



Investigating Teacher-Learner Classroom Interaction: Learner-Contingent Feedback across Proficiency Levels and Teacher Experience

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Abstract

Initiation, Response, and Feedback (IRF) is the dominant classroom interactional pattern that, if employed adequately, can facilitate learners' transition from other-regulation to self-regulation by providing scaffolded learner-contingent feedback. However, the extent to which the teaching experience and learners' proficiency level may impact teachers' employment of this interactional resource still awaits scrutiny. Hence, the present ethnographic classroom research explored possible variations in novice and experienced teachers' use of IRF patterns and graduated/contingent feedback (GCF) when teaching upper and lower intermediate classes. To serve the purpose, 20 English classrooms at nine branches of a well-known language school in Tabriz during the same semester were selected that were being taught by five novice and five experienced teachers teaching based on purposive sampling. The classroom procedures were observed, recorded, and transcribed based on a validated researcher-designed observation form. The frequency of the IRF and GCF in the transcribed data were estimated and analyzed through a Chi-square test to find out variations across the proficiency level and teaching experience. The results revealed that teaching experience could predict the frequency

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of the IRF pattern use but not the GCF in the final turn; GCF was significantly disproportionate to the general use of IRF patterns and more frequent at a lower intermediate level.

Keywords: Classroom Discourse; Graduated/Contingent Feedback; IRF; Proficiency Level; Teaching Experience

INTRODUCTION

Second and foreign language learning can be described as an intricate, multifaceted and dynamic process in which success is a relative concept and remarkably reliant on a wide range of contextual characteristics relevant to learners and the instructional context. Regardless of such variables, however, research findings in the last few decades have accentuated the prominence of negotiation for meaning in enhancing learners' communicative competence (R. Ellis, 2015; Ortega & Byrnes, 2009). In the last decades of the 20th century, attempts by cognitive interactionists to describe how negotiation for meaning unfolds in varying contexts and how interaction enhances learners' comprehension underscored the distinctive interactional patterns dominating ESL and EFL contexts (Long, 1996; Swain, 1996; Young, 2011). Experts have now reached a consensus over the facilitative effect of interaction and delineated unique features of ESL and EFL contexts that may interplay with the process of negotiation. The most dominant interactional pattern dominating classroom discourse is the triadic Initiation, Response and Feedback (IRF), most commonly focused on form mainly in the last turn. The first turn reflects the teacher's input providing comprehensible input and elicits some response to check the learner's

understanding. Observation of incongruous features in the learners' response can prompt the teacher to offer corrective feedback (CF) to draw the learner's attention to discrepancies. Provision of the IRF pattern, along with CF, is assumed to boost learners' scaffolded involvement (Duff, 2007), focus their attentional resources, and promote learning (Willett, 1995).

Conventionally, the benefits of CF were substantiated concerning the attentional sensitivity it creates to discrepancies between the response and the juxtaposed feedback (Saxton, 1997) and the implicit priming effect of exposure to the standard feature and the influence on subsequent learning (S. Gass, 1997). These virtues were initially justified concerning the error-contingency nature of feedback. More recent developments in the field, however, attribute the effectiveness of CF to learner-related factors, on the one hand, and the approaches to second language learning define contingency as best-evidence predictions about outcomes based on attention to relevant cues detected in the input and feedback (N. Ellis, 2007). These cues are provided, as posited in sociocultural theory (Lantolf, 2006; Poehner & Lantolf, 2005), at the social, interpersonal level of learning when the learner is interacting with a more competent peer at a potential Zone of Proximal

Development (ZPD) for learning that is interactionally created.

From this social perspective, feedback is envisaged as jointly negotiated assistance between the novice and the expert, or more specifically as the finely-tuned other-regulation support to facilitate the emergence of self-regulation (Aljaafreh & Lantolf, 1994; Lantolf & Aljaafreh, 1995). This type of learner-contingent CF is claimed to be primarily graduated in that it starts off as implicit prompts to allow self-discovery by the learner and becomes increasingly explicit following the learner's ZPD. Scaffolded feedback is also contingent on the learner's ZPD and is withdrawn at any stage of the implicit-explicit continuum as the learner notices the erroneous form and shows signs of an independent correction.

