Do Student Perceptions of Fluency Gains Match the Empirical Evidence?

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ABSTRACT

This paper follows up on a previous study that sought to ascertain student perceptions about English Discussion Class (EDC) lessons. Those results, based on a sample of almost 100 Rikkyo University students, clearly indicated that the participants felt considerably more positive about the EDC course and its individual lesson activities at the end of the Spring Semester than at the very beginning. The vast majority of these students also indicated that they felt their fluency and confidence when speaking English had improved over the course of the fourteen-lesson semester. The aim of the current study, however, was to find out whether such intuitions are borne out by empirical evidence. Some selected group discussions, from near the beginning and end of the semester, were videotaped and analysed for this purpose. Results indicated that, both in terms of rate of speech and hesitation phenomena, fluency gains were indeed made in all cases. This offers some tangible support for the perceptions of the students themselves.

INTRODUCTION

The main purpose of Rikkyo University's English Discussion Class is for students to develop their spoken fluency (Doe, 2014). It is well known that Japanese junior high and high schools tend to prioritize the development of grammar, writing, reading, and to some extent listening skills, as these are the skills that are tested in academic entrance exams. The result is that many students have had limited opportunities to develop their spoken fluency by the time they enter university. As a consequence, many are left underprepared for future occasions when they may actually need to speak English, whether for personal or professional reasons.

Japanese students are often well aware of the deficiency in their English speaking ability, however, and courses such as the EDC (which is compulsory for all freshmen students at Rikkyo) can be viewed as an attempt to address this situation. Garside (2015) set out to ascertain whether, in the eyes of the students themselves, the program succeeds in terms of improving their fluency and confidence when speaking English. A further aim was to determine their attitude with regard to individual lesson activities. In response to a questionnaire given at the end of the Spring Semester, an overwhelming number (90.9%) stated that they felt able to speak English more fluently than at the beginning of the semester. An even greater number (92.9%) responded that they felt more confident about speaking English. With regard to the individual lesson activities (for example pair work, group work, listening to classmates, listening to the teacher, etc.) in every case the activity was perceived as more useful, more enjoyable, and less difficult than had been anticipated at the beginning of the semester. Full details of the original questionnaires, and all the corresponding results, can be seen in Garside's (2015) study entitled 'Investigating how student perceptions of discussion class change during the Spring Semester'.

The purpose of the current study was to investigate whether the students' intuitions regarding their progress are in fact borne out by the empirical evidence. An important caveat is that several aspects of the original study may be impossible to quantify. Confidence when speaking English, along with the perceived enjoyment and difficulty level of individual activities, can only realistically be assessed by questionnaires completed by the participants. This is due to the subjective nature of such concepts as *confidence, enjoyment*, and *difficulty*, but also due to individual differences among learners. For example, what is enjoyable or difficult for one student

may not be so for another. Improvements in fluency, however, are potentially easier to quantify empirically. If such gains can be observed, then the lesson, or at least the activity under investigation, can be said to be successful in terms of the stated goals of the course.

It then becomes necessary to operationalize what is meant by spoken fluency. Nation (1989) does so by calculating the number of words per minute along with the number of hesitations, repetitions and false starts. This is broadly the approach taken here too, as it encompasses the two major aspects of fluency: temporal variables (i.e. rate of speech) along with hesitation phenomena (Ellis, 2008). However, in this study false starts have been combined with instances of repair, whether conducted by the same or another speaker, reflecting the group-based nature of the activities. Unassisted group discussions were recorded as near to the beginning and the end of the semester as possible and then compared on the basis of the fluency measures outlined above. Depending on the results, it would then be possible to see whether the course has succeeded in its goal of improving the students' spoken fluency.

This study's research question, therefore, can be stated as:

Does the empirical evidence support EDC students' claims regarding improvements in their spoken fluency during the Spring Semester?

