THE EFFECTS OF USING SPEAKING TEMPLATES ON DEVELOPING ORAL FLUENCY OF INTERMEDIATE STUDENTS

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Abstract: Among the vast array of techniques that help enhance the L2 oral fluency of students is the use of speaking templates. Much as this technique has been quite commonly practised, its relevance and effectiveness take more than experience and observation to determine. This study investigated the impact of using templates on improving oral fluency. To arrive at a conclusion, a quasi-experiment was designed with a control group (N=24) and an experimental group (N=24); they both took a pre-test and a post-test, but only the experimental group received training with speaking templates in a 6-week period. The data collected were processed to garner numerical statistics of Speech Rate, Mean Length of Runs and Average Length of Pauses, the three measures of oral fluency. The test scores of the two groups were then compared by t-tests and one-way ANOVA tests on SPSS to measure the differences in three components of oral fluency between the experimental group and the control group. The findings suggested that the students from the experimental group did not reap equal benefits from speaking templates.

Keywords: speaking skills, fluency, speaking templates.

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1. Introduction

Speaking is one of the four macro skills of English, that for most second language learners, being communicatively fluent is unquestionably the goal. Some learners and teachers even consider fluency the end, while grammar and vocabulary are just the means to achieve that end. That said, a good command of grammatical structures and a wealth of vocabulary knowledge is not always translated into high levels of oral fluency. Indeed, it is not uncommon to encounter students who possess an impressive knowledge of grammar and vocabulary, capable of making sense of long, complicated reading texts and listening tracks but still unable to produce fluent and coherent speech. Another predicament is that over time, some aspects of students' L2 proficiency do see some improvement, but their ability to communicate orally still stagnates.

The said problem is further compounded by a lack of an authentic environment which means students have little chance to "immerse" themselves into the language. In the classroom context, this shortcoming is often compensated by the introduction and practice of speaking templates – a highly structured form of scaffolding. As convenient as it may seem, whether there is any trade-off for the ease of teaching and learning with speaking templates remains questionable. In short, speaking templates, albeit widely employed, still leave much room for examination, and thanks to this, the researcher is offered an opportunity to scrutinize the effect of using speaking templates on developing the oral fluency of intermediate students.

With reference to the significance of the study, theory-wise, the study contributes to the current literature and body of research associated with teaching speaking skills and fluency training. In terms of practice, the study helps teachers gain a better understanding of speaking templates, more specifically, the upsides and downsides to using this technique in helping students improve their fluency so that teachers can be more pedagogically discerning and can make more

educated decisions. The study can also serve as a reference for those who consider teaching speaking skills to intermediate students, especially when it comes to exam preparation that doesnot allow much preparation time.

2. Literature Review

Components of speaking performance

There are three components of speaking performance: fluency, accuracy, and complexity (Ellis, 2008; Ellis & Barkhuizen, 2005; Skehan, 1998; cited in Carter & Nunan, 2013). When it comes to the interdependency between these components, Skehan (1998, cited in Carter & Nunan, 2013) suggests that they call for capacity and that there is likely to be a trade-off between these aspects of the skills. In other words, disproportionate attention to one is likely to limit one's capacity for the others. Ellis (1994, cited in Carter & Nunan, 2013) also subscribes to this view, claiming that the "psycholinguistic processes involved in using L2 knowledge are distinct from acquiring new knowledge. To acquire, the learner must attend consciously to the input and, perhaps also, make efforts to monitor output, but doing so may interfere with fluent reception and production" (p. 107). In other words, diverting learners' attention to accuracy is likely to encourage a less exploratory or fluent use of the language. On the other hand, pushing learners to develop fluency may encourage greater use of chunks of language, but at the same time can hinder attention to accuracy and reduce speakers' capacity for processing complex language. Likewise, having learners attempt new expressions or new combinations of lexical items can obstruct their accuracy or fluency (Bygate, 1999; Skehan, 1998; Skehan and Foster, 1999, cited in Carter & Nunan, 2013).

