

A Working Paper Exploring the Effects of Recursive Conversations on Participants' Fluency Development in a First-Year EFL Oral Communication Course

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Abstract

Recursive conversations (RCs) are described as a “return to a similar experience—but with a wider knowledge” (Kindt, 2004, p. 15). Focusing on RCs and their effects on learner beliefs and performance, including fluency, disfluency, and complexity, this paper describes the results of an Action Research study conducted over six weeks with 18 first-year English majors in a freshman oral communication program. Following a mixed methods approach, the researchers collected and analyzed both quantitized and qualitative data (Dörnyei, 2007). Data included pre- and post-questionnaires, learner feedback forms, and conversation transcriptions. Analysis of the transcription data indicated up to a 20% increase in fluency markers attributable to the effect of RCs. Transcription analysis also showed a significant increase in sentence complexity, as indicated by increases in average sentence length of between 10% and 95%. Questionnaire and feedback data indicated that learners considered the RCs to be more interesting and less challenging than non-recursive classroom conversations. Some students, however, considered the recursive conversations to be less useful than non-recursive ones, indicating a contradiction between learners' experiences of

the RCs and their perceptions of their usefulness in promoting L2 oral competence. The results of this research indicate that RCs can have a positive short-term impact on learners' oral competency, but that educators should take steps to engage with learners regarding the impact of pedagogical tools in order for learners to become aware of potential benefits. Issues surrounding the long-term impact of RCs and appropriate methods for helping learners to see the benefits of such procedures are a promising area for future research.

Introduction

Recursive conversations (RCs) (Kindt, 2004) and the concept of near-peer role models (NPRMs) (Murphey, 1996) have been an area of recent research interest with regard to the instructed acquisition of interactional competence (IC) in an L2, particularly within the field of Sociocultural Theory (SCT) (O'Connor & McDermott, 1997). The second author has been teaching freshman oral communication classes with a focus on conversation skills and was under the impression that learners might benefit from a reduction in the number of activities per class and an increase in speaking time. Upon learning about RCs and their potential benefits, he decided to collaborate with the first author in designing and conducting a short, six-week experiment in order to ascertain what effects, if any, RCs would have on participants and whether or not these effects are beneficial for the development of L2 interactional competence.

Issues

Proficiency. Some learners have experience living in English-speaking environments, so are significantly more competent oral communicators than some of their less experienced peers. Based on previous experience in the program and the results of questionnaires, it appears that these returnee learners are at a higher risk of losing motivation, as they feel that there is nothing for them to learn from the classes. On the other hand, there are a significant number of learners

at a lower level of proficiency who may be demotivated by classes that are too difficult. This led to the question: How can teachers help to make classes both useful and interesting for learners of various proficiencies?

Learner Beliefs. There are noticeable differences in the expectations that learners bring to the class. Some learners appear to be more aware of useful learning strategies, so will be active and independent in class. Other learners seem to be more comfortable taking a passive role and expect to be directed by the tutor. This may be related to level differences, personality, education experiences, or any of a variety of other factors. Can teachers encourage positive learning beliefs and behavior by developing dynamics and activities that encourage learner autonomy and positive, personal connections?

Personality. In previous course designs, a 10-minute conversation at the end of the class varied in its effectiveness. When learners feel comfortable and capable, they will easily talk for the allotted time and actively practice using conversation skills. However, when learners are shy or feel incompetent, the activity can be unsuccessful and appears to be quite stressful for the learners. This problem can be exacerbated by the three-learner group, where quieter learners can be dominated by outspoken ones. How can teachers scaffold activities toward both types of students to be successful?

Depth. Upon observing classes, other teachers commented that lessons may contain too many different activities, causing learning to be rather shallow and making it difficult for lower-proficiency learners to engage in the class. In order to rectify this issue, it was decided to reduce the number of activities while maintaining the key lesson components, which would allow all learners to practice conversation skills and improve their fluency.

Literature review

Interactional Competence. Perhaps in response to criticisms such as Dörnyei and Scott's (1997) acknowledgement that conversation strategy (CS)

teaching has often been confined only to those strategies that deal with problems in communication (p. 197), many researchers and practitioners have moved toward an expanded definition, usually falling under the umbrella of “interactional competence” (IC) (Brown, 2014, p. 216). This expanded view of communicative competence (CC) includes not only Canale and Swain’s (1980) original four key competences, but views them in a broader way with an emphasis on the importance of intercultural interactional skills and its implications for language learning (Young, 2011, p. 426). As Young puts it, “command of language forms is not enough to ensure successful communication” (p. 426). He lists seven key components of IC (2011, pp. 429–430, as cited in Brown, 2014, pp. 216–217):

- (1) Participation framework: Identifying the participants in the interaction.
- (2) Register: Taking account of the context and its implications for the interaction.
- (3) Selection of forms in modes of meaning: Choosing linguistic options to create meaning and effect.
- (4) Speech acts: Using forms appropriate for the desired outcome.
- (5) Turn-taking: Following conventions of maintaining the interaction.
- (6) Repair: Responding to interactional difficulties.
- (7) Boundaries: Dealing with topics and topic changes.