Graduation and learner-contingency, rather than error-contingency, types of CF have been found efficient in classroom language learning (Nassaji & Swain, 2000) because the classroom represents a social community with the teacher functioning as the expert interlocutor and the learner as the novice and classroom discourse comprising forms of talk that teachers and learners use to communicate with each other (Xin, Luzheng, & Biru, 2011). IRF pattern is the eminent interactional pattern dominating this instructional setting. Despite pros and cons of various features of classroom IRF interactions scrutinized in field research (Wells, 1993), the growing consensus is that teachers' assistance should be sensitive to learner's ZPD, particularly in the provision of feedback in order to aid smooth transition from other-

regulation to self-regulation. That is to say, the frequency and quality of teachers' use of IRF discourse and the appropriate level of assistance they provide in the feedback turn should be reliant on the proficiency level of the learners since either too much help or too early withdrawal of assistance can both impede development (Johnson, 2008).

Similar to any other teaching variable. However, teachers might differ in how they can employ classroom interactional opportunities to benefit their students. One variable that can influence their IRF patterns and GCF application is the degree of professional experience they have gained. Recent developments in SLA research highlight the significance of teaching experience in impacting both the process and learning outcome in various EFL contexts. Accordingly, it is viable to expect teachers to adjust their use of discourse IRF pattern and provision of developmentally appropriate assistance depending on the learners' competence, which is assumed to be dependent on learners' levels of proficiency.

Nonetheless, it is questionable whether these two instructional choices might vary concerning teaching experience. Hence, the purpose of the current ethnographic classroom research was to bridge this gap and examine the extent to which higher level of professional experience in teaching might be associated with sensitivity to learners' needs at varying levels of proficiency. The pedagogic significance of the study is attached to the needs of EFL learners for syntactic processing through producing output and the parallel need for

finely-tuned negotiation-mediated assistance from the teacher that can promote noticing and augment learning. This dual demand is the shared characteristic of plethora of EFL learners including Iranians.

Upsurge of research on interactional features of the learning process for the last few decades have delineated the social and cognitive variables that come into play during interaction to fuel heighten learning. Research findings have underlined the boosting effect of interaction on promoting various features of language learning including vocabulary, morphology and syntax (Long, 1996; Musumeci, 1996) attributed this positive effect to the productive link that interaction establishes among input, internal learner capacities, selective attention and output. In EFL contexts, researchers more concerned with classroom interaction have delved into interaction patterns in classroom discourse. Research on classroom interaction has focused on the description of classroom interactional turns and patterns and their subsequent effects on various features of learning or more specifically on various forms of CF as a distinctive feature of classroom interaction. The findings indicate IRF as an underlying and pervasive interactional pattern (Liu, 2008; Myhill, 2006) that governs interaction in a classroom setting (Cazden, 2001) with the teacher as the one who selects the content and aim of a lesson, controls classroom interaction and directs it to the pre-determined direction (Nassaji & Wells, 2000). Further investigations of classroom interaction have also addressed turn sequences (Ozemir, 2009), scaffolding

sequences (Molinari, Mameli, & Gnisci, 2013), and question types asked by the teacher in the initiation turn (Zohrabi, Yaghoubi-Notash, & Khiabani, 2014).

Hence, the present study aimed to explore novice and experienced Iranian EFL teachers' use of IRF pattern in teaching learners at lower-intermediate (LI) and upper-intermediate (UI) levels of proficiency and compare their GCF use at each level. Although EFL classrooms might not adequately represent a genuine social community where learning occurs through socialization, the very sense of teacher mediation, learner regulation, and classroom interaction evokes further investigation. Therefore, the study is significant regarding the insights it may provide on the very nature of classroom discourse in a typical Iranian instructional context. Based on the social turn in SLA, such insights are fundamental in broadening our perspectives on teacher-related variables such as teaching experience that can impact the process and the product of learning. Although teachers may apply the IRF pattern to engage students in classroom activities, the extent to which they can utilize interaction promoting initiations and learner-contingent CF awaits further research. Hence, the present study was undertaken to bridge this research gap and serve to address a serious practical concern. To this end, the following research questions were formulated:

1. *Is there any significant association between teachers' experience and the frequency of IRF interaction patterns they use in teacher-student exchanges*

across LI and UI proficiency levels they teach?