METHODOLOGY

Participants

Video recordings were made of the final (16-minute) unassisted group discussion of a group of four students from five different classes. The classes were chosen to reflect a variation of ability levels, from Level II (the highest in this study) to Level IV (the lowest). Recordings were made in Lesson 3 and again in Lesson 12. Three classes were eventually chosen for analysis, one from each of Levels II, III, and IV. Each of these groups consisted of the same students in the Lesson 3 and Lesson 12 recordings. This means that a total of 12 students were involved in the recordings that were selected for analysis.

Procedure

Extended, unassisted group discussions were chosen for recording as these activities represent the culmination of a regular EDC lesson. Lesson 12 is the last regular lesson of the semester, while Lesson 3 was the first regular lesson for which it was possible to obtain permission to make the recordings. This is therefore the nearest it was possible, within the same group discussion context, to compare student performance at the beginning and the end of the semester. The topic of Lesson 3 was 'Making Friends at University'. The topic of Lesson 12 was 'Happiness'.

EDC lessons consist of a variety of activities, including pair work, group work, and individual monologues. In fact, the individual monologue activity (based on the 4/3/2 speaking activity) is specifically aimed at improving students' fluency. However, that, and all other activities in the lesson, can be seen as building towards the final extended group discussion, which mirrors the testing format used during test lessons. Indeed, the word *discussion* itself implies the existence of interaction within a group context. It is also the only stage of the lesson in which instructor intervention or participation is discouraged in all but exceptional circumstances. Consequently, it was felt that this represents the most appropriate activity for the analysis of student output and performance.

Analysing group discussions with regard to fluency raises some difficulties, however, as fluency is normally seen as pertaining to the individual. Indeed, individual speakers can hesitate or repeat themselves within the same turn, albeit within a group context, yet the group dynamic necessarily impacts on individual performance. For example, such things as requests for

clarification can directly affect the output of the individual. Furthermore, in addition to extended speaking turns, the nature of interaction often produces short responses and comments, which have less to do with an individual's fluency than their ability to listen and respond appropriately and pragmatically (Rost, 2005). With this in mind, in the current study calculations regarding the rate of speech and the amount of hesitation phenomena have been applied to the group as a whole, rather than each individual within that group.

In terms of measuring the rate of speech, syllables rather than words have been used by many researchers, as of course words can vary in length, which can in turn affect the cumulative outcome. Using syllables is not entirely reliable, however, because not all speakers pronounce the same word with the same number of syllables. This applies to different native speaker accents, but even more so to learners of English, who may vary widely in their pronunciation of individual items. It was therefore decided to use the word, rather than the syllable, as the unit of measurement.

The second element of spoken fluency to be measured is that of hesitation phenomena; in this case the number of hesitations and pauses, repetitions, and false starts (with or without repair) produced during an utterance. More precisely, Skehan and Foster (1999, p. 107) define *repetitions* as "immediate and verbatim repetition of a word or phrase" and *false starts* as "utterances that are abandoned before completion". As mentioned previously, however, false starts in this study have been combined with instances of either self- or other-initiated repair. Hesitations will be counted as any pause of longer than one second, whether this is between speaking turns, or within one speaking turn. This is in accordance with the focus on fluency within the group dynamic, rather than individual performance. Repetitions, in contrast, only apply to an individual who repeats part or all of their own utterance, as repeating someone else's utterance is generally done for purposes of clarification or emphasis, rather than being indicative of disfluency.

RESULTS

The results of this study can be divided into two sections; the first is concerned with temporal variables (i.e. rate of speech) and the second relates to hesitation phenomena. As mentioned above, these are often stated as the two main aspects of spoken fluency (Ellis, 2008).

Rate of speech

Each of the recorded group discussions lasted 16 minutes. The total number of words spoken by the group was counted and the number of words per minute then calculated. When a discussion ran over 16 minutes, word counting was stopped at exactly the 16-minute mark. When speakers corrected themselves, only the corrected version was counted. When a speaker's utterance was corrected or reformulated by someone else, however, both speakers' turns were included, as such 'negotiation of meaning' represents a fundamental aspect of group interaction and indeed second language development in general (Long, 1996). Abandoned or incomprehensible turns were excluded from the count, as were Japanese words, other than proper nouns.

