4: the earth. (R) (uptake)

T, (RQ): Why do some people think television destroys their family? (I)

S4: I think TV can learn we... (R)

T, (DQ): learn we? (F) Scaffolding

S4: teach us (R) (uptake) how we can have a good family, good children and lovely relation. If we see a bad movie after that we'll talk about that and try to do not that, every nation see the sport game of their country team. (R)

T, (DQ): See or watch? (F)

S4: watch. (*R*) (**uptake**) And by watching that some of them will be happy or some of them will be sad. So, I think TV is good for our family and our children and for our sense. (*R*)

S5: Generally I agree with this idea that television has become a dangerous device. At first it was only for pleasure but these days it's something addictive. (R)

T (RQ): what do you mean? Can you explain more? (I)

S5: well, if you enter a house most of the time you see the father for instance watching News and the other family members must be silent while he's watching TV, or the son of the house is watching sport all the time with a loud volume during dinner time nobody is paying attention to the food, they're just following the movie. They're addicted. (R)

T (DQ): you said that they are addicted, how can it be possible for a person to be a TV addicted? (I)

S5: Addiction is not only about drugs but also about everything. If you use something in a wrong way it has the same effect as drugs! (R)

Oualitative Results

This study was not just limited to answering the research questions quantatively. However, during data collection, exploring the referential/display questions, IRF model, and scaffolding, researchers came across different related patterns qualitatively which will be presented here:

- 1. Teachers' questions may vary according to different activities like picture description task, discussion, and video activity.
- 2. Most of the questions being asked in Initiation move were referential.
- 3. And most display questions were asked in follow-up move.
- 4. Most of the scaffoldings occurred in follow-up move.
- 5. Scaffoldings and display questions were matched
- 6. Display questions demand short clear-cut, and linguistic answers while referential ones triggered long answers and discussions which can be related to convergent and divergent questions.
- 7. Most of the display questions and scaffoldings were incidental while referential questions were planned.
- 8. Some moves may take double functions of response and initiation.
- 9. It can be inferred from the researcher's observation that not all moves or uptakes are verbal, some are gestural.
- 10. And some uptakes are pseudo, and are not the sign of learning for example: learners just nodded their heads.

Discussion

In reviewing the literature, no data was found on the association between classroom discourse IRF related to teachers' questioning and scaffolding. This study set out with the aim of assessing the importance of teachers' use of display and referential questions in IRF model considering teachers' experience and scaffolding. The current study, comparing experienced with inexperienced teachers scaffolding of adult students, found that display questions were used more by experienced ones. And surprisingly, inexperienced ones used referential questions. On the other hand, experienced young-adult teachers used more referential questions, while inexperienced counterparts used display questions. Furthermore, teachers in adult classes conformed to IRF model through referential and display questions, while it was not followed in young-adult classes. Finally, much of the scaffolding in adult classes led to more uptakes than young-adult classes.

In line with the focus of this study, display and referential questions, some types of questions have been proposed as leading questions, to emphasize the directional aspect like display questions. In addition, divergent questions to display and convergent questions to referential ones can be attributed. And funnel was a metaphor to clarify divergent and convergent questions. Moreover, since rhetorical questions are not real questions and they are used to make them think, display questions can be related as unreality aspect but its real-life counterpart.

Addressing the first research question, this study is in contrast to some ideas of Xu (2009) who suggested that teachers' assessment questioning for the sake of just instruction and learning should be delayed to carry out a genuine interaction rather than the IRF model of classroom discourse. This study showed that different teachers according to their experience, as a sign of capability, and their learners being young-adult or adult adopt different questions of referential or display. This case may fall into IRF model, scaffolding or a genuine interaction. Therefore, it can be inferred that many determining factors necessitate the use of specific questions and none of the discourse type classroom or genuine interaction can be preferred to the other. Furthermore, in disagreement with Heron and Webster (2018) who showed experienced teachers' success of scaffolding in EAP setting, this study reflected inexperienced teachers' use of referential questions in scaffolding in contrast to the experienced teachers' use of display questions as a time-saving technique in teaching.

Backing this study, which introduced some intervening factors in accomplishing a genuine interaction, Seedhouse (1996) explained some unachievable assumptions related to communicative orthodoxy. Therefore, teachers may feel free in language use rather than guilt whenever they use specific questions and interactional pattern like institutional variety of classroom discourse. As an evidence to this claim, the second part of the first question indicated that IRF model was met by referential and display questions in adult classes. A possible explanation for this might be that adult learners come to class with a learning expectation and because they are always aware of the existence of a kind of pedagogical intervention they consider any type of question as pedagogical and artificial and they try to meet the form rather than meaning. In addition, similar to this study, Jaeger

