FORMULAIC SEQUENCES IN ENGLISH CONVERSATION: IMPROVING SPOKEN
FLUENCY IN NON-NATIVE SPEAKERS

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Native speakers often ignore the limitless potential of language and stick to institutionalized formulaic sequences. These sequences are stored and processed as wholes, rather than as the individual words and grammatical rules which make them up. Due to research on formulaic sequence in spoken language, English as a second language/foreign language pedagogy has begun to follow suit. There has been a call for a shift from the traditional focus on isolated grammar and vocabulary to formulaic sequences and context. I tested this hypothesis with 19 L2 English learners who received 5 weeks of task-based instruction and found substantial progress in oral fluency only for the experimental group. Differences between pretest and posttest oral fluency were examined by looking at the learners’ speech rate and their mean length of run. Subjective evaluation of fluency by 16 native English judges confirmed the calculated measures.
Background

While the notion of formulaticity in language is not new, it has received a great deal of attention in recent years. Most notably, Pawley and Syder addressed the link between formulaic language and speech in first language (1983), noting the fact that native speakers choose socially standardized expressions such as “I’ll see you later” as opposed to other possible but unlikely generated constructions such as “I hope that we will meet at a more protracted date.” Pawley and Syder’s revolutionary work showed the flaws inherent in a traditional view of language as a collection of vocabulary along with a grammar. This change in thought was echoed for second language (L2) by Lewis (1993), who asserted that having a large vocabulary and a strong understanding of grammar did not mean a student would be able to speak effectively. What is necessary is for language learners to also learn and use formulaic sequences. Lewis comments that it is very common for non-native speakers (NNS) to creatively generate statements that, while grammatically correct, are quite different from those used by native speakers and often unnatural; thus the need to notice and learn such expressions, which in themselves number in the hundreds of thousands (Pawley & Syder, 1983).

A primary reason for the pervasiveness of formulaic language is that formulaic language allows for greater efficiency in communication. Formulaic multi-word chunks are stored and recalled as wholes (Pawley & Syder, 1983; Wray, 2002) rather than the words which they are composed of. Studies have found that formulaic sequences are processed more quickly than nonformulaic constructions (Conklin & Schmitt, 2008) and with fewer errors by both native and non-native speakers of English (Jiang & Nekrasova, 2007). For example, Conklin and Schmitt (2008) found that the phrase “take the bull by the horns” was processed more quickly when the context established it as idiomatic (‘attack a problem’) than when it was seen literally (‘wrestle
an animal’). They also showed that formulaic sequences (such as *hit the nail on the head*) were processed more quickly than similar but non-formulaic control phrases (*hit his head on the nail*).

These facts about formulaic sequences indicate that they would be useful things for second language instructors to address in the classroom. Lewis (1993) points out that these formulaic lexical items are often already grammaticalized; they contain the necessary and accurate grammar for their purpose, so their use might result in non-native speakers producing more grammatically accurate language. For example, an expression such as *when I was a kid*, which can readily be used at the beginning of a statement, is self sufficient and requires no additional grammatical manipulation. This is certainly not to say that learning grammar is unnecessary, but rather that expressions need to be learned as well in their own right. It has been shown that not only do such expressions allow for efficiency in working memory (Pawley & Syder, 1983) because NNS can rely on them to produce quick bursts of language that they do not have to put together componentially, but their use also leads to improved accuracy (Taguchi, 2007). Wood shows in his study of the common uses of formulaic sequences in L2 speech (2006) that in spoken monologues, non-native speakers will often chain together sequences to extend the length of their utterances. These formulaic sequences are, as Dechert (1980) calls them, ‘islands of reliability’, which speakers constantly fall back on to produce more fluent speech. Conklin & Schmitt’s review of other studies reports that such studies found that 1/3 to 1/2 of native-speaker speech is formulaic (2008). All in all, the fact is clear that much of spoken language is dealt with in multi-word chunks, rather than constructed out of the component parts that make up each expression (Nattinger & DeCarrico, 1992).

The sheer magnitude of formulaic sequences to be learned may present a formidable problem for second language learners, however. Another aspect of such formulaic sequences in
English that can make them difficult to learn is that they often feature phonological change (Bybee, 2002), such as the reduction of don’t in I don’t know or the palatalization that occurs in don’t you, would you. Bybee (2002) notes that such reduction does not always occur when two sounds are next to each other; rather, these reductions occur more often in frequently used language than in infrequently used language. Such reduction, however, means that students who have learned separate vocabulary and grammar may not recognize the words when they are pronounced this way, and they likely will not produce such phrases in the same way as native speakers as well. Phonological reduction makes it imperative for students to notice and learn such formulaic sequences as wholes, rather than just learning their constituent parts and constructions.

All in all, these aspects of formulaic language have serious pedagogical implications for L2 which are only recently receiving attention. Previous research has commented on the need to introduce such language in the classroom, but only a few studies which attempt to explicitly teach formulaic sequences have been conducted. One early call is Michael Lewis’s highly influential book The Lexical Approach (1993), which advocated a shift from teaching isolated grammar and vocabulary to teaching lexical items: collocations, sentence heads, and institutionalized expressions. The Lexical Approach is broad in its reach, and covers numerous topics, but it does not provide experimental data. Later, Lewis compiled a book of activities and teacher reports which described successful use of this lexical approach in the classroom, but this was a teacher’s guide, not formal research (Lewis & Conzett, 2000). Only a handful of studies have been conducted since then which provide data supporting the link between formulaic instruction and improved spoken accuracy and fluency, and the benefits that explicit instruction of formulaic language has for learner speech.
In 2007, Taguchi conducted an experiment with 22 beginner learners of Japanese to see if they would benefit from a focus on small grammatical chunks, i.e. simple grammatical constructions memorized as wholes rather than uniquely generated. Students memorized 37 different grammatical chunks and practiced using them in spoken discourse. The hope for this experiment was that students’ spoken Japanese would be more accurate, as they would use the correct grammatical chunks that they memorized, rather than forming the constructions creatively. The results of Taguchi’s study showed that the students did in fact improve in their accuracy, and utilized a wider variety of spoken language than they had before receiving the instruction. In general, if students have been instructed in a method that causes them to constantly monitor their grammar, they may become more cautious in their speaking; thus it seems logical that by memorizing accurate constructions, students may feel safer about producing language. While Taguchi’s study illustrates that chunk learning can help improve spoken accuracy, the grammatical chunks used in the study were quite small (usually just a word form plus a grammatical particle). For example, students were taught the two-word chunk *kuruma de* (by car) which is the construction N+de (particle for means). Teaching such small constructions as wholes is not very different from teaching students to generate the word pairs on their own. However, it is certainly positive evidence that grammatical chunks can be of benefit to beginning learners.

An important experiment conducted in 2006 examined the question of whether teaching students to simply notice formulaic sequences in authentic academic language materials would improve their oral proficiency (Boers, Eyckmans, Kappel, Stengers, & Demecheleer, 2006). Seventeen advanced level Dutch L1 college students studying English were presented with authentic reading materials of an academic nature, as was a control group of 15 students.
Instruction for both groups was integrated into their general English proficiency class that met once a week for an hour over the course of eight months, with a total of 22 hours of instruction. In the experimental group, the students were introduced to collocations and fixed expressions that were found in their materials. Instruction focused on finding and recording collocations and paying attention to co-text (i.e. the words that surround the collocations and expressions). Students in the control group dealt with the same materials, but instruction did not focus on lexical sequences and co-text. Following this class, the participants were given a short article to read, and then were interviewed and audio recorded. Their interviewer judged them as to their oral proficiency, and a different judge who was not present in the interview, who was asked to consider fluency, range of expression, and accuracy, later judged their recordings. Later, a formulaic sequence count was done for each of the recorded interviews to see how many sequences were used by each speaker. The results of this study showed the experimental participants came across as more proficient than the control participants. The experimental participants were also observed to recycle many formulaic sequences that they encountered in the article they read for the post test.

The results of the Boers et al. (2006) study are intriguing, and suggest that teaching students to notice formulaic sequences will lead to greater perceived fluency. It cannot be concluded from this study, however, that actual acquisition of formulaic sequences occurs, but rather, the study showed that students are better able to notice and recycle lexical items from texts. Whether the students retained and further utilized these formulaic sequences for use in spontaneous speech was not determined. Additionally, Boers et al. (2006) found increased fluency for the group which noticed formulaic sequences, but this measure was based on subjective impressions of fluency, rated by only two judges, and no quantitative measures of
spoken fluency were used. The current study will further the research done by Boers et al. (2006) by asking whether actually teaching students formulaic sequences will result in greater use of formulaic language in later spontaneous speech. This will be evaluated both by subjective means, such as Boers et al. (2006) used, but also by objective means. I also investigate whether the acquisition of these chunks results in greater fluency for the speakers.