Given the interplay between the three components, it is apparent that not one single task type can lead to improvement in all three aspects. It then follows that different task types can differ in their impact. This insight suggests that students would benefit from a

combination of different task types since focusing on only one aspect is a detriment to the others. Having said that, task repetition has been shown to have effects on subsequent performance. In an experiment conducted by Bygate (1999), a student repeating a task carried out two days earlier without any warning on the second occasion produced significantly more accurate vocabulary, gained a number of collocations and produced more accurate grammar. The implications emerging from this study are, first, some forms of task repetition can enable learners to shift their attention from the problem of conceptualizing towards one of formulation. Second, task recycling provides the basis for learners to integrate their fluency, accuracy, and complexity of formulation around what becomes a familiar conceptual base. Third, impromptu speech needs practice, but around some content familiarity (Bygate, 1999).

Components of oral fluency

Speech Rate

Speed of language performance is probably best captured by speech rate, which is considered the most basic measure of fluency. According to Kormos (2006), a syllable is the basic unit of production, and the number of syllables per second directly shows how many production units were processed in an amount of time. It is clear that there is a linear trend across levels, which means higher proficiency speakers produced their oral delivery faster than lower ones. Speech Rate is calculated by dividing the total number of syllables produced in a given speech sample by the amount of total time required to produce the sample (including pause time) expressed in seconds.

$$Speech\ Rate = \frac{Number\ of\ syllables}{Total\ time}\ (syllables/second)$$

Mean Length of Runs

Mean Length of Runs is of paramount importance, and it indicates that "fluent speech involves the use of a large repertoire of

formulaic sequences to aid in balancing skills, attention, and planning during spontaneous speech" (Wood, 2007, p. 211). A run is defined as an utterance produced between pauses of 0.2 seconds and above (Towell et al., 1996). The mean Length of Runs is expressed in the number of syllables.

Kormos (2006) calculated the mean length of runs by dividing the phonation time, excluding filled pauses, by the total number of runs produced in the speech sample, whereby a run is defined as a speech segment occurring between pauses of 0.3 seconds or greater.

$$Mean\ Length\ of\ Runs = \frac{Phonation\ time}{Number\ of\ silent\ pauses + 1}\ (seconds)$$

Average Length of Pauses

The average Length of Pauses is calculated by dividing the total length of pause time by the total number of silent pauses. In more detail, according to Kormos (2006), for the calculation of the mean length of pauses, pauses shorter than 0.3 seconds are not regarded as hesitation, and so they are not included in the total length of pauses. The measurement of the average length of pauses is formulated by Kormos (2006) as follows:

$$Average\ Length\ of\ Pauses = \frac{Pause\ Time}{Number\ of\ silent\ pauses}\ (seconds)$$

Speaking templates

Speaking templates are a highly structured form of scaffolding specifically designed to facilitate learners in responding to questions in a conversation or in a speaking test. Being no stranger to teachers and learners of English for the convenience they render, templates can come under different terms such as "starter chunks" (Lewis, 1997, p. 83), "lexicalized sentence stems" (Pawley & Syder, 1983, p. 194), "micro units" (Kormos, J., 2006, p. 146), or "formulaic expressions"

(Jong et al., C., 2011, p. 536). Unlike chunks which can cover a wide range of memorized items from compound nouns like "mother tongue" to extended lexicalized stems such as "it's really hard to understand" (Leedham, 2006, p. 2), only long, memorized groups of words falls into the category of speaking templates. As such, speaking templates can be understood narrower than speaking chunks.

These long language chunks, which are strategically placed in speaking templates in this study, are known as "sentence frames" or "starter chunks", according to the classification of Lewis (1997). These long chunks normally structure learners' responses to questions in a speaking test and aid their generation of ideas.

A number of scholars have identified some distinct characteristics of formulaic speeches. One point pointed out by Carpenter and Just (1992) is that they can be learned as an entire unit and require little cognitive resources for processing. This specific trait of templates facilitated L2 acquisition in the way that students can devote their cognitive resources, proven to be quite limited in a task calling for spontaneity, to other processing activities, which in the case of a speaking test may include the search for lexical items, the attention to grammar accuracy or the formulation of a new idea, etc. Another trait of speaking templates or sentence frames, as the name implies, is that they make up part of a whole sentence, especially a complex one. It goes without saying that, unlike written texts, conversational utterances are created for the moment, and a study conducted by Pawley and Syder (2000) on the human capacity for planning speech has shown that speakers plan the lexical content of novel utterances in chunks no larger than one independent clause at a time. Thus, this one-clause-at-a-time hypothesis pointed to the fact that the burden associated with processing and producing long, multi-clause sentences would be substantially relieved with the availability of sentence frames.