These seven IC components emphasize the importance of not only having the ability to traverse communication breakdowns and problems, often employing CSs, but also being able to effectively negotiate the conversation in its entirety.

This navigation of breakdowns and competence in sustaining intersubjectivity is particularly important for language learners because the culture in which the learner picked up their L1 and the culture from which the target L2 comes from will often have significantly different customs and rules for social interaction, which can easily lead to breakdowns in communication. Saville-Troike (1989) provides the following example:

Some American Indian groups are accustomed to waiting several minutes in silence before responding to a question or taking a turn in conversation, while the native English speakers they may be talking to have very short time frames for responses or conversational turn-taking, and find long silences embarrassing. (p. 18)

As Saville-Troike's example illustrates, there are more aspects of CC that must be taught in order for learners to be competent in an L2 than Canale and Swain's original CSs. Based on this evidence, we can see why Young's seven components of IC are vital components of any language course that focuses on the ability of learners to effectively employ the features of language that they are learning in a communicative, intercultural setting.

Due to the overlapping nature of CSs and interactional competency components, there has been no small amount of confusion among researchers, and particularly practitioners, regarding what constitutes a CS, what does not, and what name or names should be used to refer to interactional competency components that fall outside the standard definition of a CS. In his study of the application of interactional competency components to university-level English classes, Wood (2010) used the term "communication strategies" as an umbrella term, encompassing both traditional CSs and the interactional competency components (p. 478). Others such as Hua et al. (2012) have continued to refer to CSs as only those skills that are used for problem avoidance or repair (pp. 835–836). We believe that this necessitates a clarification of terms both within the general literature and within this article. For that reason, we shall refer to the combination of components including CSs and Young's (2011) IC components as *conversation skills*.

Classroom Practice

The link between learner participation in the classroom and the rate of L2

development has been examined by several researchers, with varying results (Ellis, 2008, pp. 1901–1911). Seliger (1977), Naiman et al (1978) and Strong (1983, 1984) all reported positive correlations between participation and measures of learner proficiency. However, subsequent studies by Day (1984), Ely (1986) and Allwright (1980) found little or no correlation, throwing the idea that proficiency may be directly related to participation in to doubt. As noted by Chaudron (1988) and Ellis (1988), it may be impossible to distinguish experimentally between “‘participation-causes-learning’ or ‘proficiency-causes-participation’” (Ellis, 2008, p. 807).

Due to the issues described above, SLA research has moved on to examining issues relating to the potential links between different types of classroom practice and the rate of learner development. In studies examining the connection between rate of learning and the use of mechanical and meaningful drills, researchers have consistently found either no link or negative correlations between the two. Sciarone and Meijer (1995), for example, found no differences between learners who engaged in controlled computer-based practice activities and those who did not. Similarly, and perhaps surprisingly, Ellis (1984) investigated the effect of language drills on the development of “when” questions and noted that the “low interactors” showed greater development of the form than the “high interactors.” This further emphasizes the complexity of language-learning and the importance of providing a learning environment where communication and CC are the aim, but where learners may be allowed to progress at their own pace without being forced to attempt to use L2 forms before they are ready.

Recursive Conversations

In the movement toward a communicative approach, many academics have focused on the need for English teaching to move away from a focus on imitation of L1 speakers as the goal of the language classroom. Instead, as Cook (1999) suggested, it may be more useful for language teaching to place the successful

L2 learner at the center of pedagogy (p. 200). By focusing on the learners and using L2 speakers as role models, Cook believes that L2 learners will be more motivated and will be more likely to be successful than those who are expected to imitate L1 speakers (p. 200).

Cook's idea of focusing on successful L2 learners has gained traction in the form of the practice of using near-peer role models (NPRMs) in the classroom. Murphey and Arao (2001) conducted a study in which they examined the effects on learner motivation of showing learners a video in which older NPRMs expressed ideas connected with success in L2 learning. They found that this improved learner motivation significantly and also led to improvement in the teacher's beliefs regarding their own students.

Similarly, Murphey (2003) found that one of the key missing components in the classes of language learners was the lack of adequate performance opportunities (p. 51). By allowing learners to engage in multiple extended discourse opportunities (MEDOs), consisting of recurring five-minute conversations with multiple partners, up to 12 times in a single session, he noted a significant increase in learner speaking confidence and feelings of ownership over the L2 (Murphey, 2003, p. 52). This research is in line with that conducted by Lave and Wenger (1991), who found that the key to learning lay in teachers taking a less central role in the classroom and allowing learners to be the principal participants in the learning process. With MEDOs, Murphey was able to exemplify the learner-centered process in action.

Recursion is a process in L2 learning that promotes the developmental restructuring of one's interlinguistic system through the "return to a similar experience—but with a wider knowledge" (Kindt, 2004, p. 15). As O'Connor & McDermott (1997) suggest, it can be viewed as "a spiral staircase to bring you to higher and higher levels" (pp. 100–101). This focus on the return to a similar experience, but with new knowledge, may help learners to increase their fluency and their overall oral competence.

