A Case Study of Two Informants' Linguistic Ability of English With Similar TOEFL Scores

Ryusuke Yamato
Seiryo High School

Abstract

What language ability does TOEFL score represent? Can one speak and write well if he/she has a high score such as over 600 in TOEFL? This study examines two informants' productive skills of English with very similar TOEFL scores; 617 and 620. The T-unit analysis applied on the results of two elicitation tasks; story retelling and "Aluminum Passage" confirmed the existence of a considerable difference in their productive skills, especially in oral skill. In order to identify the cause responsible for the difference, detailed interviews were conducted. The examination of the relationship between their language skills and their learning strategies as well as learning environments led to the three conclusion; (1)TOEFL is good for measuring receptive skills but not necessarily for productive skills, (2) a strong motivation, whether instrumental or integrative, can work well in improving English ability, and (3) when motivation is high, contact with native speakers can play a decisive role in enhancing productive skills.

1. INTRODUCTION

The main purpose of this study is to identify the most effective variable that has caused a considerable difference in productive skills between two informants, Ning and Luan, both of whom got very similar TOEFL scores.

Ning and Luan are Chinese students studying at a graduate school of Indiana University, which presumably indicates that they are both highly advanced learners of English. However, the experience of living with them as roommates gave me the impression that there was a great difference in their oral skills. This first impression led to three questions about my two informants; (1) Is there a real difference between their oral skill? (2) If there is, does the difference hold true for other language skills such as writing? (3) If there really is a difference in their oral skills, what caused the difference?

As the first step to answer these questions, a questionnaire was completed by the two informants concerning their learning strategies and attitude as well as their general proficiency level of English which is, in this study, presented by their TOEFL scores. Next, several elicitation tasks were conducted to measure both speaking and writing ability of the two informants in an objective and reliable manner. Finally, with the result of the elicitation tasks, a summary of detailed interviews focusing on their learning environments and learning strategies was discussed in order to clarify the most influential variable responsible for the difference in their productive skills.

2. TWO INFORMANTS

Excerpts from the Questionnaire

Name	Ning	Luan
1. TOEFL score	620(1991)	617(1989)
2. Age	28	35
3. Major	Journalism	Public Affairs
4. Stay in USA	8 months	12 months
5. Intended length of stay in USA	3 years	As long as possible
6. Length of English study	4 years	10 years
7. Self-evaluation of English proficiency	Good	Excellent
8. Attitude toward studying English	Enthusiastic	Less enthusiastic
9. Contacts with NS outside class	1 to 2 hours	Less than 1 h.
10. Goal of studying English	Academic degree Success in home country	To become an American

The questionnaire suggests several interesting points about the two informants. First, Luan who I think is a much better speaker of English than Ning has a lower score on TOEFL. As a matter of fact, this does not necessarily contradict my impressionistic judgment concerning their oral proficiency because a three point difference of TOEFL scores theoretically means nothing. If they had taken TOEFL at a different time, their scores could have been reversed. Furthermore, when we consider that Luan had taken TOEFL two years before Ning did, it is quite possible that Luan would have got a better score two years later in 1991. Given these facts, we can assume with their latest TOEFL scores that their general proficiency levels are not far apart, but rather close.

Second, compared to Ning, Luan seems to be less eager to seek out English speaking opportunities. While Ning tries in every possible way to increase his opportunities to speak English, Luan makes no particular effort to do so. This can be explained by looking at their self-evaluation of their oral skill. Since Luan already regards his speaking ability as excellent, he may not think that he needs to use English as much as possible. Contrary to Luan, Ning still feels a great necessity to improve his oral skill by increasing his opportunities to use English.

Third, Luan presented much more reasons to study English. It is widely accepted that learners' motivations affect success in language learning. Luan seems to have both instrumental motivation and integrative motivation, while Ning has only the former

type.

3. EXAMINATION OF ORAL SKILL

3-1 TOOL

The elicitation task used in this study is "story retelling" which seems to have several advantages over other tasks. First, story retelling, which requires the subjects to work on the same text, can eliminate some variables which might affect the results caused by the subjects' uneven knowledge about a topic. This is especially true of a study with a very small number of subjects. Second, this kind of structured task can make it easy to compare performances.