Two studies which looked at correlations between use of formulaic sequences and spoken fluency (one in an English as a Second Language (ESL) setting, Sung, 2003, and one in an English as a Foreign Language (EFL) setting, Hsu & Chiu, 2008) did not test the question of whether noticing or learning formulaic sequences would lead to increased fluency, but did look for relationships between non-native speakers’ knowledge of lexical collocations, use of collocations, and spoken fluency. Audio recordings of participant monologues were measured holistically for spoken fluency by two judges using standardized test rating scales (the Test of Spoken English in Sung, 2003, and the IELTS in Hsu & Chiu, 2008), and collocation usage was analyzed in transcriptions of the recordings. While the results in both studies showed the strongest relationship to be between students’ knowledge of lexical collocations and spoken fluency, a positive relationship between the use of lexical collocations in speech and spoken fluency was also shown. Although these studies found correlations between formulaic sequences and fluency, they did not show strong support for the claim that fluency improves because of the use of formulaic sequences.

As far as I know, no previous research has examined whether teaching students actual formulaic sequences (instead of just how to notice them) results in their greater use of formulaic sequences in spontaneous conversational abilities, nor has previous research found that such use makes spontaneous conversation sound more fluent. The only exception is a small case study
involving a single participant that has not yet been published (Wood, in press). Several students participated in a six-week fluency workshop course which focused exclusively on teaching students formulaic sequences to improve their spoken fluency. Two audio recordings of one particular student (one recording from before the course and one from after) were analyzed and compared to judge improvement in fluency. This comparison showed a substantial improvement in the student’s spoken fluency, and greater use of formulaic sequences in her speech. Another point of interest was that only around 35% of the formulaic sequences the student used in the post-test were introduced during the course, suggesting that explicitly teaching students formulaic sequences will also lead them to notice and acquire more of them on their own. For this reason, looking specifically at which formulaic sequences are used in spontaneous conversation is not my goal, but rather, my hypothesis is that students who learn about the formulaic nature of language through specific examples will gradually incorporate many other formulaic sequences into spontaneous conversation on their own.

The present study addresses the need for research to directly examine the ties between explicitly teaching formulaic sequences to students in the language classroom and their fluency in spontaneous conversation. This study will examine the following research questions:

1. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson make greater use of formulaic sequences in their spontaneous production?
2. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson improve in objective measures of fluency, including speech rate and mean length of run, and in subjective ratings by native English-speaking judges?
3. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson improve more in fluency than students who focus on individual vocabulary and grammar in the context of a task-based lesson?

Method

Participants

For the present study, students were recruited from the Intensive English Language Institute (IELI) at the University of North Texas. In the IELI, students attended four to six hours of intensive academic English classes per day which focus on writing and note-taking. In these classes, as far as speaking practice goes, the students are given speaking tests aimed at academic discussion based upon the Academic Word List. They are typically given 20 to 30 minutes per day to practice such discussion, but without any instruction. Forty students of mid-intermediate to advanced level (from levels 4 and above in a 0-6 level system) initially joined the study. However, due to the intensive nature of their regular studies, attrition was high. A total of 19 students completed the course (student IDs are given here, where student initials consist of the students’ own first initial and then either a C or an E, indicating the group (control or experimental) which they belong to).
The students were randomly assigned to a control group and an experimental group. Eight control group participants and eleven experimental group participants completed the course. The number of participants who completed the course in each group was uneven due to attrition.
Instruction

The instruction was a five-week course which met for 30 minutes three times a week. Six weeks had been planned; however, two class sessions were canceled due to an instructor being ill. Students who completed the course attended at least 50% of the classes.

Each week of the five-week course focused on a different recorded conversation between native speakers of English. These conversations were about topics that students might encounter outside of the classroom in a casual conversation setting (i.e. not service settings), and served as templates for the students’ own conversation practice during the class (see Appendix A for a list of the topics and transcriptions of the conversations). Apart from these main materials, the control group and experimental group each received different supplementary materials. The control group received additional examples of grammar and vocabulary usage, while the experimental group received additional examples of fixed expressions and lexical chunks (some lesson plans are presented in Appendix B).

The control group and experimental group were each taught by different instructors (I taught the experimental group and Jenifer Larson-Hall, my thesis advisor, taught the control group), but both classes were based on a task-based approach to teaching (Willis, 1996). The first class session each week focused on listening to the sample conversations and was essentially the same for both control and experimental groups. The groups differed in how these recordings were examined and expanded upon in the two other class sessions each week.

During the first session, students would hear the conversation two to three times and answer some listening comprehension questions such as what city does K dream of living in? or what is J’s job? (where K and J were the interlocutors in the dialogue). New or unfamiliar words
would be introduced by the instructor, and the class would review the answers to comprehension questions together. This would be followed by a speaking task or activity on the same topic as the example conversation. Students would not be given a transcript of the conversation until the next session. The differences between the control and experimental group will be explained below.

Control Group

The control group received instruction based on the traditional vocabulary / grammar split focusing on the isolated vocabulary and grammar found in the materials rather than on the fixed expressions and lexical chunks. In the early stages of the class (during the first week or so), attention was paid to discourse features and single-word fillers such as like, so (at the beginning of phrases and questions), just (mid-phrase), yeah, ok, cool, mmhm, etc. After this, instruction was focused on why particular grammar items appeared in the example conversations, and students were given contrastive examples (where do you live? vs. where have you lived?; do you enjoy this city? vs. have you enjoyed this city?).

During the second 30-minute session of the week, the students were given the transcription for the conversation. The students would first read through the transcription with the teacher and review isolated vocabulary and then listen to the conversation two more times while looking at the transcript. After this, while listening to the conversation the students would be given an activity focusing on vocabulary and grammar, for example, noticing verb tenses and aspects.

The third 30-minute session each week focused on production. The students would often be put in pairs to practice having a conversation on the same topic as the conversation they studied during the first two sessions. This was supplemented by language analysis, where the
teacher would lead the students in reflecting on grammar points, vocabulary items, and mistakes made by the students.

Overall, the control group received the same amount of listening and speaking practice as the experimental group, but instruction was focused on isolated vocabulary and grammar points.

Experimental Group

The experimental group received instruction with attention paid primarily to formulaic sequences found in the materials rather than to the isolated vocabulary and grammar. This instruction was supplemented by additional formulaic sequences. As with the control group, attention was given to discourse features and fillers during the first week of the class, but with more attention paid to formulaic sequences that serve as fillers such as *I don’t know, you know,* etc… as well as the single-word fillers covered in the control class.

The first 30-minute session of each week was nearly identical to that of the control group, except in the handling of the speaking activity which concluded the first session each week. For this activity, the participants were given a few key formulaic sequences to utilize in their conversations. For example, in one of the lessons, the formulaic sequence *I can’t stand it when*... was covered, and the teacher introduced similar formulaic sequences and sentence heads such as *...really gets to me* and *I can’t deal with*... with contextual examples. At the end of the class, students had conversations discussing what they could not stand about various things and practiced using these target sequences.

During the second 30-minute session of the week, the students were given the transcription for the conversation. The students read through the transcription and the teacher reviewed the formulaic sequences discussed in the previous class. The students then listened to the conversation two more times while looking at the transcript. The instructor led the students in
finding formulaic sequences that appeared in the conversation and exploring their usage. Further contextual examples of the formulaic sequences in use were pulled from the Corpus of Contemporary American English (COCA) and given to the students in handouts. The instructor supplemented the formulaic sequences found in the conversation with others that might be found in a similar conversation, such as in the *I can’t stand it when*... example mentioned earlier.

Overall, focus was placed on using the formulaic sequences as wholes, rather than on examining the grammatical structure within them. In fact, explicit grammar was not brought up at all during the entire course.

The third session each week focused on production. A variety of exercises and activities were used to reinforce the formulaic sequences learned in the previous class sessions and to draw the students’ attention to their own fluency with spoken practice. Some examples of these activities can be seen in the lesson plans in Appendix B.

**Measurement**

Students were given a pre-test prior to instruction, and a post-test at the conclusion of the course. Both tests were done in pairs in a quiet classroom. The pre-test and post-test were identical, but students were placed in different pairs during each test.

**Pre-test and Post-test**

The paired students were given a topic (likes and dislikes about the town where they are studying) about which they were asked to have a short conversation (around five minutes). The participants were left alone in a classroom, and the conversations were audio recorded (three different recorders were used: Sony PCM-D50, Panasonic HDC-SD5, and XtremeMac Micromemo).
During the pre-test, students were paired arbitrarily with other students who had signed up to take the test at the same time. In the post-test however, students from the experimental group were paired with students from the control group. However, no student was paired with their partner from the pre-test. Since there were more students in the experimental group, a few of them could not be paired with students from the control group, in which case they were paired with a volunteer student or teacher who did not participate in the study. Participants were not aware that the post-test would be on the same topic as the pre-test.