Research Goals and Objectives

Due to the new *Power-Up Dialogue 2* textbook, which was used for the second semester of the year, certain constraints were placed upon this research. Namely, because the main part of the lesson varies on a bi-monthly basis, any recursive activities need to fit within both frameworks. The Let's Talk activity occurs on the first week of each two-week session, while Let's Discuss occurs in the second. Whereas Let's Talk is a free-form conversation involving three students, Let's Discuss is a group debating activity where students must come to an agreement regarding a particular issue, such as where to live or how to spend a budget. Based on this and the issues already expounded upon in the introduction and literature review, there are two main goals that we would like to address: (1) increase learner engagement in classes and the learning process, and (2) provide learners with deeper, more meaningful conversation practice opportunities.

Course and Learner Characteristics

This research was conducted with a group of 18 first-year English majors. These 18 learners were selected from a larger group of 34 based on their responses to a data-sharing permissions survey in the second semester of a weekly 45-minute oral communication course at a Japanese university. The course was conducted using the textbook *Power-Up Dialogue 2*, which focuses primarily on the improvement of interactional competence through the use of pair and group conversations. A sample lesson plan can be viewed in Appendix A.

Classroom Procedures

Based on the two main goals of this action research (AR) and the issues discussed, the following procedures were enacted in the second semester: (1) change learner groups every three weeks, (2) use recursive five-minute group conversations for the Let's Talk and Let's Discuss activities.

Although keeping groups together for three weeks met with mixed results in previous AR, we believe that the change has the potential to be highly useful for the learners. Therefore, we decided to continue with this and to try it with a much larger, more diverse group of learners, as other teachers felt that the change would be more effective with a large group of learners who were not already familiar with each other. For this reason we pursued this goal with the English department, which contains roughly 350 students.

Previous learners enjoyed three-minute RCs, but they and teachers both felt that three minutes was too short and restricted the depth of conversation. Another issue was that learners seem to enjoy group conversations, resulting in many of them displaying dissatisfaction with the lack of group activities in the altered first-semester classes. For these reasons, the recursive practice was adjusted to make it longer and group-based.

Data Collection and Research Schedule

In order to collect a mixture of data types and combine them in to a cohesive whole, we followed a concurrent, multiple-perspective triangulation design, as displayed in Table 1.

In previous AR, the second author encountered problems related to the types of data that he had collected and their limitations in helping to answer the AR goals. Chief among these issues was an over-reliance on learner and teacher opinions, making it difficult to draw meaningful conclusions from the often conflicting and vague data. The other main problem was that all of the data was qualitative and of a similar type, with the result that he was only able to examine learner and teacher beliefs and not the numerical data needed to be confident that the descriptions of what happened in the classroom were accurate.

Table 1
Data Types Utilized in this Action Research Project.

Quantitized Data	Qualitative Data
Pre-questionnaire	Pre-questionnaire
Post-questionnaire	Post-questionnaire
Transcription Analysis	Learner Feedback

In order to address these problems, data collection types were diversified by adding transcription analysis, in the hope that this data will allow a clearer examination of the impact of the changes that made in classes. Furthermore, in order to allow time for the collection and analysis of the transcription data, we decided not to include learner interviews and focus groups in our data gathering. We made this decision based on previous experiences with similar research, where the interviews and focus group did not add significantly to the data collected from questionnaires. To compensate for this loss of potentially insightful qualitative data, several qualitative open-ended sections were added to the questionnaires.

Table 2
Research Schedule.

Week	Questionnaire	Video Recording	Learner Feedback
3	X Pre		
4		X	
5		X	
6		X	
7		X	
8		X	
9	X Post	X	
10			X
11			X

Table 2 outlines the research schedule. During the first two weeks of the semester, the second author was absent due to out-of-work commitments, meaning that they could not begin the research until week three. There were also constraints related to teachers wishing to make as few changes as possible to the current course, so they conducted all of the changes and video recordings with a small group of 18 students and six teachers. During this six-week period, they conducted both the three-week groups and five-minute recursive conversations simultaneously, with participants engaging in both the recursive and non-RCs in order to allow them to compare their experiences. Learners were asked to complete a pre- and post-questionnaire in weeks three and nine in order to gauge changes in their perceptions of the changes made to their classes and to gain useful information about their personal histories and the class composition. To ensure learner understanding of the questions, the questionnaires were created in English and then translated in to Japanese before being administered.