3-2. DATA ANALYSIS

The T-unit analysis is applied to the performances of the two informants. This analysis is an objective and quantitative measure to assess language proficiency. Although, T-unit analysis was originally designed to assess syntactic development in the compositions of children learning their first language, it has been widely used in the assessment of second language proficiency. Kellogg Hunt, who first devised the construct of a T-unit, explains it as "Very simply, T-units slice a passage up into the shortest units which are semantically allowable to be punctuated as sentences. The T-unit can be described as one main clause plus whatever clauses, phrases and words attached to or embedded within it." (cited from Larsen-Freeman, 1983, p.288) This construct of the T-unit makes it particularly useful for analyzing oral productions because in speech it is not always easy to identify the end of each sentence.

3-3. PROCEDURE

The two informants read a fairy tale 540 words long only once. After being given one minute for organization, they started to retell the story in their own way. Their retelling was recorded and transcribed. The T-unit analysis was applied to the transcription.

3-4. RESULTS

Table 1

	Average # of Clauses / T-unit	% of error -free T-units	Average length of error-free T-units	Average lenght of T-units
Story	1.08	N/A	N/A	5.32
Ning	1.05	51.2%	5.9	6.20
Luan	1.26	78.0%	7/4	7.46

Before getting into a discussion of the results, two points need to be made clear. First, as to the way direct speech and indirect speech is treated in counting the number of the T-units, each direct speech is counted as one T-unit independent of the main clause, and each indirect speech as a part of the main clause. Second, the four performances variables tabulated in the Table 1 are the same variables that are claimed to best discriminate different proficiency levels in the study of Larsen-Freeman(1983).

The results seem to support my judgment that Luan is a much better speaker of English. Looking at Table 1, all the figures show that Luan is more proficient in speaking than Ning. The average number of clauses per T-unit and the average length of T-units are considered to present the complexity of each utterance by the two informants. It is clear from the table that Luan uses much more complex structures than Ning. An interesting thing is that even Ning uses no less complex structures than the original story. This fact suggests that both of them are creating new expressions rather than just recalling the story word by word. What they are doing is basically the same thing as people do in conversations; taking information, processing it and finally reproducing it in their own way. Luan and Ning could retell the story soon after they read it only once. This fact indicates that both of them have pretty good ability to speak English.

Turning to the other items, the percentage of error-free T-units and the average length of error-free T-units suggest that Luan overperforms Ning not only in complexity but also in accuracy. Especially, the more than twenty five percent difference in the percentage of error-free T-units would be big enough to make a great difference in native speakers' judgment of their oral proficiency. In fact, all of the three native speakers who listened to the recorded tape felt that Luan was superior to Ning in many aspects; syntax, vocabulary, pronunciation and intonation.

4. EXAMINATION OF WRITING SKILL

4-1. TOOL

The elicitation task used for assessing the informant's writing skill is a rewriting task known as "Aluminum Passage". What the subjects do with this task is to rewrite a given passage comprised of single clause sentences in a more sophisticated way.

The first three sentences in the passage read, "Aluminum is a metal. It is abundant. It has many usages." A better way of writing these three sentences might be "Aluminum is an abundant metal with many usages." A subject responding in this way would have produced one T-unit eight words long rather than three T-units three to four words long. As stated in the previous section, this kind of structured task is considered to be useful especially for studies of a small number of subjects. Besides this general advantage of structured tasks, we can expect with this "Aluminum Passage

" task that the subjects would focus more on forms and thus reveal their syntactic proficiency or at least their monitored knowledge of writing.

4-2. T-UNIT ANALYSIS AND SENTENCE BASED ANALYSIS

There are several counterarguments against the usefulness of the T-unit analysis depending on the language samples to be examined. Bardovi-Harlig(1992) claims that " for the description of syntactic complexity in the writing of adult second language learners, sentence-based analysis may be superior."(p. 390). This is because the T-unit analysis does not always reflect the learner's syntactic knowledge especially with coordination.(See Bardovi-Harlig, 1992 for more details.) For this reason, although there are few coordination patterns in the products by the two informants, both the sentence-based and the T-unit analysis are employed to compare the results.

4-3. RESULTS

Table 2   T-unit analysis

	Total # of words	Average # of words/T-units	% of error-free T-units	Average # of words/ error-free T-units
Ning	104	11.56	66.67%	10.00
Luan	95	19.00	40.00%	11.50

In the T-unit analysis of the writing samples, I first tabulated the four variables; the total number of words produced, the average number of words per T-unit, the percentage of error-free T-units, the average number of words per T-unit, following the study of Larsen/Freeman using the the "Aluminum Passage". Secondly, each figure of my informants was compared with that of Larsen-Freeman's subjects to see where my informants are ranked in that group.