(2019) showed that IRF model can vary according to different factors which this studied posed some as the experience, question types and scaffolding. Related to the third question about scaffolding, Clifton (2006) recommended facilitation as an alternative case between IRF and a genuine interaction which may reflect itself in scaffolding of this study. In agreement with this study, Guk and Kellogg (2007) emphasized the importance of scaffolding. Contrary to their belief in student-student scaffolding, this study showed positive results in teacher-student scaffolding. To the researchers' knowledge, the inconsistency may be due the ILI setting as the teacher-fronted classes that the students get used to and expect to receive any help from the teacher. And besides, being youngadult and adult learners can be another factor in their reliance on teachers' scaffolding. In line with Lee (2006), viewing display question as constraining communicative language use but being adopted by teachers in language pedagogy, this study agreed in the use of display questions by experienced teachers of adult and inexperienced ones of young-adult learners. Besides, consistent with Al-Zahrani and Al-Bargi's (2017) study which explored the questions based on different features leading to interaction, this study zeroed in on referential and display questions considering different features affecting their efficiency. Likewise, this study is in line with Wright (2016) regarding the efficiency of referential questions in triggering genuine communication. Parallel to this study, Chin (2006) did his research on the feedback aspect of IRF model and questions that draw the learners' attention toward developing knowledge. These questions can be similar to the features of display questions in this study. Consistent with Kirchhof and Klippel (2014) who examined teachers' questions in different communicative and pedagogic conditions considering IRF model, this study checked referential and display questions considering experience in IRF model. In addition, Kirchhof and Klippel (2014) gave a fuzzy picture between IRF model and pedagogic lesson similar to this study which yielded different uses of referential and display questions according to teachers' experience meeting or violating IRF model. Behnam and Pouriran's (2008) study, who showed repeated use of display questions, was extended in this study through the inclusion of teachers' experience and teaching to adults and young-adults. As a result, this study indicated changing questioning techniques according to different factors.

Conclusion

The present study examined the use of referential and display questions by experienced and inexperienced teachers to young-adult and adult learners regarding IRF model and checked the frequency of teachers' scaffolding leading to uptakes. One unanticipated finding was that experienced teachers used more display questions in scaffolding of adult students, while inexperienced ones preferred referential ones. This result may be explained by the teachers' intention to tap just pedagogical aspect as linguistic. On the contrary, experienced young-adult teachers used more referential questions, and inexperienced counterparts used display questions. These results can be justified by referring to teachers' awareness about the young-adult learners having a meaning default. IRF model being met by referential and display questions in adult classes can be related to that the adult learners in contrast to young-adult learners do not primarily pay attention

رتال جامع علوم اتبايي

to meaning. However, they come to class with learning expectation. And to this reason, much of the scaffolding in adult classes was more successful than young-adult classes. Hence, it could conceivably be hypothesized that ateachers' questioning may vary according to experience and the learners being adult or young adult. And different factors urging the change in IRF model or following it should not make the teachers feel guilty about relying on an artificial discourse type because different situations may demand different questioning approximations.

Disclosure Statements

The authors of this study declare that they have not been supported by any organizations. And, there is no conflict of interest in this study.

ORCID

Seyyed Nasser Mousavi: 0000-0003-4445-6651

References

- Allwright, D. (1988). Observation in Language Classroom. London: Longman.
- Al-Zahrani, M. Y. & Al-Bargi, A. (2017). The Impact of Teacher Questioning on Creating Interaction in EFL: A Discourse Analysis. *English Language Teaching*, 10(6), 135-150.
- Behnam, B., & Pouriran, Y. (2009). Classroom Discourse: Analyzing Teacher/Learner Interactions in Iranian EFL Task-Based Classrooms. *Porta Linguarum*, 12, 117-132.
- Brock, C. (1986). The Effect of Referential Questions on ESL Classroom Discourse. *TESOL Quarterly*, 20(1), 8-47.
- Chin, C. (2006). Classroom Interaction in Science: Teacher questioning and feedback to students' responses. International Journal of Science Education, 28(11), 1315-1346.
- Clifton, J. (2006). Facilitator talk. English language teaching, 60(2), 142-150.
- Ellis, R. (2008). Principles of Instructed Second Language Acquisition. *CAL Digest*, 1-6. Guk, I., & Kellogg, D. (2007). The ZPD and whole class teaching: Teacher-led and student-led interactional mediation of tasks. *Language Teaching Research*, 11(3), 281-299.
- Heron, M. & Webster, J. (2018). Scaffolding talk in EAP lessons: an examination of experienced teachers' practices. *Innovation in Language Learning and Teaching*, 13(4), 358-370.
- Jaeger, E. L. (2019). Initiation, Response, Follow-up and Beyond: Analyzing Dialogue Around Difficulty in a Tutorial Setting. *Dialogic Pedagogy: An International Online Journal*, 7, 1-26. https://doi.org/10.5195/dpj.2019.195
- Kirchhoff, P., & Klippel, F. (2014). On the Role of Teacher Questions in EFL Classrooms: Analyzing Lesson Videos. Second Language Learning and Teaching, 87-100.

- LEE, Y. A. (2006), Respecifying Display Questions: Interactional Resources for Language Teaching. TESOL Quarterly, 40, 691–713.
- Long, M. H. (2009). Rhetorical Questions. ILI Teachers' Know How. 2(12), 5-6.
- Lowenberg, P. H. (2009). Questioning technique: Funnel Questioning. *ILI Teachers'* Know How, 2(5), 4.
- Nunan, D. (2009). Leading Questions. ILI Teachers' Know How. 2(11), 5.
- Politzer, R. (1980). Requesting in elementary school classrooms. *TESOL Quarterly*, 14(2), 165-174.
- Schmidt, R. (1990). The role of consciousness in L2 learning. *Applied Linguistics*, 11, 129-158.
- Seedhouse, P. (1996). Classroom Interaction: Possibilities and Impossibilities. *English Language Teaching*, 50(1), 16-24.
- Sinclair, J. & Coulthard, M. (1975). *Towards an Analysis of Discourse*. Oxford: Oxford University Press.
- Vanlier, L. (1988). The Classroom and the Language Learner. London: Longman.
- Wright, B. M. (2016). Display and referential questions: Effects on student responses. *Nordic Journal of English Studies* 15(4), 160-189.
- Xu, L. (2009). Teacher Questioning as a Way to Open up Dialogue in the EFL Intensive Reading Classrooms in China. *Journal of Cambridge Studies*, 7(4), 101-115.