Results and Analysis

Questionnaires

Gender. Of the 17 learners to complete the questionnaire 10 classed themselves as female, seven as male and none as other (Figure 1). This imbalance meant that some classes were not gender-balanced, and it would be interesting to see whether or not this dynamic had an effect on learner perceptions of the experiment. It is also interesting to note that this is a smaller imbalance than the

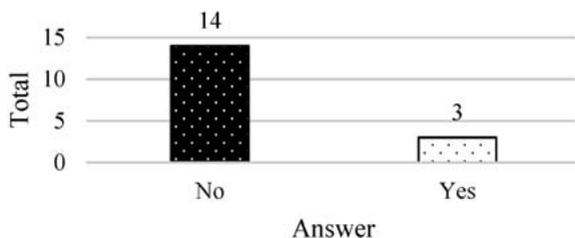


Figure 1. Learners' study abroad experience (Source: questionnaires, n = 17)

class as a whole, where 23 of the 34 learners, just over two thirds of those who completed the pre-questionnaire, classed themselves as female.

Age at which learners began to study English. Twelve of the 17 began studying during elementary school, while a further five did not begin until junior high school (Figure 2). Learners who began to study English in the first year of elementary school would have had a full five years more experience with the language than the learners who began in junior high school. It is possible that this would affect the group dynamic, particularly as the course does not stream learners of different proficiencies. It may be that the JHS group benefitted more from these changes, in particular the RCs and its increased focus on similar conversations.

Learner experience living and studying abroad. Three of the learners have lived abroad at some point during their lives, for an average of three years (Figure 3). A further two learners have studied abroad, both for three months. When combined with the age of beginning study, it can be seen that there is a sig-

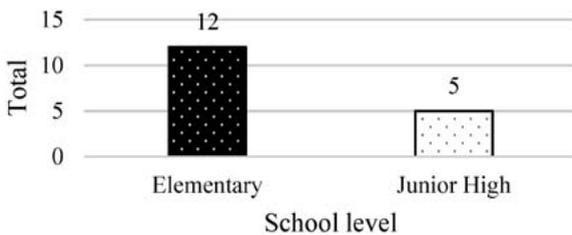


Figure 2. Age at which learners began study (Source: questionnaires, n = 17)

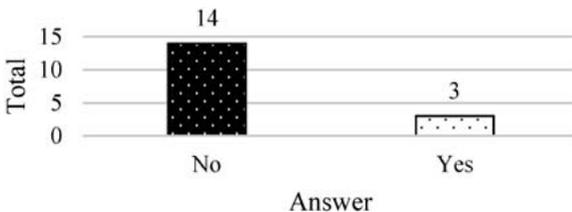


Figure 3. Learners' study abroad experience (Source: questionnaires, n = 17)

nificant amount of variation when it comes to learners' experiences of English. Consequently, it seems likely that their proficiency and motivations are also quite broad, meaning that classes need to be highly flexible and learner-centered in order to provide all learners with a positive, useful learning experience.

Learner *juku* and *eikaiwa* experience. Eight of the 17 learners stated that they had *eikaiwa* (conversation school) or *juku* (cram school) experience, with an average attendance of four years (Figure 4). This contrasts with the other nine learners, who have no such experience and may therefore be approaching classes from a lower level of proficiency. In particular, learners with *eikaiwa* experience may benefit from already having a significant amount of experience using English orally for communicative purposes.

Learner perceptions of the recursive conversations. The original Let's Talk/Discuss activity usually consists of a 10-minute, three-learner conversation conducted at the end of the class as a kind of formative goal for learners to aim towards. The new version conducted during this AR consists of two five-minute, three-person conversations, with learners moving between booths in order to add a recursive element. These differences resulted in interesting differences in the way that learners answered questions related to the two versions.

As can be seen in Figure 5, the new version was rated as more interesting, less useful and less challenging than the original. The changes to the interesting and challenging categories are exactly as hoped for, however, the perception that the original version is more useful is somewhat surprising. Perhaps the decreased difficulty is what caused learners to consider the original to be more

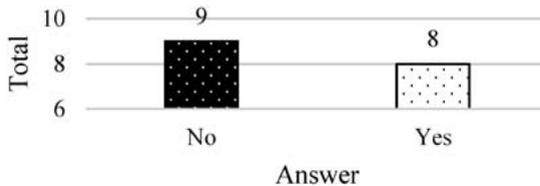


Figure 4. Learner *juku* and *eikaiwa* experience (Source: questionnaires, n = 17)

useful, or perhaps there are other contributing factors. Overall, we are pleased to see that learners found the new Let's Talk/Discuss to be more interesting and less challenging, even at the expense of a decreased perception of usefulness. It would be worth exploring a combination of this recursive Let's Talk/Discuss style with teacher feedback, as was provided in subsequent classes. This would likely have led to learners rating the new activity as better across the board, including usefulness.