2. *Is there any significant association between teachers' experience and the frequency of GCF they use in teacher-student exchanges across LI and UI proficiency levels they teach?*

LITERATURE REVIEW

In the last few decades, applied linguistic literature is replete with the exploration of CF as the last turn in the classroom interactional pattern. Scrutiny of the empirical background to CF delineates the distinction between the conventional error-contingent and more innovative learner-contingent interpretations of CF, with the former attributing the effectiveness of feedback to its contingency on the erroneous form and the latter underscoring the necessity of taking into account the learner's ZPD in deciding what kind of feedback to offer and when to stop support. Error-contingent CF was compared with error-preventing input and found to be more effective in promoting learning (Tomasello & Herron, 1989). (S. M. Gass, 2017) explained the positive effect of CF in drawing the learner's attention to discrepancies and lapses in his linguistic knowledge or even concerning its priming effect.

Although interest in the significance of CF has not died down yet, experts are now more engrossed in comparing the effectiveness of various feedback types with mixed findings. Explicit CF has been found more effective at lower levels of proficiency (Ammar & Spada,

2006) regardless of the channel in which CF is presented (Sheen, 2010), on pronunciation errors of Polish learners (Pawlak, 2013) and on learning grammatical features like third person singular marker "s" by Iranian pre-intermediate learners (Jafarpour & Hashemian, 2013) findings have substantiated the effectiveness of implicit CF like recasts in enhancing learning of classifiers for Chinese learners (Han, 2010) and learning of regular past tense for low-intermediate EFL learners in the context of Iran (Gholami & Talebi, 2012).

The spread of sociocultural concepts in language theory brought about an upsurge in exploring various interactional feedback and learner-contingent feedback (LCF). It describes an innovative provision of roughly-tuned CF as other-regulatory support that functions as backup within a given learner's ZPD to encourage the emergence of self-regulation. (Aljaafreh & Lantolf, 1994) scrutinized the effect of graduated and contingent feedback (GCF) on pre-intermediate female ESL learners' learning of articles, tenses, prepositions and modals in seven weekly L2 writing tutorials. They reported progressive transition of the participants from other-regulation to self-regulation and achieving the capacity to self-correct their errors. Likewise, (Nassaji & Wells 2000) compared the impact of this form of scaffolded support on Korean learners' learning and verified the facilitative effect of learner-contingent feedback.

In the context of Iran, (Zarei, Ahour, & Seifoori, 2018) compared the effect of implicit, explicit and GCF on the accuracy and fluency of 54 Iranian EFL learners' oral performance

and their attitudes towards the feedback they received. GCF was found to enhance the participants' accuracy and attitude but not their fluency. The same types of CF were also found effective in enhancing EFL learners' motivation, attitude and perception (Zarei, Ahour, & Seifoori, 2020).

As the literature review indicates, restrictions in the research on learner-contingent feedback, despite its effectiveness, highlight a yawning research chasm, on the one hand, and provoke a striking question regarding the applicability of learner-contingent feedback in classroom negotiation. This links learner-contingent feedback to various teacher characteristics that may impact teachers' application of classroom interaction. It is, thus, questionable whether Iranian practising teachers at varying levels of teaching experience differ significantly in their application of IRF interaction and their vigilance to the varying proficiency levels of their learners to provide learner-contingent feedback.

METHODS

Participants

The participants in this study comprised 10 English teachers and their learners in upper-intermediate (UI) and lower-intermediate (LI) classes. The number of learners in each class was 15 on average. The purposive sampling procedure was applied in selecting the teachers Teaching UI and LI classes regardless of their age, sex, and L1 background. They were

selected out of 60 teachers at nine Branches of Goldis Language Institute in Tabriz. The participants were grouped based on (Fuller, 1970) teacher development model, those with one to four years of teaching were regarded as a novice and those above five years of teaching were regarded as experienced. The experienced teachers ranged in age from 28 to 39 and varied in experience from 5 to 15 years; likewise, the novice teachers' age range was 24 to 34 and their teaching experience was between 2 and 4 years.

The institutional regulations did not allow the administration of a general English pre-test in 20 classes; thus, the initial homogeneity of the participants was checked by comparing their obtained final scores from the preceding semester. This seemed a viable option to minimize the limitation we faced in administering the pre-test since the participants had been attending English classes for more than ten successive semesters. Moreover, the study was not directly focused on the participants' homogeneity but rather on the type of IRF patterns employed by the teachers at two different proficiency levels

Materials

The research data in this descriptive Interrelational classroom research explored classroom interactions in naturally occurring classroom contexts. The research data comprised an audio-recorded flow of classroom interactions that were further transcribed and analyzed based on a validated researcher-designed observation form and were further

tabulated based on the coding system offered by (Molinari et al., 2013).