Before getting into a detailed discussion of the results, one more thing needs to be clarified. In the process of rewriting, although Luan included all the information in the original passage, Ning left out two pieces of information. Therefore, we can assume that if he had not left out any of the information, he would have used more words to complete the rewriting. This makes Ning's figures with the total number of words and possibly the average number of words per T-units more similar to those of Larsen-Freeman's level four group who are sufficiently proficient in English to take graduate courses.

Judging from Table 2, it seems that Luan is slightly more proficient in the writing task than Ning who is very likely to belong to the level four group. The only unfavorable figure against Luan is with the percentage of error-free T-units. This can be explained when we take into consideration the fact that Luan uses more complex

structures than Ning as shown in the two variables; the average number of words per T-units and the average number of words per error-free T-units. It can be said that Ning achieves higher accuracy by avoiding complex structures. On the other hand, Luan is much more challenging and risk-taking, but this does not seem to damage the integrity of his rewriting as a whole.

Table 3   Sentence-based analysis

	Average #of words/ sentence	% of error-free sentences	Average # of words/ error-free sentences	Coordination Index
NIng	14.86	57.14	13.25	40.0%
Luan	19.00	40.00	11.50	0.0%

Table 3 presents the results of a sentence-based analysis. In this sentence-based analysis, instead of the total number of words produced, the coordination index proposed by Bardovi-Harlig is calculated in the table. Her coordination index considers "only multiclausal sentences and reflects the frequency with which coordination is used by a learner relative to the total number of combinations produced."(p.393)   For example, Ning's coordination index is calculated in the following way;

		Calculating Ning's Coordination Index		
Clauses	Sentences	Clauses combined= Clauses-Sentences	Indep. Clause Coordination	Coordination Index
12	7	12-7=5	2	$2/5=0.4 \times 100=40\%$

The results provide an indecisive conclusion in terms of the writing skills of the two informants. Although one more variable, the average number of words per error-free sentence, turned out to favor Ning's superiority over Luan, the coordination index, which is thought to decrease as the learner's proficiency increases, suggests the opposite. An interesting point to note here is that Luan uses no coordination in combining sentences, while Ning uses quite a few coordinations considering his proficiency level. When we examine more closely the way both Luan and Ning combine sentences, we find that Luan uses considerably more varied structures than Ning. Luan uses three patterns which are not used by Ning at all. These structures are appositions, to-infinitives and participles used as a modifier. This difference seems to have led to the native speakers' holistic judgment of Luan's slight superiority over Ning in spite of his displaying less accuracy in writing. Given this, as far as the writing skills are concerned, Luan manages to retain his favorable status over Ning, although the difference between the two is not clear as in oral skills.

5. EFFECTIVE VARIABLE

After confirming the existence of the difference in productive skills between the two informants, an interview was held with them with a view to finding effective variables for the difference.

It is obvious from the summary that there are quite a few differences in the way the two informants learned English. As for Ning's case, we could predict that he would have difficulties in communicating with native speakers of English when he first came to America, and he actually did. Ning told me that he could not understand more than half of any conversation at first. However, the progress which he made in ten months is remarkable. He seems to have great potential as a language learner. This is supported by the fact that he reached a high level to get 620 on TOEFL after just two years of intensive study.

Turning to Luan, he seems to have had a better learning environment than in Ning's case. Since he started learning English, he was made to pay attention to meanings as well as to forms under private instruction from a native speaker. He often had to write compositions and have conversations with the teacher through which he acquired the basic skills of English conversation. After entering university, he majored in English literature, especially English poetry. Many of the instructors were native speakers of English and there were some international students with whom he practiced English conversation. Through various interactions with the instructors and the international students, he came to be attracted to both the beauty of the language and also the culture behind it. After graduating from college, he worked for a company where he had to use English on a daily basis for communication. These learning experiences gave him great advantages to brush up his communicative skills in English.

Looking at the first and the second stages of their study, it is true that the environment, especially the availability of contact with native speakers seems to have played an important role. However, what really counted in their improvement is their strong motivation for mastering English. Especially in the case of Ning, after the Tian-An-Men Square incident, his attitude toward English study totally changed. Realizing that he would have limited future career opportunities for having taken sides with the democratic movement, he desperately wanted to go to America. Although he was not particularly attracted by American culture nor by American people, he thought that studying in America and getting an American degree would help him when he returned to China and started a new business.