Learner feelings about being with the same learners. As with the pre-questionnaire, learners considered having different partners every week to be the optimum situation on average, scoring it almost four out of five (Figure 6). The idea of having the same group for three weeks came in a close second, with a rating of 3.3 out of five, while the idea of having the same partners for the entire

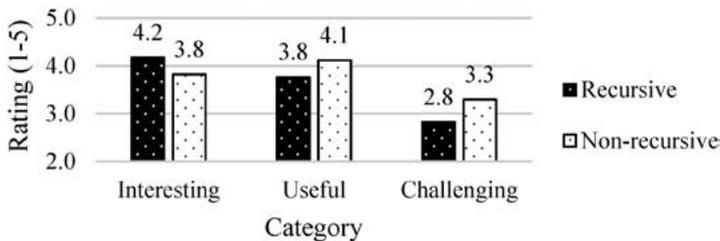


Figure 5. Learner perceptions of the recursive conversations (Source: questionnaires, n = 34)

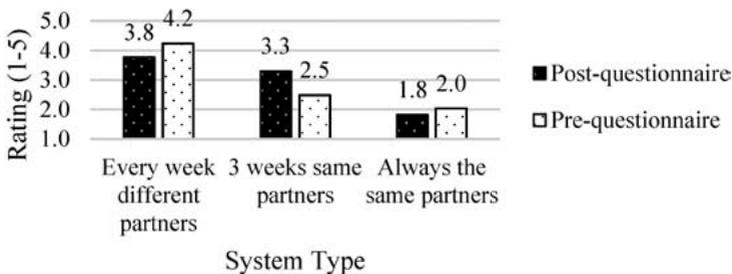


Figure 6. Learner feelings about time together in class (Source: questionnaires, n = 34)

year scored less than two out of five.

Although the order of preference is the same as the pre-questionnaire, this does not offer a complete picture. In the pre-questionnaire, learners considered changing groups every week to be far better than the other two choices, rating it over four out of five, with the other choices scoring less than three. However, after six weeks of trying the three-week style, it was rated almost as highly as changing every week, while the idea of changing every week fell to a lower score, as can be seen in Figure 9. This is highly significant, as just six weeks of the new system was enough to effect a change in learner beliefs about what works best for them. This begs the question: what would happen were the experiment to be continued for an entire semester? Based on the pattern displayed in questionnaire answers from both this semester and last semester, the three-week rotation can reasonably be assumed to have been successful, but a longer study is necessary in order to provide a definitive answer.

Questionnaires summary. As expected based on the questionnaire data from the previous semester, the English department classes contain a diverse range of learners with different life experiences, education experiences and motivations. On average, learners preferred the new, recursive Let's Talk and Let's Discuss conversations, rating them as more interesting and less challenging, a sure sign that the RCs appeal to a wider range of learners than the non-recursive ones. However, the fact that the RCs were rated as less useful indicates that more care needs to be taken to educate learners on the benefits of any new techniques that are being introduced to the classroom.

Regarding the issue of how long to keep one group of learners and their teacher together, this semester's questionnaires ran in to the same issue as those in the previous semester. Namely, that although the answers showed an overall shift in beliefs away from wanting to change every week and toward appreciating the benefits of being together for longer, the results are not conclusive. While approval ratings for changing every week decreased and ratings for staying

together for three weeks increased, changing every week remained the highest rated of the two at the end of the six-week trial period. It seems likely that were the trial period to increase, the learners would eventually begin to see changing groups every three weeks as more beneficial than changing every week. Certainly, feedback from other teachers was highly positive and several teachers expressed a desire to continue the system.

Transcriptions

In order to gauge the effect of RCs on learner fluency and conversation complexity, the second author recorded learners' RCs in his booth for the six weeks of the experiment, and also within two other teachers' booths. Because video data was being collected for both his booth (recursion) and other teachers' booths (no recursion), he hoped that this would allow him to compare the data for the recursion and non-recursion groups. Unfortunately, due to problems with the data collection process this was not possible. However, sufficient quality video data was available from his booth during weeks seven through nine, which allowed him to examine the effects of RCs. The majority of the data from the non-recursive conversation booths was of insufficient quality to allow for the transcription of learner speech, so we have not included it in this report.

Group Fluency. In order to gauge the effect of RCs on learner fluency, the total number of recognizable words in the conversations were counted, then divided by the total conversation time, arriving at an average number of words per minute. By charting the difference between the average number of words per minute (WPM) for conversations one and two during weeks seven through nine, it was possible to compare and contrast the difference.

In Table 3 below, a stark difference is visible between the WPM of the first and second conversations for all three weeks. Each displays an increase in WPM during the second conversation in comparison to the first. The degree of difference varies, with a relatively small increase of 6 WPM between C1 and

C2 in week eight, and a relatively large increase of 18.5 WPM in week nine. On average learner groups spoke 58.5 WPM in C1 compared with 70.8 WPM in C2, an average increase of 12.3 WPM. When one considers that the learners changed booths for C2, it is quite surprising that the results are so marked (Figure 7). RCs clearly have a significant positive impact on learner fluency. Given that such a profound increase in WPM was observable from just two RCs, it would be interesting to see if a third iteration of RC also results in a significant rise in learner fluency.