The Observation Form

In order to collect the research data, a semi-structured observation form was designed based on (Molinari et al., 2013) views on the factors involved in IRF pattern and the dominant classroom procedures of pre-view, view and post-view stages to measure the frequency of teacher-student IRF interactional patterns and CF, graduated feedback (GF) and contingent feedback (CNGF) that typically occur at the last turn during the warm-up, pre-view, and post-view phases of teaching listening, reading, and speaking skills. The writing was intentionally excluded since it is usually treated very lightly in English classes and is assigned as homework. Also, the view stage of teaching was not included in the observation since teacher-student interaction is less likely when learners are individually involved in comprehending the written or oral texts or planning their task-based speaking in pairs and groups. The main parameter considered in the observation and analysis of teacher-student interaction in each of the lesson stages was the overall number of IRF interactions used and the teachers' feedback types.

Because it was impossible to access and analyze student-student interactions, we had to limit this analysis to teacher-student interactions, typically during the pre-view and post-view teaching stages. Student-student interactions during the post-view phase of

teaching in pair and group work were also excluded from the analysis.

The content validity of the observation form was assessed by two licensed mentors with more than 10 years of supervising and mentoring English teachers and more than 20 years of teaching English. Further, the finalized observation form was explained to two trained observer mentors who agreed on the fit between the content of the form and the requirements of the study. They were also required to observe four recorded classes taught by an experienced teacher and four by a novice teacher and complete the related forms regarding the IRF and CGE patterns used by the teachers. The results were reported in the form of frequencies and the inter-rater reliability was estimated through Cohen's Kappa that revealed a moderate and almost perfect agreement (Altman, 1999; Landis & Koch, 1977) between the ratings of two raters for the IRF ($k = .47$, $p = .000$) and CGE ($k = .71$, $p = .000$) patterns, respectively.

Having collected the research data, two of the researchers listened to the collected data and transcribed those sections relevant to the warm-up, pre-view and post-view stages. Further, the frequency of IRF interactions occurring at each of these stages and the frequency of various CF types was computed and tabulated.

The IRF Categorization Framework

Some parts of a valuable framework for investigating patterns of classroom interaction proposed by Molinari, (Molinari et al., 2013) were utilized in coding the transcribed data with

the addition of (Aljaafreh & Lantolf, 1994). Specific sub-categories of IRF sequence are summarized in Table 1.

Table 1
A Summary of Sub-categories of IRF Pattern

IRF sequences		IRF sub-categories	
I	Initiation	<i>Function</i>	1. New 2. Elaboration 3. Re-launch
		<i>Form</i>	1. Authentic 2. Focused
II	Response	<i>Form</i>	1. Requested 2. Not requested
		<i>Correctness</i>	1. Correct 2. Partially correct 3. Incorrect 4. Not accessible
		<i>Production</i>	1. Minimal 2. Complex 3. Not accessible
III	Feedback	<i>Teaching-learning process</i>	1. Simple 2. Elaborate 3. Scaffold 4. Refusal 5. Graduated/ contingent
		<i>Related quality</i>	1. Content 2. Non-verbal indicators

As illustrated in Table 1, the system provides detailed coding for the three turns of the IRF interaction. The teachers' initiations are coded according to two categories of function and form. Regarding the function, the initiation can elicit information from an individual using interrogative or yes/no questions (Snikdha, 2016) ask for elaboration or clarification of prior output, or address the same question to another student in the same interactive sequence. The teacher may employ a focused (referential) question with only one possible

answer or an authentic (inferential) one without a pre-determined response.

Learners' answers are coded based on three features of form, whether the response has been requested or not, correctness, showing the quality of the learner's answer as correct, incorrect or not assessable in terms of accuracy, and production, if it is minimal, brief and straightforward comprising one to five words or complex, lengthy and elaborated containing more than five words.