Assessment

Quantitative Fluency Analysis

Studies mentioned earlier (Boers et al., 2006; J. Hsu & C. Chiu, 2008; Taguchi, 2007) have depended on the intuition of native speakers to measure the spoken fluency of non-native speakers. While native speaker judgment (NSJ) can provide useful insight into spoken fluency, it is not reliable enough to be the sole measure. The present study utilizes a large amount of native speaker scoring, but only to supplement the more objective quantitative measures. In the process of collecting NSJ scores, it was noticed than even though judges received training, were given criteria to score on, and practiced scoring together, scores were still quite scattered. For example, one judge might give a particular person a 5 on the 1-7 scale, while another judge might give the same person a 2. Wray (2002) also found numerous variables which affect the reliability of NSJ, such as data set size, judge fatigue, and changes in judgment threshold while judging. In order to reach a greater consensus, the present study used 16 NSJ judges to score each recording, a far greater number than previous studies.

Because of these issues with native speaker intuition, it is obvious that quantitative measures are needed to more accurately and objectively measure improvement in spoken
fluency. For the present study, two primary criteria which allow for such objective measures will be addressed: speech rate, and run length. These two criteria may be measured; an increase in either measure over time suggests an improvement in spoken fluency (Wood, 2006). Research points to the speed of speech as a primary aspect of spoken fluency (Goldman-Eisler, 1967, 1972), and as something which improves over time as students study and practice (Freed, 1995; Riggenbach, 1991; Towell, 1987; Towell, Hawkins, & Bazergui, 1996). Speakers who are able to speak quickly display greater spoken fluency than those who speak slowly. Of course, even with native speakers there is a great deal of variation in speaking rate as some people speak more quickly than others, but individual performance here was examined in light of changes in an individual’s performance over time. Speech rate (SR) is determined by a measure of syllables uttered per minute.

The second aspect of spoken fluency which can be measured is run length, or rather, how much a speaker is able to say before pausing. Longer runs (count of syllables uttered between pauses) suggest that a speaker speaks more fluently than a speaker who pauses after shorter runs (Freed, 1995; Lennon, 1990; Möhle, 1984; Raupach, 1980). Following similar studies, the low cut-off point to determine a pause was set at 0.3 seconds; what this means is that any pause of 0.3 seconds or greater marks a break in a run (Wood, 2006). The present study calculates the mean length of run (MLR) for each speaker in combination with the previously mentioned speech rate to measure spoken fluency. Increases in these two measures indicate improved spoken fluency. By using these two measures, data of varying lengths may be easily compared.

For the present study, the pre-test and post-test recordings were analyzed and measured for these two measures (speech rate, mean length of run). Since the recordings were conversations between two speakers, each recording was first divided into each speaker’s turns.
Turns were determined when one student was the primary speaker. Their partner might add some simple responses to show comprehension, but the primary speaker was clearly the person providing the content of that part of the conversation. If speaker overlap occurred, the segment would be given to the speaker who claimed the turn, and the other speaker’s overlap was ignored. The turns of each speaker were compiled into separate recordings, and a pause of 0.3 to 0.6 seconds was then placed between each turn to emulate natural pausing. This editing process resulted in 38 recordings: pre-test and post-test recordings for each of the 19 students. The length of these recordings ranged from one minute and nine seconds to three minutes and twenty-nine seconds, with an average length of two minutes and forty seconds.

Next, each recording was marked for individual runs. Pauses were measured by hand in Sony Sound Forge 9. Each run was transcribed and syllables were counted. Some words are pronounced differently by different speakers and may contain a different number of syllables (for example, the word “difference” might be pronounced with two syllables [dif-rence] or three [dif-er-ence]), and so it was necessary to count the syllables audibly, rather than from the transcriptions. The total number of syllables were counted and divided by the total number of runs to determine the mean length of run. The total time of each recording was divided by the total number of syllables to determine the SR as syllables per minute. The results from the pre-test and post-test of each student were then compared and a percent change was calculated. Once all recordings had been analyzed, an average percent change of SR and mean length of run was calculated for each class.

Measuring Formulaic Sequence Usage

While some of the studies mentioned in the introduction (JT Hsu & C Chiu, 2008; Sung, 2003) focused on collocations such as ‘heavy smoker’ or ‘commit fraud’ which are easily
recognized, what constitutes a formulaic sequence and what criteria can be used to recognize one has been a subject of research (Wood, 2006; Wray & Namba, 2003). Five particular criteria to identify formulaic sequences have proven useful.

First, formulaic sequences commonly feature phonological coherence (Wray, 2002) with ‘no internal pausing and a continuous intonation contour’ (Wood, 2006, p. 21) or phonological reduction. This was the most apparent and common criterion found in the present study; the participants clearly separated each word except when using a formulaic sequence in which case their words were strung together.

Next, formulaic sequences are often collocations or lexical phrases such as for example, or I don’t know. This criterion is based on Nattinger and DeCarrico (1992).

Third, formulaic sequences are often of greater complexity or length than other language used by a non-native speaker. Less fluent speakers might only utter a few syllables before pausing, but then use a formulaic sequence which is longer or more complex than their other output. An example is if a speaker says I would like… but does not use would elsewhere in other nonformulaic constructions (Wood, 2006).

Fourth, formulaic sequences may be idioms and metaphors which are semantically irregular, such as a piece of cake or out of the blue. With non-native speakers, however, such sequences are sometimes inaccurate, but such inaccuracies do not preclude such phrases’ consideration as formulaic sequences if the phrases meet the other criteria listed here.

Fifth, formulaic sequences may be idioms or metaphors which are syntactically irregular such as by and large. These also require careful review as in the fourth point.
Wood emphasizes that formulaic sequences do not necessarily meet any particular combination of these criteria, and that they might feature one, several, or all of these criteria (2006).

Next, it is important to consider how these formulaic sequences were analyzed once they were identified. Simply counting the number of formulaic sequences that appear in the data was not feasible as the data which were compared were not of equal length. Also, formulaic sequences are of varying lengths (for example I like vs. when I was a kid), which should be taken into account in counting the contained syllables. I thus decided to use a ratio of syllables found in formulaic sequences to total syllables in the recording (FS/S ratio), as was also used in (Wood, In Press). Using this measure will indicate what percentage of each speaker’s speech is formulaic in nature, and this can be compared between pre-test and post-test recordings to gauge if students’ speech becomes more formulaic.

For the present study, each recording was analyzed for formulaic sequences using the five criteria just mentioned. This was done separately by myself and Jenifer Larson-Hall after a session where we both rated 4 examples separately and then discussed differences in our judgments, and together re-listened to the recordings to come to a consensus. For the final 34 examples (there were 38 transcripts in all to be considered—19 for the pre-test and 19 for the post-test) discrepancies were reviewed by me. I listened again to recordings and resolved the differences in judgment alone. The FS/S ratios in the pre-test and post-test for each student were then compared to see if students utilized more formulaic language in their post-tests.

Native Speaker Judgment

Although I consider the objective measurement of fluency to be the more important one for interpreting the outcome of the study, I thought it important to include subjective native
speaker judgments for several reasons. One is that these types of judgments have been used in previous research which investigates formulaic sequences. Another reason is that it will be useful to see how well native speaker intuitions match the objective measures of fluency increase or decrease. Short 30-to-60-second segments of these recorded conversations were listened to by native speakers of English. The judges were undergraduate students taking a senior-level Second Language Acquisition course at UNT who received extra credit for their participation. After listening to each speaker, the judges assigned a rating from 1 to 7 to each recording, with a 1 being very disfluent, and 7 being very fluent, based on their own individual impressions. Scores were written directly onto a piece of paper listing the number of each recording. The 38 recordings which included each student’s pre-test and post-test samples were placed in random order and put in a computer file with a label as to their order (Recording 1, Recording 2, etc.). Each recording was listened to by the 16 judges in a quiet environment using headphones, and their scores were averaged for each recording. Each student’s pre-test and post-test scores were then compared to judge improvement.

Before completing this task, the judges were given around 20 minutes of instruction on the aspects of speech which are measured to judge fluency (rate of speech, pausing phenomena, and length of runs). They were then presented with four example recordings to listen to and discuss together. All of these example recordings were from students who did not participate in the speaking class, and covered the full range of fluency scores. The judges then listened to the 38 recordings and scored each one.