Table 3
Group Fluency (Source: Transcriptions, n = 9)

	Week 7	Week 8	Week 9	M	SD
WPM C1	62.4	72.4	40.8	58.5	16.2
WPM C2	74.6	78.4	59.3	70.8	10.1

The standard deviation also provides some interesting information about fluency changes between the first and second conversations. Whereas C1 has a standard deviation of 16.2 WPM, C2 shows a significantly lower standard deviation of 10.1 WPM. Whereas the C1 speaking speed varies, the C2 speeds are much closer together, indicating that the speaking speed in the second conversations is approaching the learners' maximum fluency. On this note, we

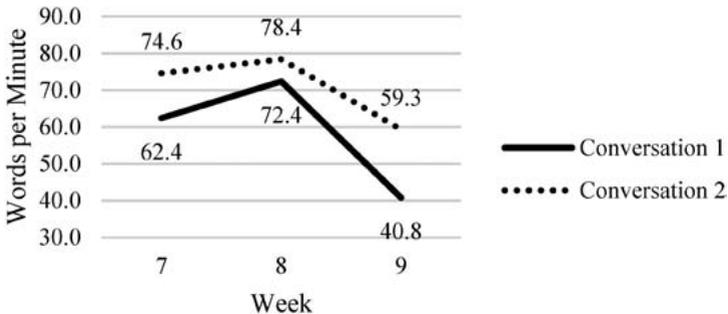


Figure 7. Group Fluency (Source: Transcriptions, n = 9)

wonder whether or not approximately 80 WPM represents an upper limit of words per minute for learners at this level of proficiency? Also, would a third recursion, or C3, show a further reduction in standard deviation?

Table 4
Group Disfluency (Source: Transcriptions, n = 9)

	Week 7	Week 8	Week 9	M	SD
PPM C1	2	1.4	1	1.5	0.5
PPM C2	1	0.7	0.4	0.7	0.3

Group Disfluency. While fluency is undoubtedly a vital marker of learner oral proficiency, so too can disfluency be considered to be an extremely important component of learner language. Although measuring fluency can provide us with data on the speaking speed of learners, it sheds little light on the quality of the conversation. For this, it is necessary to look at not only at disfluency markers but also complexity, discussed in the next section. When exploring disfluency, there are several potential markers that can be examined. For this AR, however, the second author decided to focus on the one that is most visible in his classroom: pauses of longer than one second (Table 4).

In the first conversations for weeks seven, eight and nine, the groups paused between one and two times per minute (PPM) (Figure 8). However, in the second

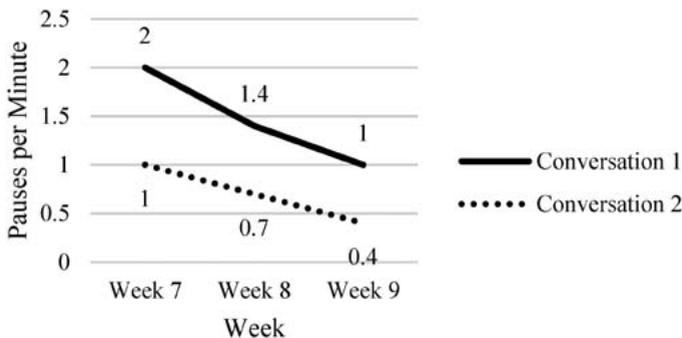


Figure 8. Group Disfluency (Source: Transcriptions, n = 9)

conversations, the number of pauses encountered per minute was halved for all three weeks. This shows that the learners required a significant amount of time to generate their thoughts and sentences when conducting conversations for the first time, but that this became less of an issue during the second conversation. This reduction in pauses during conversation may well be the factor that allowed the learners to increase their fluency so much between C1 and C2. As with fluency, it would be fascinating to examine what happens when learners engage in a third recursive iteration and whether or not a similar reduction in disfluency markers would be encountered.

Complexity. As with disfluency, there are many potential markers that can be used to examine conversational complexity. Initially, the second author decided to examine turn-taking. Surprisingly, turn-taking did not provide any new information, so we decided to examine this more closely by calculating the average length of utterance during C1 and C2. This data provided another intriguing angle for examining the changes in learner conversations, and matched well with the fluency and disfluency analysis.

Looking at the statements per minute (SPM) and questions per minute (QPM) in the table, there is a surprising level of consistency between the first and second conversations for all three weeks. The average SPM for C2 is almost the same as that for C1, while the standard deviation is significantly higher. This indicates that the number of statements varied more for the second conversations, while the average SPM remained virtually identical. A similar result is visible when looking at QPM, with little observable difference between the first and second conversations. After seeing the significant improvements that learners made in terms of fluency and disfluency between the first and second conversations, it was quite surprising that there was effectively no difference in terms of turn-taking; learners used, on average, the same number of statements and questions in the first and second conversations.