The teachers' feedback is coded into two categories: teaching-learning processes

(simple, refusal/missing, elaborate, scaffold, and graduated and contingent) and the second assessing relational quality. In simple teaching-learning processed, the teacher may either admit the answer or decide to offer some solutions to rectify it. Refusal/missing process involves either the lack of student's response or the teacher's rejection of it. The teacher can go one step beyond and offer elaboration on the student's answer, reformulate it, or enrich it by adding detailed information.

The focus in the present study on graduated and contingent feedback can be justified with regard to the fact that these two features can represent teachers' views towards the process of learning and teaching and can bear a lasting impact on learning outcomes (Aljaafreh & Lantolf, 1994). Having concentrated on the frequency of IRF pattern employed by teachers and the extent to which the feedback turns were graduated and contingent, the researchers delimited their analysis to tallying the overall IRF cases and estimating the proportion of graduated and contingent feedback to all other types considered simply as CF.

Procedure

This descriptive Interrelational classroom research was undertaken through observation in several steps including selecting the research sample, developing the observation form, collecting, tabulating and analyzing the data. The first two stages of the study were described in the previous sections of the methodology.

The data collection procedure initiated with observing and audio recording three sessions of

each LI and UI class taught by participating novice and experienced teachers, making a total of 60 sessions. This did not interfere with the classroom procedure since all the classes in the observed institutes are constantly recorded based on institutional regulations, and the teachers and students are quite used to being observed.

Next, the recorded teacher-student exchanges were independently transcribed by two of the researchers and 25% of their transcripts were matched with the recorded data by a third experienced teacher to ensure the consistency of transcripts with actual classroom interactions. The transcribed data were then coded based on the analytic framework developed by (Molinari et al., 2013), and the instances of IRF interaction and types of teachers' feedbacks were marked in the observation form and tallied for novice and experienced teachers concerning the proficiency level of the learners. The inter-rater reliability of the tallies was further estimated.

Design and Analyses

Having collected, transcribed, and coded the research data for this Interrelational classroom research that comprised classroom interaction samples, the researchers compared the experienced and novice teachers' use of IRF patterns and contingent graduated feedback at the two proficiency levels via the Chi-Square test.

RESULTS

The first step in data analysis was estimating the inter-rater reliability for the tabulated IRF patterns used by the teachers in LI and UI

classes, as reported by the two raters based on Cohen's Kappa, as indicated in Table 2.

Table 2

Results of Cohen's Kappa for Inter-rater Reliability of IRF Patterns

	Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Measure of Agreement	.893	.071	15.610	.000
N of Valid Cases	20			

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

Table 2 indicates an almost perfect significant agreement ($k = .89$, $p = .000$) between the ratings of the raters (Altman, 1999; Landis & Koch, 1977) Next; the researchers calculated the average of both raters' ratings for

the IRF interaction patterns of both novice and experienced teachers in their lower-intermediate and upper-intermediate classes. These scores were considered in the primary analysis of the study (Table 3).

Table 3

The Frequency of IRF Exchanges Used by Experienced and Novice Teachers across Proficiency

	No	LI	UI
		IRF T-S interaction	IRF T-S interaction
Experienced	1	62	98
	2	68	116
	3	82	113
	4	56	105
	5	69	92
	Total	337	524
Novice	1	62	70
	2	69	62
	3	37	59
	4	63	58
	5	65	61
	Total	296	310

Table 3 shows, the maximum number of IRF exchanges used at both LI (337) and UI (524) levels belonged to the experienced teachers. Novice teachers' use of this interactional pattern was far less frequent at LI (296) and UI (310) levels. Also, the data indicates the third teacher as the least interactive among the

novice teachers with only 37 instances of IRF interactions in the three sessions of teaching listening, reading and speaking at LI level. Further the frequency percentages of IRF use for the novice and experienced teachers were computed, as shown in Table 4 below.

Table 4

IRF Frequency Percentage Used by Experienced and Novice Teachers across Proficiency

Teaching Experience		Proficiency Level		Total
		LI	UI	
Novice	Count	296	310	606
	Expected Count	261.5	344.5	606.0
	% within Experience	48.8%	51.2%	100.0%
	% within Level	46.8%	37.2%	41.3%
	% of Total	20.2%	21.1%	41.3%
	Count	337	524	861
Experienced	Expected Count	371.5	489.5	861.0
	% within Experience	39.1%	60.9%	100.0%
	% within Level	53.2%	62.8%	58.7%
	% of Total	23.0%	35.7%	58.7%
	Count	633	834	1467
	Expected Count	633.0	834.0	1467.0
Total	% within Experience	43.1%	56.9%	100.0%
	% within Level	100.0%	100.0%	100.0%
	% of Total	43.1%	56.9%	100.0%

Table 4 indicates that in LI classes, the frequency percentage of IRF use for the novice and experienced teachers were 48.8% and 39.1%, respectively. Moreover, in UI classes, this percentage for novice and experienced teachers was 51.2% and 60.9%.