While the full recordings that were analyzed for SR and mean length of run for each student averaged about two and a half minutes, the segments used for scoring were only 30 seconds to one minute in length. The segments were intended to feature the primary speaker who
the judges were to score so there would be no confusion over which speaker was to be rated. There was some concern that if a segment contained an equal mix of both speakers, the judges might rate the wrong speaker. However, these segments needed to be chosen as arbitrarily as possible. To choose these segments, I looked for long runs by each speaker as close to the middle minute of each recording (i.e. 30 seconds prior to and following the mid-point of the recording). In some cases, there were no lengthy turns found in this middle minute, so this area was expanded until a turn of at least 30 seconds by one speaker was found. In a few cases with particularly quiet or weak students, 30-second turns could not be found. In this situation, two turns which totaled to over 30 seconds were edited together, separated by a short pause. It was impossible for each segment to feature one speaker exclusively, so comments such as “rate the female speaker” or “rate the first speaker (the person who lives in Dallas)” were included on the score sheets used by the NSJ judges. Three of the recordings were lower in quality than others, due to the recording equipment used during the tests, and this was also pointed out to the judges.

Results

Quantitative Fluency Analysis

Table 2 shows the percentage change in scores from pre-test to post-test for the study for speech rate (SR), mean length of run (MLR), formulaic syllables to total syllables (FS/S) ratio, and native speaker judgment scores (NSJ) for each student. The percentages in Table 2 are the percentage changes from the pre tests to the post tests. Please see Appendix C for individual scores on the pre-test and post-test.
Table 2

*Percent change from pre-test to post-test (standard deviations in parentheses)*

<table>
<thead>
<tr>
<th>Control Participant</th>
<th>SR</th>
<th>MLR</th>
<th>FS/S</th>
<th>NSJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>3.2%</td>
<td>-10.3%</td>
<td>16.3%</td>
<td>-45.0%</td>
</tr>
<tr>
<td>GC</td>
<td>-23.9%</td>
<td>-33.4%</td>
<td>-36.8%</td>
<td>-48.0%</td>
</tr>
<tr>
<td>KC</td>
<td>-4.5%</td>
<td>-19.6%</td>
<td>127.5%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>NC1</td>
<td>18.6%</td>
<td>12.3%</td>
<td>-42.2%</td>
<td>19.0%</td>
</tr>
<tr>
<td>NC2</td>
<td>11.6%</td>
<td>-5.6%</td>
<td>-49.2%</td>
<td>-9.0%</td>
</tr>
<tr>
<td>PC</td>
<td>-5.9%</td>
<td>8.1%</td>
<td>9.7%</td>
<td>-20.0%</td>
</tr>
<tr>
<td>TC</td>
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<td>-2.4%</td>
<td>-15.6%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>VC</td>
<td>11.0%</td>
<td>12.3%</td>
<td>153.9%</td>
<td>11.5%</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Experimental Participant</th>
<th>SR</th>
<th>MLR</th>
<th>FS/S</th>
<th>NSJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>16.9%</td>
<td>20.8%</td>
<td>12.9%</td>
<td>41.7%</td>
</tr>
<tr>
<td>JE1</td>
<td>21.2%</td>
<td>25.3%</td>
<td>125.0%</td>
<td>18.8%</td>
</tr>
<tr>
<td>JE2</td>
<td>1.7%</td>
<td>24.5%</td>
<td>29.4%</td>
<td>-13.9%</td>
</tr>
<tr>
<td>KE1</td>
<td>11.7%</td>
<td>3.5%</td>
<td>71.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>KE2</td>
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<td>13.9%</td>
<td>73.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>LE</td>
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<td>-1.2%</td>
<td>59.8%</td>
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</tr>
<tr>
<td>ME</td>
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<td>96.0%</td>
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</tr>
<tr>
<td>NE</td>
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<td>4.7%</td>
<td>0.0%</td>
<td>27.0%</td>
</tr>
<tr>
<td>OE</td>
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<td>32.7%</td>
<td>-0.6%</td>
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</tr>
<tr>
<td>SE</td>
<td>20.1%</td>
<td>22.0%</td>
<td>16.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>XE</td>
<td>38.1%</td>
<td>101.6%</td>
<td>114.7%</td>
<td>63.6%</td>
</tr>
</tbody>
</table>

| Class Average | 0.7%(13.4)| -4.8%(16.1)| 20.5%(78.2)| -11.9%(24.4)|

<table>
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<td>101.6%</td>
<td>114.7%</td>
<td>63.6%</td>
</tr>
</tbody>
</table>

| Class Average | 16.5%(11.1) | 24.7%(27.6) | 54.4%(45.6) | 13.2%(28.4) |

The experimental group showed an average improvement in speech rate of 16.5%, while the control group only went up 0.7%. The individual change scores show that for the control
group, some participants increased modestly in speech rate while others decreased, but for the experimental group almost all (just one exception) of the participants increased their speech rate, with some increasing quite a bit. For statistical tests we use an $\alpha=0.10$ level, which is larger than the standard level but was suggested by Larson-Hall (Larson-Hall, 2009) as a way to increase power in the field of language research. A $t$-test comparing the two groups (with equal variances not assumed) found a statistical difference between groups ($t_{13.4}=-2.7$, $p=.02$, 90%CI: -26.0, -5.52. $d=1.28$). The effect size (Cohen’s $d$) shows that the difference between groups was somewhat more than one standard deviation greater for the experimental group, a large effect size. Figure 1 below shows boxplots of the difference from pre-test to post-test for both groups (the width of the boxplot indicates the relative number of participants in each group).

![Boxplots of speech rate percent change from pre-test to post-test for control and experimental groups.](image)

*Figure 1. Speech rate percent change from pre-test to post-test.*
For the mean length of run, the experimental group overall improved 24.7%, while the control group dropped 4.8%. This means that participants in the experimental group were able to produce longer runs of speech between pauses, on average. Again, looking at individual scores, it can be seen that in the control group most participants decreased in their run lengths, while in the experimental group almost all participants increased, some impressively so (participant XE with an over 100% increase!). A $t$-test comparing the two groups (with equal variances not assumed) found a statistical difference between groups ($t_{16.4}=-2.9, p=.01, 90\%\text{CI}: -47.1, -11.9, d=1.30$). Again, the effect size is large and indicates the groups differed by slightly over 1 standard deviation of difference. Figure 2 below shows boxplots for the difference from pre-test to post-test in mean length of run for the two groups.

![Figure 2. Mean length of run percent change from pre-test to post-test.](image)
Native Speaker Judgment

Overall, the native speaker judgments roughly matched the quantitative analysis, especially in the overall differences between the two classes. The control group average decreased 11.9% in the post-test, while the experimental group increased 13.2%. Changes in native speaker judgment scores between pre-test and post-test for each student generally coincided with changes in speech rate and mean length of run, with a few exceptions. A $t$-test looking for differences between the groups (assuming unequal variances) found a statistical difference between groups, ($t_{16.4}=-2.06$, $p=.055$, 90%CI: -46.4, -3.95, $d=0.94$). The effect size shows that this effect size was nearly as large as that for the other comparisons, at around 1 standard deviation of difference. A boxplot of the mean scores of the native speaker judges for each group is shown in Figure 3.

![Boxplot](image)

**Figure 3.** Native speaker judgment of fluency percent change from pre-test to post-test.
Formulaic Sequence Use

The results showed the majority of the experimental group greatly increasing their use of formulaic sequences (with two exceptions: NE stayed the same, and OE dropped 0.6%) with an average improvement of 54.4% (please see Appendix D for individual participant FS/S ratios). The control group improved as well, but with only a 20.5% average. A $t$-test looking for differences between the groups found no statistical difference between groups because of the large variances, even though the mean scores were quite different ($t_{10.5}=-1.1, p=.30, 90\%CI: -89.7, 21.7, d=0.53$)

![Figure 4](image_url)

*Figure 4.* Formulaic sequence syllables to total syllables ratio difference from pre-test to post-test.
While a few students in the control group did improve significantly, some more than doubling their use of formulaic language, these improvements were not across the board, as in the experimental group. The results of the control group were very disparate, in fact, with half of the class dropping in their formulaic sequence usage in the post-test.