3. Methodology

Research context

The research project was carried out at a tertiary educational institution in Hanoi. The English major of the institution has acurriculum with two phases spanning almost four years. Stretching six terms, the first phase focuses on improving undergraduates' overall level of English proficiency; more specifically, after a two-year intensive English language training program, English-majored students are expected to develop their English proficiency to CEFR B2 level or IELTS overall band score of 6.0. In the first three terms spanning 27 weeks, undergraduates have a chance to enhance their English proficiency via an integrated-skill approach, and the remaining three terms of the first phase spare them time to work on the four macro English skills separately and intensively. In the second phase, the shift is from English skills to linguistics, translation, and English for specific purposes. The study was carried out in the third term of the first phase.

Participants

All participants in the study were English-majored students of a tertiary educational institution. Two intact classes of Vietnamese learners of English as a foreign language participated in this quasi-experiment (N=48). They were all 19 or 20 years of age and enrolled in a 2-year intensive English language training program at the institution where the study was conducted.

According to an in-house English language proficiency test, participants' English proficiency at the experiment was equivalent to CEFR B1+ or IELTS overall band score of 5.0, equal to intermediate level.

Every week, each class had ten contact hours comprising two sessions, and at home, they were expected to self-study for an equal amount of time.

As regards the experimental group consists of 24 participants who got at least 8.5 for the National Exam English Test by the time they were admitted to the institution, and after the first two terms of studying, they all achieved passing scores in an in-house English proficiency test equivalent to B1+ level albeit not with the same results. The control group (N=24) was identified with a reasonably similar profile prior to the experiment. The average score of the National Exam English Test achieved by the control group was 8.81/10, almost the same as the experimental group's, at 8.77/10.

Research question

This study investigates the effectiveness of using speaking templates in developing oral fluency. To fufill this aim, the researcher sought an answer to the research question: *What are the effects of speaking templates on developing oral fluency of intermediate students at tertiary educational institutions?*

Research design

A quasi-experiment was designed with the following procedures:

Step 1: Identify the population

The researcher used two intact classes for the study, which means the participants were not randomly assigned to either the experimental or the control group. Initially, the participants were asked to answer questions in a speaking test, and they were informed that they would have to take another speaking test with the exact test specifications after a 6-week interval.

Step 2: Conduct the pre-test

After the participants for the study were recruited, a pre-test was administered to both groups. There were two interlocutors with recording devices and a timer to proceed with the test. The two interlocutors, both English teachers at the institution, just read the

question and gave instructions; they did not mark the test or give comments.There were, in total, six short answer questions that covered two main topics: hometown and keeping fit. The participants were kept from thinking about what they would say. Also, the participants of both groups were not informed of the topics that would get asked in the test, but there was mention of the expected length of their answers and the total time the speaking test would be restricted to (no more than 6 minutes). Regarding the pre-test items, six questions prompted participants to perform different language functions in speaking, such as giving opinions, comparing and contrasting or making future predictions, etc.

Step 3: Design the treatment

After the pre-test results were analysed and little difference was found in the two groups' verbal fluency scores, the researcher proceeded with the treatment in which speaking templates were only introduced to the experimental group. To ascribe the difference in the post-test scores and oral fluency, if any, to the exposure to and training with speaking templates, the researcher had to minimise the possibility of any factor other than the speaking templates bringing about the differences in the post-test scores. Considering this, speaking templates aside, all other learning activities were equally introduced, and homework assignments were equally prescribed for the two groups.

In terms of lesson procedures, most of the activities were the same for both groups. After check-and-drill listening and reading exercises, there were always some follow-up activities and questions related to the information and knowledge that students acquired from the reading texts and listening recordings. Students of both groups were first asked to generate ideas to answer thesequestions. They would then be taught the same vocabulary related to the theme of each lesson, and the same grammatical structures were introduced as well. The researcher was also the course instructor for both groups to make sure that they received the same treatment.