Table 5
Group Complexity (Source: Transcriptions, n = 9)

	Week 7	Week 8	Week 9	M	SD
SPM C1	3	2.8	3.4	3.1	0.3
SPM C2	4	2.7	2.4	3.0	0.9
QPM C1	2.8	0.4	2	1.7	1.2
QPM C2	2.4	0.3	1.7	1.5	1.1
WPS C1	10.6	22.3	7.6	13.5	7.8
WPS C2	11.7	25.9	14.5	17.4	7.5

After finding almost no difference between the first and second conversations in terms of turn-taking, we decided to also examine length of sentence, as this is another useful indicator of complexity. Although turn-taking remained roughly unchanged through C1 and C2, it can be seen from Table 5 that sentence length in terms of the number of words (WPS) was consistently higher in the second conversations. The difference was particularly stark during week nine, when average sentence length doubled from 7.6 to 14.5 (Figure 9). It seems likely that during the first conversations, learners' cognitive load was occupied

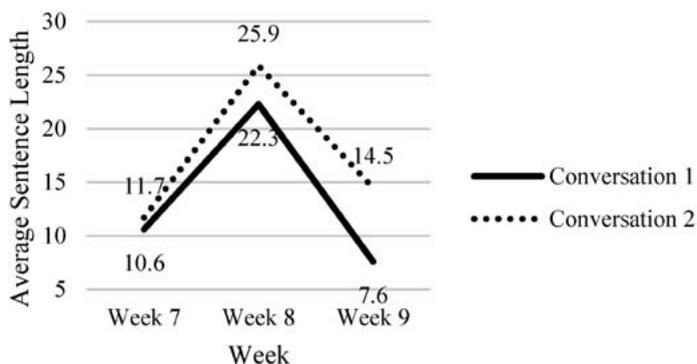


Figure 9. Group Complexity (Source: Transcriptions, n = 9)

with organizing their thoughts and language, resulting in lower fluency and complexity. However, during the second conversation learner proficiency increased considerably, so that that they were able to share more ideas and use more complex utterances.

Transcription Analysis Summary. It is clear from the analysis of the transcriptions from weeks seven, eight and nine that RCs provide learners with a useful tool for improving their fluency and increasing their ability to convey more complex ideas using more complex language structures. The transcription data indicates that the first and second conversations play different roles in learner development, with the first conversation helping the learners to arrange their ideas and the second conversation allowing them to speak with increased fluency and clarity of thought. A third recursive conversation might yield different results again and would be well worth looking in to.

Learner Classroom Feedback

Extended Recursive Let's Discuss. This activity was an excellent candidate for extension, as it requires the learners to both share their ideas and come up with a new design, both of which take a significant amount of time if they are to be done meaningfully. The learners typically required 10 minutes to complete the activity, with those who initially requested less time negotiating for an extra few minutes when the alarm sounded. As can be seen from Figure 10 below,

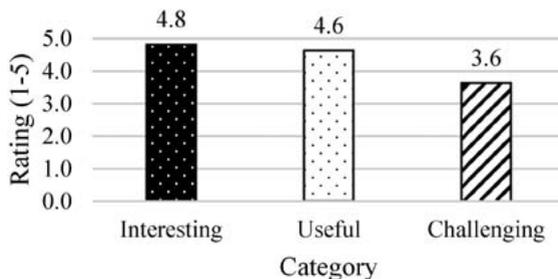


Figure 10. Learner Feedback on Let's Discuss (Source: Learner Feedback, n = 11)

the activity was rated highly by the learners, and was in fact rated as both the most interesting and the most challenging of the lesson's activities. This activity, however, allowed teachers to provide better feedback to the learners, as there was plenty of time to watch and analyze their conversation and to write notes.

Conclusion

Three-week Groups. In the first semester, the second author tried to create a more familiar, personal learning environment for the learners in the small English Teaching department program by having them remain together in the same groups of three for three weeks at a time. After gathering the results from pre- and post-questionnaires and learner interviews, he found that despite an improvement in learners' views of the three-week groupings, overall they preferred to continue with the original weekly group changes, despite teacher-taken class observation notes which indicated an increase in learner performance and behavior. On the advice of fellow teachers, who felt that the three-week groupings would be more successful with a larger, less personal department, he decided to conduct the trial again during the second semester, this time with learners from the much larger English department.

Similarly to the results from the first semester, the pre- and post-questionnaires indicated a significant change in learners' views after experiencing the three-week groups. Where initially learners had displayed an overwhelming preference for changing groups and teachers every week, after experiencing the three-week groups the questionnaire results showed that learners' views of the three-week groupings had greatly improved, while their opinions of changing groups every week had diminished slightly. Were this improvement to hold-up over the long-term, it would result in learners on average favoring the three-week groups after 12 weeks of experience. However, after six weeks of experience the learners, despite their change in views, still displayed a preference for changing groups every week, meaning that the effectiveness and popularity of the three-

week groups remains in doubt and in need of further research.

Recursive Conversations. One of the main problems that was identified with these classes was the overly large number of activities reducing the quality of learning in the classroom. In the first semester, the Let's Talk was targeted as the main component of the class to improve. This was done by making it a recursive pair conversation with three, three-minute conversations, greatly increasing learner talk time and interaction. This change was well received by the learners and observation data indicated that learners were talking more freely and more equally. However, the observational and interview data, while useful, did not provide conclusive evidence that the RCs were effective and there remained the question of whether or not three minutes was actually a sufficient amount of time in which to conduct a conversation.