Closer comparison of some individual students’ pre-tests and post-tests illustrates how formulaic sequences assisted in improving speech rate and mean length of run. Some examples of participants’ formulaic sequence use (from both control and experimental groups) follow:

Example 1 – ME (Experimental Group)

Participant ME’s FS/S ratio nearly doubled (96% improvement) between her pre-test and post-test. In her conversations there are several long runs which are made up almost entirely of formulaic sequences. This is something that is not seen in her pre-test, where her formulaic sequences are scattered and not chained together. In the pre-test she often uses single short 3-to-4-syllable formulaic sequences, but then pauses, leaving the entire run to a single sequence. The following segment gives a pre-test excerpt (sequences determined to be formulaic are bold in brackets and run length in syllables is noted in parentheses at the end of each run):

00:00:06.0 um (1)
00:00:07.7 [I think about] (3)
00:00:09.7 mm, [I think] um (4)
00:00:12.5 Denton is a safe place (6)
00:00:16.6 mm, [to live], and uh (5)
00:00:19.7 many things is very cheaper (8)
Errors

27

00:00:22.5 cheap, maybe [cheaper than] (6)

00:00:24.2 [west coast] or (3)

Formulaic sequences are certainly present, but she only makes use of one per run, and often stops to think immediately following, interrupting her run. While she does create some long runs, she does not make extensive use of formulaic sequences. In her post test, there are much longer runs and not only is there a greater amount of formulaic language, but formulaic language regularly appears in chains:

00:01:27.4 like on the easts, eats, east side in Taiwan there is uh [many beautiful natural place], [I think there] (25)

00:01:36.4 it's not like Tauyuen city, city's too (10)

00:01:39.9 [I think it's also too] crowd (7)

00:01:42.0 crowd but (2)

00:01:43.2 [if you want to] [have a good job] [in the north Taiwan] [I think] [Tauyuen is a good place] (21)

She generates long runs in close proximity, and in the last line above she chains five sequences together to create a 21 syllable run which, while not perfect, is quite accurate and natural. Such chaining of at least two sequences can be seen in almost all of her 10+ syllable runs, while it only happens twice in her pre-test. Chaining has been shown to be a common fluency-aiding function for non-native speakers (Wood, 2006). From ME’s pre-test to her post-test, she made a 23.6% improvement in her run length (mean length of run), which shows that her chaining of formulaic sequences aided her fluency. Her speech rate went up 15.3% as the formulaic sequences were spoken without the internal pausing that is seen when she struggles to generate her constructions word by word.
Example 2 – JE1 (Experimental Group)

In JE1’s post-test, we see a high concentration of formulaic sequences in chains, which were not present in his pre-test. In his pre-test, he chains two formulaic sequences together only twice, while in his post-test, it occurs in ten separate runs. Here is an example of formulaic sequence use in his pre-test:

00:00:56.0 and I think uh [in the future] I should (10)
00:00:58.7 try to (2)
00:01:00.8 eat (1)
00:01:01.4 [American food] (5)
00:01:03.3 but uh, not much (4)
00:01:05.4 because it's too (4)
00:01:08.1 greasy (2)
00:01:09.3 [I don't know], mmhm (5)

A clear improvement can be seen in his post-test, where he uses formulaic sequences frequently:

00:02:03.7 [you mean that], that uh here is uh quite far from (11)
00:02:07.3 the city (3)
00:02:08.6 like uh, Dallas (4)
00:02:10.4 [is quite far] (3)
00:02:11.6 [and there's no transportation] (7)
00:02:13.6 [if you don't have a] [private car] (8)
00:02:15.7 you, you [couldn't go there] (6)
00:02:18.0 [how bout the food], [how bout the weather?] (9)
00:02:20.8 [but for me now] [it's ok] (7)
His use of formulaic sequences more than doubled (125% increase) in his post-test, and both his speech rate and mean length of run improved as well (21.1% and 25.3%, respectively).

Example 3 – VC (Control Group)

An interesting difference is seen when looking at VC, a student from the control group who dramatically increased her use of formulaic language. Her post-test FS/S ratio was not particularly high (0.316), but rather, her pre-test FS/S ratio was the lowest (0.124), so she had lots of room to improve. Brief pauses between words existed in almost all of her pre-test speech, with only a few formulaic sequences sparsely scattered.

00:00:09.8 ok I feel that (5)
00:00:11.6 Denton is kind of small town (7)
00:00:15.2 near the Dallas (4)
00:00:17.0 it's very different fr, uh, from my hometown (10)
00:00:20.8 don't have a lot of high building (8)
00:00:23.6 and uh, heightest, building [maybe just] 5 floor (11)
00:00:28.4 and (1)
00:00:30.4 boring (2)
00:00:32.7 mm (1)
00:00:33.6 so I dislike (4)
00:00:35.5 Denton, traffic (4)
00:00:37.3 because no taxis (5)
00:00:39.7 or (1)
00:00:40.8 [just have a] [school bus] (5)
She utilizes much more formulaic language in her post-test, but what is not strongly present is the chaining phenomenon, which was more predominant in the experimental group participants.
They included [all the thing] (7)

so I don't need to buy furniture (9)

so (1)

Overall, the participants who had the lowest pre-test FS/S ratios improved their use of formulaic sequences the most, regardless of group. In fact, the five participants with the lowest pre-test FS/S ratios showed the greatest improvements in their post-tests, as seen in the figure below (participants whose second letter of the abbreviation is a C are control group students; students whose second letter is an E are experimental group students).

Table 3

Five lowest pre-test FS/S participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-FS/S</th>
<th>Post-FS/S</th>
<th>Change FS/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC 0.124</td>
<td>0.316</td>
<td>153.9%</td>
<td></td>
</tr>
<tr>
<td>KC 0.129</td>
<td>0.293</td>
<td>127.5%</td>
<td></td>
</tr>
<tr>
<td>XE 0.129</td>
<td>0.277</td>
<td>114.7%</td>
<td></td>
</tr>
<tr>
<td>ME 0.134</td>
<td>0.262</td>
<td>96.0%</td>
<td></td>
</tr>
<tr>
<td>JE1 0.165</td>
<td>0.370</td>
<td>125.0%</td>
<td></td>
</tr>
</tbody>
</table>

It follows that students who do not already utilize formulaic language can greatly benefit from explicit instruction. Non-native speakers have been shown to use more formulaic language over time as they gain experience with authentic language in use even without explicit instruction (Wood, 2006). The control group utilized the same authentic materials as the experimental group, which may have helped them in this regard.
Another interesting point that I noticed while listening to the recordings was that the speech rate and mean length of run were similar within L1 groups. For example, I noticed that the Chinese speakers seemed to speak somewhat more smoothly than the other groups. In Table 4 I give pre-test, post-test, and percentage of change from pre-test to post-test scores for the data, divided into the three categories of L1 learners who participated in the study. In Table 4a, pre-test scores for speech rate (SR; measured in syllables per minute), mean length of run (MLR; measured in average number of syllables per run) and formulaic sequence length (FS/S; measured in number of syllables contained in formulaic sequences divided by the total number of syllables in utterance) are given for the Chinese (n=11), Japanese (n=3), and Thai (n=5) groups. Table 4b gives the post-test scores for the same data. Table 4c gives the percentage change in these measures from pre-test to post-test.

Table 4

Average L1 group pre-test and post-test scores and percent change

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SR</td>
<td>MLR</td>
<td>FS/S</td>
</tr>
<tr>
<td>Chinese, n=11</td>
<td>144.6 5. 66</td>
<td>0.240 Chin.</td>
<td>150.2 6. 00</td>
</tr>
<tr>
<td>Japanese, n=3</td>
<td>110.6 4. 21</td>
<td>0.269 Jap.</td>
<td>133.0 4. 88</td>
</tr>
<tr>
<td>Thai, n=5</td>
<td>139.1 4.79</td>
<td>0.314 Thai</td>
<td>156.4 5.41</td>
</tr>
</tbody>
</table>

From Table 4a and 4b, it can be seen that Chinese and Thai speakers both had faster speech rates as compared to Japanese speakers, for both the pre-test and post-test. Chinese
speakers also had the highest length of runs (MLR) in both the pre-test and post-test, followed by Thai speakers at an intermediate level, and then Japanese speakers with the shortest MLR.

Notice that although speech rate and mean length of run increased from pre-test to post-test for all groups, these relative hierarchies held over the pre-test and the post-test. However, Chinese speakers used less formulaic language in their pre-tests than the other L1 groups, and improved in that usage the most. Japanese and Thai speakers made more significant headway in speech rate and mean length of run than in formulaic sequence usage. These are observations that occurred as I conducted this study; I did not set out to specifically follow L1 groups, and with such low numbers of participants in some groups certainly no statistical comparisons should be made. More specific studies on the L2 fluency of specific L1 groups could, however, provide beneficial insights into which particular aspects of fluency (such as speech rate or run length) are most helpful for each group, and examine whether aspects of the L1 are influencing speech rate or mean length of run in the L2.

Discussion

I will now discuss each of my research questions and note whether the results of the experiment upheld the hypotheses.

1. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson make greater use of formulaic sequences in their spontaneous production?