Hence, to answer the first research question regarding the association of the frequency of IRF exchanges to teaching experience, a Chi-Square test for independence (with Yates Continuity Correction for a 2×2 table) was performed, the results of which are presented in Table 5.

Table 5
Results of the Chi-Square Test for the Frequency of the IRF

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.654 ^a	1	.000		
Continuity Correction ^b	13.262	1	.000		
Likelihood Ratio	13.637	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	13.645	1	.000		
N of Valid Cases	1467				

0 cells (.0%) have expected count less than 5. The minimum expected count is 261.48.

Computed only for a 2x2 table

* $p < .05$

As indicated in Table 5, the Asymp. Sig. (2-sided) value ($p = .000$) is smaller than the Alpha level (0.05), which indicates that the use of IRF in the UI and LI classes is significantly dependent on the teachers' experience. In order to find the strength of this relationship, the

effect size was computed via the phi coefficient, which is the correlation coefficient indicating a stronger association between teaching experience and the use of IRF patterns. Table 6 presents the symmetric measures.

Table 6
Symmetric Measures for the Frequency of the IRF

		Value	Approx. Sig.
Nominal by Nominal	Phi	.096	.000
	Cramer's V	.096	.000
N of Valid Cases		1467	

A Phi-value of about .10 (.096) for a 2×2 table of the study was found, which, based on Cohen's (1988) criteria, represents a small association between the students' experience and proficiency level concerning the use of IRF.

However, the significance of the difference between experienced and novice teachers, $\chi^2(1, n = 1467) = 26, p = .000, \phi = .10.$, provides a positive answer to the first research question. There was a significant association between

teachers' experience and the frequency of IRF interaction patterns they used in teacher-student exchanges at LI and UI proficiency levels.

The second research question dealt with the significant association between teachers' experience and their use of graduated/contingent feedback (GCF) at LI and

UI proficiency levels. To answer this question, first, the tabulated instances of GCF by two raters were checked for the inter-rater reliability concerning the teachers' experience and the proficiency level of their classes. In this regard, Cohen's Kappa was estimated that yielded the following results (Table 7).

Table 7

Results of Cohen's Kappa for Inter-rater Reliability of GCF

	Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Measure of Agreement	.835	.087	12.55	.000
N of Valid Cases	20			

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

Table 7 indicates an almost perfect agreement between the raters' ratings ($k = .83$, $p = .000$). In this case, similar to the first

research question, the average of both raters' ratings was considered in the main analysis to answer the second research question (Table 8).

Table 8

The Frequency of GCF Used by Experienced and Novice Teachers across Proficiency

Teacher's experience	No	Lower-intermediate	Upper-intermediate
		Contingent/ graduated	Contingent/ graduated
Experienced	1	5	9
	2	9	4
	3	14	6
	4	21	10
	5	24	9
	Total	73	38
Novice	1	14	6
	2	9	5
	3	12	7
	4	20	3
	5	23	9
	Total	78	30

Table 8 reveals that novice teachers ostensibly used GCF more frequently at LI (FLI=78) and less frequently at UI (FUI=30) compared to experienced teachers (FLI = 73, FUI = 38). However, concerning the proportion of the GCF to the total number of IRF patterns, the number of GCF used by novice teachers at LI (26.35%) and UI (9.67) was higher than that of their experienced colleagues (LI = 21.66%;

UI = .7.25%), which indicates overall infrequency of learner-contingent feedback compared to other types of CF used by the teachers.

Further, the frequency percentage of GCF use for the novice and experienced teachers across proficiency was computed, as shown in Table 9 below.