Table 1, below, shows the rate of speech for each group. It also illustrates the difference between Lesson 3 and Lesson 12, both in terms of raw data and as a percentage.

	Lesson 3	Lesson 12	Difference	Difference (%)
Level II	43.75	45.25	1.5	3.43
Level III	46.75	52.44	5.69	12.17
Level IV	40.75	48.63	7.88	16.20

Table 1. Rate of speech (words per minute)

The greatest gains were made by the Level IV group (the lowest level of the three), with almost an extra eight words per minute spoken on average. This was followed by the Level III group, and finally the Level II group (the highest), which made a relatively modest gain of only 1.5 extra words per minute.

Hesitation phenomena

This represents the second major aspect of spoken fluency and has been subdivided into the following three categories: repetitions, false starts and repairs, and hesitations and pauses.

Table 2 shows how the number of repetitions changed from Lesson 3 to Lesson 12. These refer only to immediate repetitions made by the same speaker, where they are adjudged to indicate a disfluency. For example, "I want to... want to retire my club" is counted as a repetition, whereas "Yes, yes, that's right!" is not, as the latter is produced for emphasis. Similarly, when a different speaker repeats a word or phrase this is not counted.

	Lesson 3	Lesson 12	Difference	Difference (%)
Level II	10	11	1	10.00
Level III	20	13	-7	-35.00
Level IV	12	18	6	50.00

Table 2. Number of repetitions

No clear pattern can be discerned from the above data, as the results vary widely. There was a considerable drop in repetitions among the Level III group, a 50% rise in the Level IV group, and a very slight rise in the Level II group.

The next category of hesitation phenomena to be examined is that of false starts and repairs (see Table 3). This includes instances of speakers correcting themselves, or simply abandoning a turn, whether or not that turn was re-started. It also includes instances of repair conducted by more than one student, as this indicates a disfluency in the wider context of the group discussion.

Table 3.	Number	of false	starts	and	repairs
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	Lesson 3	Lesson 12	Difference	Difference (%)
Level II	28	15	-13	-46.43
Level III	38	32	-6	-15.79
Level IV	19	17	-2	-10.53

The pattern here is much clearer. In all cases, the number of false starts and repairs fell between

Lesson 3 and Lesson 12. This ranged from as much as 46.43% in the Level II group, to 10.53% for the Level IV group.

The final aspect of hesitation phenomena to be looked at is the number of hesitations and pauses (see Table 4). For the purposes of this study, this includes all hesitations and pauses of longer than one second, whether within the same speaking turn, or between two separate turns by different speakers. This is in accordance with the focus on the group dynamic, rather than the performance of the individual alone, as previously stated.

	Lesson 3	Lesson 12	Difference	Difference (%)
Level II	51	53	2	3.92
Level III	60	44	-16	-26.67
Level IV	65	59	-6	-9.23

Table 4. Number of hesitations and pauses

The results of this category vary considerably, from a large drop in the number of hesitations and pauses among the Level III group, to a slight rise in the Level II group.

Finally, the results of all three categories of hesitation phenomena have been combined and are presented in Table 5.

	Lesson 3	Lesson 12	Difference	Difference (%)
Level II	89	79	-10	-11.24
Level III	118	99	-19	-16.10
Level IV	96	94	-2	-2.08

Examining a combination of all three categories presents a clearer picture, as the cumulative result is a drop for all three levels from Lesson 3 to Lesson 12. This ranges from an overall fall of 16.10% (Level III) to a much smaller fall of 2.08% (Level IV). This is in contrast to the rate of speech gains, which were largest among the Level Four group.

DISCUSSION

It has already been established that at the end of one semester of English Discussion Class the vast majority of the students sampled felt their spoken English had improved both in terms of their confidence and fluency (Garside, 2015). The purpose of this study, however, was to investigate whether that belief is supported by empirical evidence.