Results showed that nine of the eleven experimental group participants increased significantly their usage of formulaic sequences from pre-test to post-test, with the remaining two students producing about the same amount in both tests. On average, the experimental students improved 54.4%. For comparison purposes, students in the control group who were not explicitly taught formulaic sequences but received exposure to authentic language improved as
well, but the results for the group were varied, with half of the students decreasing in their use of formulaic sequences. The average improvement for the control group was 20.5%. The fact that the experimental group improved consistently illustrates that students who are explicitly taught formulaic sequences in task-based instruction do incorporate them into their spontaneous production. I did not expect that students would necessarily remember and incorporate all of the particular formulaic sequences that I introduced them to in class, as such phrases are often very topic-specific. Research by Wood (2006) showed that even if formulaic sequences are not explicitly addressed, students’ use of them will naturally increase over time as they gain more experience with the language (2006), so it is no surprise that the control group improved in this aspect. However, the significantly greater improvement of the experimental group in the present study shows that explicitly teaching formulaic sequences does have a strong positive effect. In Wood’s (In Press) case study, the student he tested used a much greater amount of formulaic language in her post-test, but only a small percentage of those sequences were ones she was taught in class.

2. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson improve in objective measures of fluency, including speech rate and mean length of run?

This question concerns just the experiment group. Participants in the experimental group increased their speech rate by 16.5% on average, with gains occurring for all individuals except one participant who decreased slightly (3.3%). Looking at individuals, ten of the eleven experimental students increased their mean length of run (with one student more than doubling her performance). The consistent improvement across the entire experimental group is evidence that explicit instruction of formulaic sequences in task-based instruction does have a positive
effect in objective measures of fluency. This finding is even more impressive in the context of the time frame of the experiment; gains were made in only 5 weeks and 9 hours of class time.

3. Do students who are explicitly taught formulaic sequences in the context of a task-based lesson improve in fluency more compared to students who focus on individual vocabulary and grammar in the context of a task-based lesson?

This question concerns comparisons between the experimental and control groups. Overall, the experimental students showed greater improvement than the control group in all measures (quantitative measures of speech rate and mean length of run, native speaker judgment, and formulaic language usage). The control group showed some improvement, but performance was mixed and less consistent than in the experimental group. Note that the control group did progress somewhat in fluency, and this may have been due to the nature of the authentic language that was being used in both classes (language that was produced at a natural pace, unlike canned dialogues found in most English textbooks, which are stilted and then spoken at a very slow speed for purposes of playing the conversations in the language classroom).

The experiment conducted provides strong evidence that explicitly teaching students formulaic sequences and giving them time to practice and internalize them leads to improved spoken fluency, as measured quantitatively and by native speaker judgment. In the experimental group where formulaic sequences were the focus of instruction, increased use of formulaic language was seen nearly across every individual as well as in the average scores.

In summary, this study is the first experimental study that I know of that has shown a direct link between teaching formulaic sequences in the classroom and increased use of formulaic sequences in spontaneous conversation. Increased use of formulaic sequences then leads to students’ objective and subjective improvement in fluency. While task-based teaching is
a useful method of helping students to receive large amounts of input and output and to gain speaking practice, this study seems to shows that incorporating a healthy component of attention to formulaic sequences in the classroom can help students in a second language environment use such formulaic sequences more frequently and thus improve in their fluency in speaking. A variety of interesting and enjoyable tasks that incorporate formulaic sequences are shown in Appendix B and can be used by teachers, but future research could profitably focus on finding the most effective ways of embedding formulaticity in ESL/EFL speech instruction.

I also found tantalizing evidence that measures such as speech rate and mean length of run may vary widely depending on the language learners’ L1. My study did not set out to answer this question, so the numbers of participants are not large enough to study this question statistically, but further research on this topic may uncover some fascinating evidence that speakers transfer certain suprasegmental aspects of their speech patterns from their L1 to L2.
APPENDIX A

NATIVE-SPEAKER CONVERSATION TOPICS AND TRANSCRIPTS WITH TARGETED FORMULAIC SEQUENCES HIGHLIGHTED
**Week 1 – “So what do you do?” Transcript**

J: So what do you do?
K: Well, uuum, I’m a student at UNT
J: Yeah
K: I’m getting my Masters in Linguistics, or, well, in TESL
J: Yeah
K: And, um, I’m an intern at the IELI
J: Cool
K: So I teach lab classes
J: Yeah
K: And it’s a lot of fun
J: Cool
K: I like it. What about you?
J: Umm, I work for a city and I make maps and stuff
K: Yeah?
J: Yeah
K: You work for the city of Denton?
J: No, I work for the city of Frisco
K: Ok
J: Yeah, it’s, it’s alright, haha
K: Ok
J: Um
K: So is it, GIS, or…
J: Yeah
K: Ok, do you know Wes?
J: Ummm… I don’t
K: Oh no, actually no he does that for Denton I think so nevermind
J: (I’m not sure, wait, which Wes?)
K: I can’t remember his last name now
J: I don’t know, I’m tryin, well, I don’t…
J: I know A Wes, but I don’t know any Wes’s that do what I do
K: Ok, nevermind then
J: It works… Um… cool, well, um, let’s see…
K: Do you go to school or, you graduated?
J: Yeah I graduated
K: Ok
J: Now I just work
K: Yeah?
J: Yeah
K: What did you study?
J: Um, I studied Geography and Biology
K: Yeah
J: Yeah
K: Did you have um… oh, what was… that professors name who was from Ghana
J: Oh, Dr. Oppong?
K: Yesss
J: Yeah
K: I love him
J: Yeah
K: Yeah
J: Yeah he’s pretty funny
K: Yeah, we went on a, a geography study abroad to Ghana
J: Oh really?
K: Yeah, it was great
J: (That’s cool) When did you do that?
K: Like eight years ago
J: Wow, (that’s cool)
K: Yeah, 2000
J: Man
K: It was really fun though
J: Yeah… like, I… wh… what class, what’s that for, were you just doing the study abroad?
K: (It was) Yeah, it was Medical and Economic Geography
J: (Crazy)
K: I was an Anthropology student but I just wanted to… do a study abroad in a cool country so…
J: That’s really cool
K: Yeah, it was, it was great
J: Yeah… So did you do your Undergraduate in uhh Anthropology?
K: Um hm
J: Cool
K: Yup, and then I got another one in French, which I’m not using, but… I change my mind a lot so…
J: That’s cool… So what are you doing in TESL? Like, uh, do you, do you focus on any language or what do you do?
K: Um… I’m interested in teaching ESL
J: Oh
K: Um… I taught for a couple years in Japan
J: Hmm
K: And I'd like to teach at a University in the future
J: Wow, that's cool
K: Yeah... we'll see...
J: Yeah... man...

Week 2 – “Where are you from?” Transcript
K: So tell me, where are you from?
J: Uh... I'm from Colorado, where are you from?
K: Yeah?
J: Yeah
K: I'm from Shreveport
J: Really?
K: Yes
J: How long were you there?
K: Uh, first 10 years of my life
J: Wow
K: And then uh my family moved to Richardson, so
J: Wow that's cool
K: I'm pretty much a Texan
J: Yeah?
K: Although I don't consider myself to be too much of one
J: Yeah, well, you started off somewhere else
K: How long were you in Colorado?
J: Uh, I was in Colorado till I was... um... 14? Maybe
K: Um hm
J: And then I moved to Phoenix for a few years, and then I moved here and finished up high school here.
K: Ok
J: Wait, that... I must have been like 12 when I left Colorado
K: Close enough
J: Yeah, I didn't finish... high school when I was... I don't know... well no I didn't finish when I..
J: Yeah, I didn't finish when I was 19
K: Uh
J: But, oh well
K: Do you go back to Colorado... a lot?
J: Not that much, I have a brother who lives there... um... and so I go visit him every once in a while, and then I have another brother who lives in Utah
K: Ok
J: And so, like, we'll go... camp... somewhere in between Denver and Salt Lake
K: Um hm, nice
J: Yeah, like once a year usually, but we haven’t done it
K: You go skiing?
J: No I’ve actually never been skiing… I don’t know… are you a skier?
K: No
J: Yeah?
K: Uhmm… I went snowboarding… in Japan, but that’s about it I’m terrible at it
J: (Wow), that’s cool
K: so, I’ve never tried skiing
J: Man… what was it like in Japan?
K: Oh… great, I mean… I mean, uh… the snowboarding? Or being in Japan?
J: Well, I was talking about snowboarding at the time, but
K: Oh yeah
J: You can, but,
K: Well I
J: But, yeah, Japan in general, you lived there for a while, like
K: Yeah, well, yeah the snowboarding… yeah I, I was really bad at, at the best part
J: Yeah
K: Or, or the part that I liked the best was uh, just going up the ski lift
J: Yeah
K: But uh,
J: Getting to just look around?
K: Right right you know that was really calming and then you get to… the end and you have to jump off and that was always a little scary
J: (Yeah… ohhhh) Yeah
K: But, yeah
J: And have to try and balance down
K: Yeah… I was pretty terrible at that
J: Yeah, I’ve heard it’s pretty bad the first couple of times
K: Yeah… the first time I went out, um… the people that I was with wanted to… be out there for 10 hours
J: Wow
K: I didn’t know that to begin with
J: Yeah
K: So, it was probably for the best though, because, you know, after the first couple of hours I was like “I hate this, I don’t wanna do it”, but then I was just kindof just forced to stay and so
J: Yeah
K: I just had to keep getting up and trying again so
J: That’s cool… so did you end up liking it or?
K: (Yeah)
J: Or was it still just kinda like an experience that you’re glad you did but, you will never do it again?
K: No, I, I’d do it again
J: Yeah?
K: Yeah
J: That’s cool… I don’t know, yeah, I, like I’ve, I’ve thought it would be fun, like I’ve, I’ve, I grew up skateboarding, and I still skateboard some but, um, but, snowboarding’s always sounded good but I never… got around to it
K: (Yeah, you’d probably be good at it)
J: I don’t know, I’d probably still fall down a lot, like, yeah