Table 1: An example of speaking templates

Language function	**Discuss advantages**
Speaking template	**Opening:** – Clearly, there are a number of obvious merits/benefits. – Obviously, there are a few positive features. **The main advantage:** – But I would probably say that the one thing that really stands out is… This is because… – However, I guess the greatest benefit is that… This is surely a positive feature as/because… **The second advantage:** – Besides, a second positive point could be that… This can be seen… – As well as this, a second merit is that… This can be seen…
Sample question	What can be some benefits of being famous?
Sample answer	**Clearly, there are some obvious merits** **But I would probably say that the one thing that really stands out is that** it is easy to make money. **This is because** we can see the extravagant lifestyles that celebrities have. You know they always seem to have cool cars and luxurious houses. **Besides, a second positive point could be that** famous people receive a lot of respect in society. **This can be seen in the way** that celebrities often receive special attention at hotels and restaurants.

The follow-up questions were where speaking templates, the experimental materials, were introduced. Specifically, at first, students of both groups were asked to work in pairs to generate ideas for the questions; they were also asked to come up with some lexical items or recycle ones that they acquired from the reading or listening. After several minutes of pair work, the teacher would elicit answers from some groups and ask for clarification and/or addition. Both groups of the experiment received the teacher's guidance and had a chance to collaborate with their peers. However, while both groups were instructed to organize their answers and extend their main ideas by providing explanations and/or examples, only the experimental groups were provided with the speaking templates. A sample question and a sample answer using speaking templates were also provided. An example of a speaking template can be found in Table 1.

After each lesson, students of both groups were required to record their answers to the follow-up questions and submit their recordings to the teacher. Students were encouraged to send the best version, which means they could revise their talk as much as they wish. However, while the control group was asked to just record their answer, the experimental group were required to use the templates.

Step 4: Conduct the post-test

The post-test was conducted a week after the last lesson, and participants of the experimental group were not required to use speaking templatessince if they just memorized the templates and used them when responding to the questions, the memorized templates would then be a majoradvantage to members of the experimental group when compared to the completely impromptus speeches of the control group. Members of both groups, however, were informed right after the pre-testthat they would have to take another test whose format was identical to the pre-test they just took.

Step 5: Measure the effects of the treatment

The researcher used PRAAT –a scientific speech analysis software program which can convert sound files into a three-dimensional spectrogram, allowing the transcription and analysis of very small segments of recorded speech. In this study, PRAAT was used to yield numerical data of Speech Rate, Mean Length of Run and Average Length of Pauses of each speech. After the numerical data was calculated, it was then run through SPSS statistics. The t-test for independent samples was used to compare the two groups' oral fluency, as all the data in this test were normally distributed. Based on the result of the pre-test, the researcher then categorized participants of the experimental groups into three sub-groups: high achievers, intermediate achievers, and low achievers. This was to compare the extent to which speaking templates can have an effect on each group

of participants. In order to determine the speaking templates' extent of effectiveness on three groups of students (the high-achievers, intermediate achievers, and low achievers), the researcher used the conventional analysis of variance (ANOVA) test to compare these sub-groups post-test scores. The classification of members to each group was determined by the results of the pre-test. A two-tailed p-value of 0.5 was set as a threshold for significance in all the tests.

4. Findings and discussion

After a 6-week interval, both groups took the post-test, which was set to determine the effect of speaking templates on oral fluency measured in Speech Rate, Mean Length of Runs and Average Length of Pauses.

Speaking templates were proven effective in improving oral fluency of the intermediate students in all three measures of oral fluency: Speech Rate, Mean Length of Runs and Average Length of Pauses. This conclusion was based on the analysis of the post-test scores of the control group and the experimental group. More specifically, the control group trailed their counterpart in all components of oral fluency, with asignificant gap found in the Mean Length of Runs. However, what stood out from the post-test results was that although the experimental group outperformed the control group in all three aspects of oral fluency, the former was more heterogeneous. In other words, the experimental group's post-test scores were more spread out compared to the results of the control group. This could, to a certain extent, invite the interpretation that the experimental group's better performance in the post-test was due to the much better performance of the individuals at the higher end of the oral fluency spectrum. Further analysis of the data suggested that speaking templates did not have the same effect on all students in the experimental group.