When looking at the results of each group as a whole, rate of speech gains can be seen across all three levels. The largest gains occur in the lowest level group (Level IV) followed by Level III then Level II. It is tempting to surmise that the lowest level group had the most to gain in terms of fluency and therefore increased by the biggest margin. Yet the fact that this group overtook the Level II group in the Lesson 12 activity suggests that there were additional factors at work. For example, the Level II group had a couple of extended pauses caused by collective word searching during the Lesson 12 discussion. Also, the Level IV discussion from that lesson inexplicably (and uncharacteristically) began with a single turn of 3 minutes and 36 seconds! Such individual anomalies suggest that it may be more beneficial to search for patterns across all three

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groups as a whole. This has the further benefit of increasing the sample size.

With that in mind, it can be seen that a general increase in speech rate has indeed occurred between Lesson 3 and Lesson 12. In fact, the average increase across all three groups is 10.6%. The other aspect of fluency investigated was that of hesitation phenomena, specifically the number of repetitions, false starts and repairs, and hesitations. Similarly, a clearer picture emerges if all three aspects, across all three groups, are taken as a whole. In this case the average decrease in overall hesitation phenomena between Lesson 3 and Lesson 12 is 9.81%. It can therefore be stated that both aspects of fluency under investigation have shown improvements that lend empirical support to the perception among students that their fluency has increased. This is despite the fact that the Lesson 12 discussion topic ('Happiness') is arguably more challenging than that of Lesson 3 ('Making Friends at University'). Indeed, the units of the course are deliberately sequenced in such a way that more familiar topics appear earlier, with more abstract topics appearing later. Against this, however, can be balanced the fact that students are more familiar with each other by Lesson 12, which is likely to promote greater group cohesion (Dörnyei & Ushioda, 2011).

In fact, there are so many variables at work within group interaction such as this that it becomes difficult to explain the development of fluency with any precision. Nevertheless, some insight can be gained from comments made by the participating students themselves when informally asked to explain in what ways, if any, they felt their English speaking ability had improved by the end of the semester. Common themes that emerged were that they felt able to speak more smoothly and actively, and also to express their ideas and opinions without thinking too much about grammar and vocabulary. Some of the most revealing comments are presented below:

Now I can express my ideas using easy words and without trying to say too difficult things.

Even if what I wanted to say was right, I was thinking too much and couldn't convey my ideas. However, by changing the words I was able to be understood by my partner.

Before I took this class I thought, "My English is not good. I don't want to speak English." However, ... my complex [about] speaking English was gone by this class.

I often used to freeze when speaking English because I was thinking too much about grammar, but I'm gradually overcoming that now. English is not so scary anymore!

I used to think you had to use perfect grammar, but now I realise that as long as it's more or less okay you can get your point across.

It seems fair to infer from these remarks that a preoccupation with grammatical and lexical accuracy had been inhibiting the students, something that is related to the way in which English is taught in Japan prior to university. Tolerating ambiguity and accepting that it is not always possible to say exactly what you want to say is a fundamental aspect of learning to speak a foreign language. Helping EDC students overcome this barrier seems likely to have contributed to their fluency development.

CONCLUSION

The results of this study offer some empirical support to the intuitions of the students themselves 100

that their spoken fluency improves during their first semester of English Discussion Class. The fluency-based focus of this study is in accordance with the fact that fluency development is stated as the main objective of the course. Nevertheless, it would be interesting to investigate the effect of improvements in fluency on the accuracy and complexity of output, particularly in the light of some of the student comments above. Indeed, Skehan's (1998) Trade-off Hypothesis postulates that one or other of these factors can have a deleterious effect on the others.

As well as looking at concomitant rates of accuracy and fluency, it would also be beneficial for further research to include more groups and thereby increase the sample size. A further suggestion could be to look at the progress of individual students, in addition to the performance of the group as a whole, which was the focus of this particular study.

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