Week 3 - “Living Places” Transcript
J: so when do you think you’ll go back? Er, do you have definite plans for when you want to?
K: um… I don’t really have definite plans
J: yeah
K: I have another year before I graduate… so… nothing’s happening for a year
J: yeah
K: um…… I don’t know, uh, I’m thinking about going back to either Japan or maybe Korea or Taiwan… to teach
J: that’d be cool
K: but I’m also thinking of moving out to Portland… so… I don’t know
J: Portland, Korea
K: yeah
J: yeah… wow… so what’s the pull for Portland? Or
K: oh I’ve always, I’ve always wanted to move there I mean
J: (Yeah)
K: I’ve just kinda known that’s where I want to ultimately end up
J: yeah
K: or at least for that to be my home base and then
J: (umhm)
K: you know, I can travel around from there, but I don’t really want Texas to be my home base
J: yeah
K: nothing against Texas but
J: yeah (crazy)
K: just kinda ready for another place
J: yeah, you know a lot of people up there?
K: um, I know a few
J: yeah
K: yeah
J: that’s cool. yeah some of my friends from when I lived in Phoenix have moved up there, and they like it pretty well but… I don’t know, I mean, growing up in Colorado, like, now I’m… I’m really scared of like the cold and dark
K: mmmm
J: like,
K: yeah that does make me a little nervous
J: (yeah) yeah just the whole idea that
K: the grey season
J: yeah… and getting dark at like 4pm, like, you’re not even out of work at 4pm, like, when do you get to see the sun if you live in Portland?
K: oh I didn’t hear about that
J: yeah… well, I guess in Portland… it might not be 4, it’s like 4:30 or something, but it’s, it’s dark, you know
K: (yeah)
J: yeah
K: well, we’ll see
J: yeah
K: if it’s bad I’ll just move somewhere else
J: yeah

Week 4 – Movies, etc (talking about personal taste in music, movies, etc)
J: Oh yeah, movies, um… I don’t… I don’t know. I like um… I like uh…
K: I like action movies
J: Do you really?
K: Um hm
J: What kind of action movies?
K: Well, like… cheesy action movies
J: Yeah?
K: Like, Indiana Jones… Back to the Future kinda stuff
J: (Ohhh)… Yeah
K: Not like, you know… Van Damme or anything like that
J: Yeah, when you said action movies I was imagining like guns and explosions, like
K: (Nooo)… I don’t know if those actually would be considered action movies maybe cheesy action adventure
J: Yeah
K: Or just adventure
J: Yeah
K: I don’t know, like, uh… Fifth Element…
J: Yeah
K: kinda stuff
J: Well that’s cool… yeah, I don’t know, I like um… I’m tryin to, I don’t know that there’s a genre of movies that I like… I, I like uh… I like Wes Anderson movies… pretty well … I like uh…
K: Now what did he do again? I know that name but…
J: (He did like), um… Royal Tenenbaums, Life Aquatic, and stuff like that
K: (Oh, ok, yeah)… Oh ok… quirky films
J: Yaaaah… well, some of them, you know, uh… well, I mean Wes Anderson’s quirky films I guess yeah
K: (But cool)
J: and then, I like uh, I like, I like James Stewart movies, a lot… like, movies that James Stewart has been in…
J: Yeah, I guess, I like… I don’t know, I like pretty much everything I like, I like horror films even though they really scare me
K: Yeah, I can’t do the horror ones
J: Yeah, I probably shouldn’t do them
K: They give me nightmares
J: Yeah, they give me nightmares too, but I still like them!
K: Why do you watch them?
J: That’s… I’m always askin myself, like… like maybe… I should stop… like, I just can’t do this anymore.
K: Hmmm
J: Yeah… yeah uh, like, I get pretty much, I get really wrapped up in any movie that’s, that’s on like
K: Yeah?
J: Like, um… you know like if it’s, if it’s a, a scary movie I’m always jumping, you know?
K: Um hm
J: Like… and if it’s like… a romantic comedy, like, I’m squirming because it’s so awkward, I’m just like “ohhh this is, this is horrible” like, you know like, hiding my head under my hands you know so…
K: (Right, right)… That’s great

Week 5 – Bad jobs (talking about things one doesn’t like doing or would not be good at doing)

from http://www.elllo.org
APPENDIX B

SAMPLE LESSON PLANS
### Experimental Group Week 4 - “Movies”

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Listening and comprehension</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm up – 5 min</td>
<td>“Do you like horror movies?”</td>
<td>Handout</td>
</tr>
<tr>
<td>Listening – 8 min</td>
<td>Give students listening comprehension questions</td>
<td>Handout</td>
</tr>
<tr>
<td></td>
<td>Listen to conversation twice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Go over comprehension questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listen third time</td>
<td></td>
</tr>
<tr>
<td>Movie Collocations – 7 min</td>
<td>Go over movie genre collocation list</td>
<td>Handout</td>
</tr>
<tr>
<td>Speaking – 8 min</td>
<td>Conversations in pairs or groups of 3: “Do people in your country speak like J (many fragments, speaking a lot but not actually saying much?) What are some things people might do in your language that are similar?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 2</th>
<th>Formulaic language and practice</th>
<th>Materials</th>
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<tr>
<td>Warm up – 7 min</td>
<td>“What is the most difficult part of conversation with a native English speaker?”</td>
<td>Transcript</td>
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<tr>
<td></td>
<td>Discuss together as a group (native speakers talk too fast? They blend words together? Etc)</td>
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<tr>
<td>Listening – 15 min</td>
<td>Listen once with transcript</td>
<td>Handout</td>
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<tr>
<td></td>
<td>Go over formulaic sequences found in the conversation and practice with students</td>
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<tr>
<td>Speaking – 8 min</td>
<td>Conversations in pairs or groups of 3: “What kind of movies do you like most? Are there any movie genres you hate?”</td>
<td></td>
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<tr>
<td></td>
<td>Using formulaic sequences from handout</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 3</th>
<th>Practice</th>
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</thead>
<tbody>
<tr>
<td>Practice – 15 min</td>
<td>Power speaking* – movie topics</td>
</tr>
<tr>
<td></td>
<td>“Do you like movies from your country?”</td>
</tr>
<tr>
<td></td>
<td>“What kind of movie would be bad for a date?”</td>
</tr>
<tr>
<td></td>
<td>“Do you prefer to watch movies at home or in a theater?”</td>
</tr>
<tr>
<td>Practice – 15 min</td>
<td>Collocation game*</td>
</tr>
</tbody>
</table>

**Power-speaking** – students were placed in pairs and given a generic opinion topic. They were given 30 seconds to say as much as they could about the topic before switching partners and receiving a new topic. Students were encouraged to speak as quickly as they could and to not worry about making grammatical mistakes. This activity is designed to focus on increasing speech rate and reducing pauses while considering grammar.

**Team power-speaking** – students were divided into two teams and given a list of topics. The first team would choose a topic, and one student from the opposing team would have to speak
about the topic for one minute without pausing. If the student paused for too long, the opposing team would sound a buzzer.

**Collocation game** – students were divided into two teams and presented with a core noun which featured a high number of collocations in the corpus (see list further on in this appendix). Teams were given two minutes to write down as many collocations as they could come up with. After this, the teacher would introduce additional strong collocations and discuss their use with the students. This activity was designed to make students consider the many different forms which collocations might take (adjective + noun, verb + noun, …), and to increase their awareness of collocation so that they might discover such lexical items in the texts they encountered in their regular classes.