Table 2: Post-test scores on different components of oral fluency

Components of oral fluency	Group	N	Mean	SD
Speech rate	Control group	24	2.4	0.4
	Experimental group	24	2.7	0.4
Mean length of runs	Control group	24	1.9	0.5
	Experimental group	24	2.5	1.1
Average length of pauses	Control group	24	1.4	0.7
	Experimental group	24	1.2	0.9

It is apparent that no significant difference was found between the low-achievers in the experimental group and their counterparts in the control group. To be more specific, Sig. (2-tailed) scores for Speech Rate, Mean Length of Run and Average Length of Pauses were 0.442, 0.245 and 0.512, respectively, all higher than 0.05. It is then safe to say that compared to the low-achievers in the control group, the low-achievers in the experimental group did not make a significantly bigger improvement in oral fluency even after their training with speaking templates.

Independent Samples t-Tset

		t-test for Equality of Means				
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SR	Equal variances assumed	0.441	-.1750	0.2207	-.6483	0.2983
	Equal variances not assumed	0.442	-.1750	0.2207	-.6509	0.3009
MLR	Equal variances assumed	0.245	-.4250	0.3499	-1.1754	0.3254
	Equal variances not assumed	0.245	-.4250	0.3499	-1.1763	0.3263
ALP	Equal variances assumed	0.511	-.1375	0.2039	-.5749	0.2999
	Equal variances not assumed	0.512	-.1375	0.2039	-.5794	0.3044

Figure 1: Post-test scores of the low-achiever's groups

A similar result emerges from the post-test scores of the intermediate achievers (N=8*2), as shown in Figure 2. In more detail, Sig. (2-tailed) was 0.097, 0.911 and 0.513 for Speech Rate, Mean Length of Run and Average Length of Pauses in turn, and once again, the figures were all higher than the threshold of 0.05. This invites the conclusion that no difference in oral fluency existed between the two groups of intermediate achievers, whether they had been introduced to and trained with speaking templates or not.

Independent Samples t-Tset

		t-test for Equality of Means				
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SR	Equal variances assumed	0.091	-0.3125	0.1724	-0.6822	0.0572
	Equal variances not assumed	0.097	-0.3125	0.1724	-0.6923	0.0673
MLR	Equal variances assumed	0.910	-0.0250	0.2170	-0.4905	0.4405
	Equal variances not assumed	0.911	-0.0250	0.2170	-0.5084	0.4584
ALP	Equal variances assumed	0.513	-0.1375	0.2050	-0.5772	0.3022
	Equal variances not assumed	0.514	-0.1375	0.2050	-0.5780	0.3030

Figure 2: Post-test scores of the intermediate-achievers groups

Unlike the other subgroups, a statistically significant difference was observed in the test results of the high-achievers. In all three measures of oral fluency, the sig. (2-tailed) was all lower than 0.05 with the sig. (2-tailed) for Speech Rate being 0.08, for Mean Length of Runs 0.09 and for Average Length of Pauses 0.44. It, therefore, can be inferred that the introduction of speaking templates had a role to play in the higher results of the high-achievers in the experimental group since this group of high-achievers outdone their equivalents in the control group in all three measures of oral fluency.

Independent Samples t-Tset

		t-test for Equality of Means				
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SR	Equal variances assumed	0.008	-0.3375	0.1968	-0.7596	0.0846
	Equal variances not assumed	0.003	-0.3375	0.1968	-0.7646	0.0896
MLR	Equal variances assumed	0.009	-1.3875	0.4577	-2.3693	0.4057
	Equal variances not assumed	0.014	-1.3875	0.4577	-2.4218	0.3532
ALP	Equal variances assumed	0.044	-0.4250	0.1925	-0.8379	0.0121
	Equal variances not assumed	0.047	-0.4250	0.1925	-0.8426	0.0074

Figure 3: Post-test scores of the high-achievers groups

Regarding Speech Rate, which measures how quickly speakers produced their oral delivery, the gain in this aspect by the high-achievers in the experimental group could be attributed to accelerated automaticity as a result of practice with speaking templates, and this acceleration could eventually lead to faster processing of speech production.

Table 3: The high-achievers' post-test scores

Components of oral fluency	Group	N	Mean	SD
Speech rate	Control group	8	2.6	0.3
	Experimental group	8	3	0.4
Mean length of runs	Control group	8	2.1	0.4
	Experimental group	8	3.5	0.9
Average length of pauses	Control group	8	1.6	0.3
	Experimental group	8	1.2	0.4

As far as the *Mean Length of Runs* was concerned, the high-achievers from the experimental group could produce substantially longer fluent runs than those from the control group. This could be because the high-achievers from the experimental group may have internalised the learned phrases through practice at home. The quite long chunks in the speaking templates could also give the high-achievers from the experimental group an advantage edge.