Table 9

Frequency Percentage of GCF Used by Experienced and Novice Teachers across Proficiency

Teachers' Experience		Level		Total
		Lower-Intermediate	Upper-Intermediate	
Novice	Count	78	30	108
	Expected Count	74.0	34.0	108.0
	% within Experience	72.2%	27.8%	100.0%
	% within Level	52.7%	44.1%	50.0%
	% of Total	36.1%	13.9%	50.0%
	Count	70	38	108
Experienced	Expected Count	74.0	34.0	108.0
	% within Experience	64.8%	35.2%	100.0%
	% within Level	47.3%	55.9%	50.0%
	% of Total	32.4%	17.6%	50.0%
	Count	148	68	216
	Expected Count	148.0	68.0	216.0
Total	% within Experience	68.5%	31.5%	100.0%
	% within Level	100.0%	100.0%	100.0%
	% of Total	68.5%	31.5%	100.0%

As revealed in Table 9, the frequency percentage of GCF use at LI level for the novice and experienced teachers were 72.2% and 64.8%, respectively, with novice teachers using GCF more frequently. However, at UI level, the percentage estimations for the novice and

experienced teachers were 27.8% and 35.2%, showing more frequent use of GCF by experienced teachers. To check the significance of the observed difference in the frequencies, thus, we ran another Chi-Square test, which are presented in Table 10.

Table 10
Chi-Square Tests for the Frequency of GCF

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.374a	1	.241		
Continuity Correction ^b	1.052	1	.305		
Likelihood Ratio	1.376	1	.241		
Fisher's Exact Test				.305	.153
Linear-by-Linear Association	1.367	1	.242		
N of Valid Cases	216				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.00.
b. Computed only for a 2x2 table

As shown in Table 10, the Asymp. Sig. (2-sided) value is ($p = .241$), which is higher than Alpha level (0.05), indicating no significant difference between the groups of teachers. To be on the safe side, however, the effect size of

the association between teaching experience and the use of GCF across proficiency were computed via the phi coefficient, as presented in Table 11.

Table 11
Symmetric Measures for the Frequency of GCF

	Value	Approx. Sig.
Nominal by Nominal Phi	.080	.241
Cramer's V	.080	.241
N of Valid Cases	216	

Table 11 indicates a Phi-value of about .10 (.080) for a 2×2 table of the study, which, according to (Cohen, 2013) represents a small association between the teachers' experience and proficiency level concerning the students the use GCF. The results revealed a low association, and the chi-square table did not show any significant relationship, $\chi^2 (1, n =$

$216) = 1.052, p = .241, \phi = .10$. Therefore, the answer to the second research question is negative: There was not any significant association between teachers' experience and the frequency of GCF they used at LI and UI proficiency levels. However, both groups of teachers employed far less GCF in proportion to the overall number of IRF exchanges used.

DISCUSSION

The findings emerging from the present study indicated that teaching experience was significantly associated with the use of IRF discourse pattern at LI and UI levels of proficiency but not with GCF across the same proficiency levels. The collected data also revealed the extreme cases of GCF to the overall number of IRF patterns used.

The findings run counter to those of (Cromley, 2005), which indicated no significant difference in the rate and frequency of questions more and less experienced teachers asked, their content errors, and how they responded to students' errors. Nonetheless, they support those accentuating the positive influence of teacher experience on the frequency of IRF pattern (Li, 2018; Liu, 2008; Sundari, 2017; Waring, 2008). The findings support (Liu, 2008) assumption that teachers talk time and control can boost student contribution and facilitate learning. In fact, despite divergence from authentic discourse, classroom IRF patterns seem to represent basic interactional attempts that, as suggested by (Waring, 2008), can promote learners' cognitive and emotional involvement and simultaneously protect their identities. The findings also suggest that large-scale expectation of IRF may depend on their realization of teachers' wealth of experience (Sundari, 2017).

The participating teacher's use of IRF at both proficiency levels might be interpreted either as teachers' attempts to control classroom interaction and hold power in the

classroom (Cazden, 2001) or as learner-friendly instructional techniques to promote classroom interaction and learner involvement (Lier, 1996). Experienced teachers at UI levels might have intentionally employed IRF patterns to elicit response and offer modifications hoping that these modifications would stimulate selective attention and promote learning (Long, 1996; Vygotsky, 1986). Hence, the difference might suggest that through experience, teachers can develop a deeper understanding of the social and mediated nature of learning and (Vygotsky, 1986).