At that time, his working situation began deteriorating and he seemed to have no other alternative than to go to America. Therefore, he devoted himself to the study of English attending a preparatory school for TOEFL. With such clear instrumental

motivation in mind, he studied English more than ten hours a day, and finally achieved the very high score on TOEFL.

On the other hand, Luan was not much interested in TOEFL. He seemed to have been confident that he would get a high score in TOEFL. He did not particularly prepare for TOEFL, and he still got a score high enough to be accepted by the university. Given these facts, it is understandable that he could not get a higher score in TOEFL than Ning in spite of his higher productive skills of English.

Concerning the role of motivation, it seems that Luan had no clear goal for studying English However, it would be too much to say that motivation played little part in his mastery of English. As a matter of fact, his first experience of learning English from a native speaker gave him a great interest in English culture. As opposed to Ning's, Luan's motivation to study English was driven more by a strong appreciation of English people and Western culture. This motivation remained all through his learning experiences and made him a good speaker of English.

Summary of the Interview

	Ning	Luan
1. The first stage of learning English	16 to 18 years old. At college. Twice a week. Focus is on grammar.	16 to 22 years old. From an American woman. Every other day. Focus is on both speaking and writing.
2. The second stage of learning English	24 to 25 years old. As an editor at the foreign desk in a newspapaer company. Focus is on reading. No formal instruction	22 to 26 years old. As an English literature major at college. Focus is on reading and writing. Many contacts with native speakers.
3. The third stage of learning English	25 to 27 years old. After Tian-An-Men Square incident. At least 8 h. a day. In order to go to America for study.	26 to 34 years old. As an English teacher at public school for 3 years. As a businessman at a company where he had to use English for communication.
4. Contacts with native speakers.	Very few	Many
5. Motivation	Instrumental	Both integrative and instrumental
6. TOEFL Score	Year 1991 Lis. section 57 Gram. section 67 Read. section 62 Total 620	Year 1989 Lis. section 62 Gram. section 61 Read. section 62 Total 617
7. Preparation for TOEFL	Attend a school for TOEFL for 6 months	Two week preparation by himself

6. CONCLUSION

So far, we have examined the different learning experiences of the two informants along with an objective measurement of their productive skills of English. Given these discussions, the following three points could be stated as a summary. First, TOEFL is good for measuring receptive skills but not necessarily for productive skills. This conclusion seems rather self-evident, because TOEFL does not test any productive skill directly. One thing to note here is that Ning, who got almost full marks in TOEFL's subsection of structure and written expression, could not demonstrate his superiority in the writing task over Luan, whose score in the same section was lower than Ning's by six points. In this respect, it is very reasonable that ETS has introduced TWE, Test of Written English, to measure learners' true ability of English composition since 1986.

The second point is that a strong motivation, whether instrumental or integrative, can work well in improving English ability. Of course, it is very difficult to explain how their motivations led the two informants to their success. The process is a result brought about by very complex interactions between motivations and various other social and affective factors. However, examining this particular case, we can at least say that they couldn't have achieved their high proficiency level without strong motivations for mastering English.

The third point is that when motivation is very high, contact with native speakers can play a decisive role in enhancing productive skills. This process could be explained in the following way;   high motivation brings many contacts with native speakers. In order to make the various inputs from the native speakers comprehensible, the necessity for interaction or negotiation arises. Through these activities, the learner gains a great deal of comprehensible input which finally lead to the acquisition of communicative competence.

References

Bardovi-Harlig, K.(1992). A second look at T-unit analysis: Reconstructing the sentence. TESOL Quarterly, 26, 390-395.

Larsen-Freeman, D.(1983). Assessing global second language proficiency. In H.W. Seliger & M.H.Long(Eds.). Classroom Oriented Research, 287-305. Rowley MA: Newbury House.

Seliger, H.(1983). Learner interaction in the classroom and its effects on language acquisition. In H.W. Seliger & M.H.Long(Eds.). Classroom Oriented Research. Rowley, MA: Newbury House.

Shumann, J.H.(1986). Research on the acculturation model for second language acquisition. Journal of multilingual and multicultural development, 7, 379-392.