With reference to *Average Length of Pauses,* speaking templates could help the high-achievers from the experimental group to reduce their hesitation when answering questions. It is quite apparent that higher proficiency levels often contain fewer and shorter pauses because speakers with higher proficiency do not hesitate as often as lower proficiency speakers in their responses. This, as explained by Jong and Perfetti (2011), was because "as the students know what to say and how to say it, they have more resources for retrieving vocabulary and grammatical structures, again reducing the need for frequent and long pauses." (p. 561). Another plausible reason for the better performance of the high-achievers in the experimental groups in the post-test could be their home practice with speaking templates with a certain amount of repetition to achieve significant improvement within six weeks.

Within the scope of this study, speaking templates were empirically testified to be effective in boosting students' oral fluency. However, the merits rendered by training and practising with speaking templates were only savoured by some students. Unfortunately, two-thirds of the experimental group's members did not benefit significantly from the templates, which, on the other hand, were proven to have a profound effect on the oral fluency of the other one-third. These students were the high-achievers in the pre-test, and with the aid of speaking templates, they gained an advantage over their equivalents in the control group in the post-test. Despite six weeks of training and practising with speaking templates, the low-achievers and

intermediate-achievers did not significantly outperform the corresponding subgroups from the control group.

The findings of the study carry some implications for teaching and learning. As for teaching, speaking templates are more suitable for small-sized classes with the slight disparity in students' oral fluency. However, it is a fact that large-sized, mixed-ability classes are much more common in practice. As a result, speaking templates should be introduced as supplementary materials rather than be made a mandatory part so that less competent students are not disadvantaged. Finally, practice with a certain amount of task repetition is recommended to reap the benefits of speaking templates.

The studies still have some limitations. One was the small sample size, which did not allow generalisations to other researchers in other contexts. Another was the limited time span of this study which might need to show the extent of difference that speaking templates could make on oral fluency. An additional limitation concerns categorising students into three subgroups after the pre-test results were analysed; participants were assigned to three groups by descending their pretest scores. It would be more reliable if there had been a benchmark with clear criteria.

References

Bygate, M. (1999). Task as context for the framing, reframing and unframing of language. *System*. https://doi.org/10.1016/S0346-251X(98)00048-7

Carter, R. & Nunan, D. (2013). *The Cambridge Guide to Teaching English to Speakers of other languages*. Cambridge University Press.

Jong, N., & Perfetti, C. (2011). Fluency Training in the ESL Classroom: An Experimental Study of Fluency Development and proceduralization. *Language Learning, 61*, 533-568. https://doi.org/10.1111/j.1467-9922.2010.00620.x

Carpenter, P. A. J. P. R., & Just, M. A. (1992). A capacity theory of comprehension: Individual differences in working memory. *Psychological Review, 99*(1), 122. https://doi.org/10.1037/0033-295X.99.1.122

Kormos, J. (2006). Exploring measures and perceptions of fluency in the speech of second language learners. *System, 32*(2), 145–164.

Leedham, M. (2006). "Do I Speak Better?" -A Longitudinal Study of Lexical Chunking in the Spoken Language of Two Japanese Students. *The East Asian Learner, 2*(2), 1–15. Retrieved at https://www.researchgate.net/publication/47343030

Lewis, M. (1997). *Implementing the Lexical Approach: Putting Theory into Practice.* Language Teaching Publications.

Pawley, A. & Syder, H. (1983). Two puzzles for linguistic theory: Native-like selection and native-like fluency. In J. Richards & R. Schmidt (Eds), *Language and Communication.* (pp.191–226). Longman.

Pawley, A., & Syder, F. H. (2000). The one-clause-at-a-time hypothesis. In *Perspectives on Fluency*. The University of Michigan Press.

Towell, R., Hawkins, R., & Bazergui, N. (1996). The development of fluency in advanced learners of French. *Applied Linguistics.* https://doi.org/10.1093/applin/17.1.84

Wood, D. (2007). Mastering the English formula: Fluency development of Japanese learners in a study abroad context. *Japan Association for Language Teaching, 29*(2), 209-230. Retrieved at https://jalt-publications.org/files/pdf-article/art3_8.pdf