Moreover, the findings revealed that the number of GCF was remarkably disproportionate to the overall number of IRF patterns used. One way to augment the effectiveness of IRF in the observed classrooms, as suggested by (Lier, 1996), was providing learner-contingent feedback, which the teachers did not fully accomplish since they failed to calibrate their feedback to learners' ZPD. This failure could have emanated from unawareness of their learners' potential for learning, which is usually the case in more than 10 learners. Most of the research findings supporting the effectiveness of GCF were carried out with pairs of more manageable students than classes of around 15 participants. Alternatively, the disproportionate application of GCF could be attributed to the teachers' unawareness of the concept of ZPD since it was observed in classes taught by both novice and experienced teachers.

Socioculturally, thus, learning as a socially situated activity (Leont'ev & Wertsch, 1981) is closely bound to the concept of assistance that

can be exerted in the final turn of the IRF exchange in response to learners' demands. Despite the wide appeal for graduated contingent assistance endorsed by research findings (Aljaafreh & Lantolf, 1994; Lantolf & Aljaafreh, 1995; Nassaji & Swain, 2000), the restricted classroom application of GCF can allude to the practical problems it may in all likelihood arise in practice. Among such problems, we may consider the Iranian learners' propensity for explicit CF, which has roots in the long-standing cultural habit of relying on teachers for everything.

However, under the influence of Post-Vygotskian views, English classrooms are considered as complex social contexts where the learner's social identity is under the influence of various variables while he is engaged in interaction with peers and the teacher. Hence, learning in the Iranian context should be re-conceptualized as assisted performance (Tharp & Gallimore, 1991) and guided participation (Rogoff, 1990). The need for students' participation in collective activities with other students has to be highlighted and guided by teachers who offer assistance and interactional support to boost learning. To this end, teachers may employ collective argumentation, which is another sociocultural model for classroom interaction (Brown & Renshaw, 2000) in which the teacher first guides the elementary students on how to share their personal views of a given task through pair and group work and compare, explain and justify their interpretations and reach an agreement which is further presented to the whole class for evaluation.

CONCLUSION

Despite several limitations and delimitations in the research methodology, sample size and data collection instruments employed, the findings from this study offer several conclusions. First and foremost, IRF pattern as a valuable tool for creating communication within classroom contexts is shown to be effectively employed, more frequently by experienced teachers, to increase learners' involvement and engaging them in classroom interaction. Nevertheless, like many other teaching activities, the frequency of the IRF patterns used and the quality of each turn can be affected by teachers' experience, which is widely acknowledged to play a pivotal role in teaching. Moreover, highly restricted use of GCF reflects teachers' dim awareness of this important aspect of IRF exchanges. It undermines the need to bridge this gap in their knowledge through various in-service training courses that provide the theoretical foundation and interactively introduce practical teaching techniques GCF in the process of teaching. With such training courses, teachers may become more willing to pursue their professional development to help learners achieve autonomy through pedagogical dialogues (Lantolf & Aljaafreh, 1995).

The results regarding the disproportionate use of learner-contingent feedback might allude to teachers' disregard of the necessity to tailor their feedback to the needs of the learners. This, as suggested earlier, might have been owing to the teachers' unawareness of the need for providing needs-based feedback or the

techniques required. Whatever the cause, the findings underscore the need to raise teachers' awareness of how to cultivate interactional opportunities provided through IRF patterns to involve learners' more actively in the process of learning. This crucial need might be addressed at the pre-service level by supplementing the typical ELT training course with practicum modules comprising hands-on activities that illustrate the techniques of providing contingent and graduated feedback. However, for practising teachers, what may work is a meticulously designed in-service training course focused on treating learners' errors in which the same techniques might be presented and practised cooperatively with teachers and based on their personal teaching experiences. The significance of making interactive use of classroom IRF can also be highlighted in the same teacher development programs.

Additionally, classroom practice might be observed meticulously to detect teachers' use of various feedback techniques. The results should then be negotiated with teachers to raise their awareness of how they treat their students' errors. Yet, it should be borne in mind that the teacher-supervisor and mentor interaction quality can profoundly impact the outcomes. Hence, supervisors should be fully briefed on the goal and the importance of capturing the teachers' mindset by first praising them for what they do right and then derive value and satisfaction in upgrading their feedback techniques. Through such constructive professional exchanges, both novice and experienced teachers can notice ways of modifying the quality of each turn in IRF

toward more authentic interactions and develop a better understanding of how to tailor all turns to the needs of the learners.

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