*Collocation Game Key:*

<table>
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<tr>
<th><strong>Key Word</strong></th>
<th><strong>Special</strong></th>
<th><strong>Top 5</strong></th>
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<tbody>
<tr>
<td>Test</td>
<td>Bomb a test</td>
<td>Pass a test</td>
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<td></td>
<td>Standardized test</td>
<td>Big test</td>
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<tr>
<td></td>
<td>Ace a test</td>
<td>Fail a test</td>
</tr>
<tr>
<td></td>
<td>Drug test</td>
<td>Take a test</td>
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<td></td>
<td>Test drive</td>
<td>Have a test</td>
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<td>Food</td>
<td>Junk food</td>
<td>Fast food</td>
</tr>
<tr>
<td></td>
<td>Food chain</td>
<td>Chinese food</td>
</tr>
<tr>
<td></td>
<td>Food supply</td>
<td>Organic food</td>
</tr>
<tr>
<td></td>
<td>Food shortage</td>
<td>Healthy food</td>
</tr>
<tr>
<td></td>
<td>Serve food</td>
<td>Favorite food</td>
</tr>
<tr>
<td>Student</td>
<td>Straight A student</td>
<td>Good student</td>
</tr>
<tr>
<td></td>
<td>Doctoral student</td>
<td>Full-time /part-time student</td>
</tr>
<tr>
<td>Brilliant</td>
<td>student</td>
<td>International student</td>
</tr>
<tr>
<td></td>
<td>Struggling student</td>
<td>Graduate student</td>
</tr>
<tr>
<td></td>
<td>Gifted student</td>
<td>College student</td>
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<tr>
<td>City</td>
<td>Sprawling city</td>
<td>Inner city</td>
</tr>
<tr>
<td></td>
<td>Bustling city</td>
<td>Major city</td>
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<td></td>
<td>Entire city</td>
<td>Capital city</td>
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<tr>
<td></td>
<td>City hall</td>
<td>Big city</td>
</tr>
<tr>
<td></td>
<td>City limits</td>
<td>Old city</td>
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<td>Movie</td>
<td>Hit movie</td>
<td>Movie theater</td>
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<tr>
<td>Independent</td>
<td>movie</td>
<td>Movie star</td>
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<tr>
<td>In-flight</td>
<td>movie</td>
<td>New movie</td>
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<td>Movie trilogy</td>
<td>Watch a movie</td>
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<td></td>
<td>Award-winning movie</td>
<td>See a movie</td>
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<tr>
<td>Day</td>
<td>Spend a/the day</td>
<td>Other day</td>
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<td></td>
<td>Day dream</td>
<td>Good day</td>
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<td></td>
<td>Take a/the</td>
<td>Single day</td>
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<tr>
<td></td>
<td>Day off</td>
<td>Great day</td>
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<tr>
<td></td>
<td>Seize the day</td>
<td>Day time</td>
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<tr>
<td>Country</td>
<td>Entire country</td>
<td>Foreign country</td>
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<tr>
<td></td>
<td>Free country</td>
<td>Country music</td>
</tr>
<tr>
<td></td>
<td>Third-world country</td>
<td>Free country</td>
</tr>
</tbody>
</table>
Experimental Group Lesson Plan – Week 4 – “Movies” – Listening Comprehension Handout

**Listen to the conversation between Katie and John. The first two times you hear it, try to answer these questions:**

A. What kind of movies does Katie like?  
   (cheesy action adventure movies)

B. Who likes horror movies, and who doesn’t like them?  
   (John likes them, Katie doesn’t)

C. Horror movies give John and Katie _____________  
   (nightmares)

D. What does John do when he watches horror movies?  
   (he jumps when he is scared)

E. How does John feel when he watches Romantic Comedies?  
   (he feels uncomfortable)
APPENDIX C

RAW INDIVIDUAL SCORES
|       | SR    | MLR  | FS/S | NSJ |       | SR    | MLR  | FS/S | NSJ |       | SR    | MLR  | FS/S | NSJ |       |
|-------|-------|------|------|-----|-------|-------|------|------|-----|-------|-------|------|------|-----|-------|-------|------|------|
| CTRL GROUP |       |      |      |     |       |       |      |      |     |       |       |      |      |     |       |       |      |      |
| DC    | 155.0 6. | 28   | 0.2155. | 00 |       | 160.0 5. | 64   | 0.2502. | 75 |       | 3.2%  | -10.3% | 16.3% | -45.0% | |
| GC    | 176.3 6. | 22   | 0.2446. | 38 |       | 134.2 4. | 15   | 0.1543. | 31 |       | -23.9% | -33.4% | -36.8% | -48.0% | |
| KC    | 140.4 6. | 76   | 0.1295. | 00 |       | 134.0 5. | 43   | 0.2934. | 94 |       | -4.5%  | -19.6% | 127.5% | -1.3%  | |
| NC1   | 107.7 4. | 35   | 0.3362. | 63 |       | 127.7 4. | 89   | 0.1943. | 13 |       | 18.6%  | 12.3%  | -42.2% | 19.0%  | |
| NC2   | 136.0 4. | 76   | 0.4334. | 19 |       | 151.8 4. | 49   | 0.2203. | 81 |       | 11.6%  | -5.6%  | -49.2% | -9.0%  | |
| PC    | 155.1 4. | 97   | 0.3124. | 38 |       | 145.9 5. | 37   | 0.3433. | 50 |       | -5.9%  | 8.1%   | 9.7%   | -20.0% | |
| TC    | 187.2 6. | 56   | 0.5065. | 25 |       | 179.4 6. | 40   | 0.4275. | 13 |       | -4.2%  | -2.4%  | -15.6% | -2.4%  | |
| VC    | 126.6 5. | 73   | 0.1243. | 25 |       | 140.5 6. | 43   | 0.3163. | 63 |       | 11.0%  | 12.3%  | 153.9% | 11.5%  | |
| EXP GROUP |       |      |      |     |       |       |      |      |     |       |       |      |      |     |       |       |      |      |
| AE    | 141.6 4. | 26   | 0.3963. | 75 |       | 165.5 5. | 15   | 0.4475. | 31 |       | 16.9%  | 20.8%  | 12.9%  | 41.7%  | |
| JE1   | 133.7 4. | 89   | 0.1654. | 31 |       | 162.6 3. | 13   | 0.3705. | 13 |       | 21.2%  | 25.3%  | 125.0% | 18.8%  | |
| JE2   | 126.3 4. | 16   | 0.2904. | 94 |       | 128.5 5. | 18   | 0.3764. | 25 |       | 1.7%   | 24.5%  | 29.4%  | -13.9% | |
| KE1   | 151.2 6. | 23   | 0.2884. | 94 |       | 168.9 6. | 44   | 0.4935. | 20 |       | 11.7%  | 3.5%   | 71.4%  | 5.3%   | |
| KE2   | 110.0 4. | 40   | 0.1874. | 25 |       | 134.2 5. | 01   | 0.3254. | 25 |       | 22.0%  | 13.9%  | 73.7%  | 0.0%   | |
| LE    | 146.1 6. | 22   | 0.1853. | 69 |       | 141.3 6. | 14   | 0.2953. | 56 |       | -3.3%  | -1.2%  | 59.8%  | -3.4%  | |
| ME    | 135.6 6. | 32   | 0.1344. | 31 |       | 156.3 7. | 82   | 0.2622. | 75 |       | 15.3%  | 23.6%  | 96.0%  | -36.2% | |
| NE    | 130.0 4. | 59   | 0.3233. | 94 |       | 147.5 4. | 81   | 0.3235. | 00 |       | 13.5%  | 4.7%   | 0.0%   | 27.0%  | |
| OE    | 140.6 4. | 72   | 0.3403. | 63 |       | 174.8 6. | 26   | 0.3385. | 06 |       | 24.3%  | 32.7%  | -0.6%  | 39.7%  | |
| SE    | 114.2 3. | 88   | 0.2843. | 94 |       | 137.2 4. | 73   | 0.3314. | 06 |       | 20.1%  | 22.0%  | 16.2%  | 3.2%   | |
| XE    | 103.8 3. | 56   | 0.1293. | 44 |       | 143.3 7. | 17   | 0.2775. | 63 |       | 38.1%  | 101.6% | 114.7% | 63.6%  | |

- **Average Change:**
  - **CTRL GROUP:** 0.7% -4.8% 20.5% -11.9%
  - **EXP GROUP:** 16.5% 24.7% 54.4% 13.2%
APPENDIX D

FORMULAIC SEQUENCE SYLLABLES TO TOTAL SYLLABLES
<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>DC</td>
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<tr>
<td>GC</td>
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<tr>
<td>KC</td>
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<td>127.50%</td>
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<tr>
<td>NC1</td>
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<td>NC2</td>
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REFERENCE LIST