In the second semester, the RCs were tweaked by changing them to five-minute group conversations and allowing the learners to change groups for their second conversation. When asked about the change in the questionnaires, learners had extremely interesting responses: on average, they rated the RCs as more interesting, less challenging and less useful than the original 10-minute group conversations. That learners found the RCs to be more interesting and less challenging was excellent to discover, as this indicated that learner engagement had increased, while at the same time the barriers to entry for the conversations had been lowered. It is interesting to note that learners considered the RCs to be less useful than non-recursive conversations, as the transcription analysis data strongly refutes the position. The transcription data shows that RCs have a significant effect on learner fluency, disfluency markers and conversation complexity. The second RCs were consistently better in terms of all three factors, showing that recursion is an excellent and highly useful method for improving learner conversation proficiency.

Final Thoughts. In light of the two goals of this project, the changes made—particularly those made in the second semester—were successful in

both increasing learner engagement in the classes and in providing learners with deeper, more meaningful conversation practice. The RCs made conversations easier to engage in and learners also found them to be more interesting than non-RCs. While we suspect that three-week groups also aided learners by creating a more personal environment, the questionnaire data does not strongly support this and more research is needed. Finally, recursion was a powerful tool for increasing learner fluency, by allowing them to self-assess and practice in recursive episodes. However, the surprising disconnect between the large improvements in oral competence shown by the transcription analysis and the overall perceptions of learners regarding this tool show that more needs to be done regarding making learners part of the classroom planning experience and providing them with useful information in order for them to make informed decisions regarding the usefulness of new pedagogical tools. We hope to further develop and utilize these pedagogical tools in future research.

Future Issues. Based on teachers' observation notes, we believe that three-week groups benefitted learners. The learners themselves, however, did not universally agree with this assessment. At this stage, there appears to be enough potential benefit to continue experimenting. What has not been made clear by this research is the effect that three-week groups would have were they to be implemented from the beginning of the school year and carried out for a longer period of time, for example one year. It appears from the data that learner opinions of the groups vary based on underlying personality traits and on learner proficiency. This too, is an area ripe for more research and may be able to shed light on aspects of motivation.

Recursive Conversations are clearly a powerful tool for learners that could be made even more impactful than they were over the course of this research. It would be prudent to experiment with increasing recursion in the classroom significantly, by having three seven-minute RCs every week and making them the focus of the lesson. Significant questions remain regarding the long-term

impact of RCs and how they should be integrated in to the classroom. This study was relatively short, at only six weeks. Although significant short-term changes were visible in learners' conversations, it is not clear whether or no these changes hold up over longer time periods, or if learners return to previous tendencies. This research also bears some limitations with regard to the statistical significance of the results. Although the results were quite positive, the experiment was conducted with only 18 learners on an English program, raising the question of how the results would look with a much larger number of students from a more diverse range of contexts. We look forward to attempting to shed light on these issues in future research projects.

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Appendix A: Example Lesson Plan

Week 7 – Relationships

Lesson Goals:

- Learners can engage in a five-minute group conversation about relationships, using a variety of conversation skills.
- Learners can use the strategies of using descriptions and using different words in order to negotiate meaning when a partner does not understand an utterance.

Procedure:

Homework check

- Students seem to forget the feedback, so we moved this part of the lesson to the end. We've been doing it for a few weeks now and it seems to be having a positive effect. Students are focusing more on keywords as preparation, instead of relying on reading out long sentences. Consequently, homework scores have also increased on average.

Lesson Goal

- Some students' lesson goals were very vague, so we helped them to make more concrete personal goals. For example, "I want to talk more" became "I will ask three follow-up questions". We've also been providing counting strategies for students so that they can self-assess more accurately.

Using Descriptions/Asking the Right Questions

- We added a recursive element to this activity, so we worked in pairs for two minutes at a time. Everyone had two minutes with everyone else, allowing us to practice the skill three times. The first time was usually not so successful, but the second and third times were much better.

Using Other Words/Wedding Plans

- After comparing homework notes, we spent a few minutes coming up with new words and ways of saying them, such as "zombie day is Halloween". We feel that this maybe helped students with the productive element of the skill.
- We changed the Wedding Plans activity to a recursive pair activity similar to the one above. As with the previous activity, students improved after the first pair, usually becoming much more proficient by the third discussion.

Let's Talk

- We split it into three sections: first group talk, feedback session, third group talk. While students were conducting the first group talk, we made notes on their use of conversation skills and areas for improvement. During the feedback session, we shared this information with the students so that they could focus on improving for the second group talk. Some students actively used the feedback and improved their conversations, so we felt that this was fairly successful.

Lesson Reflection

- Students frequently referred to the feedback session when writing their lesson reflection. A significant number of students stated that they wished to focus on weaknesses that we had identified for their next lesson goal. Other students focused purely on their own personal goal.