Student Perceptions and Performance on TOEFL iBT Independent Writing Tasks

> John Peloghitis Tokai University

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The writing section of the TOEFL continues to be an obstacle for Japanese students hoping to study abroad. This paper is a report of a classroom research study into student perceptions of their performance on the independent task writing of the TOEFL iBT that used various measures of performance to gain insight into the changes that occur in students with more practice and training. Seven 1st-year Japanese students enrolled in a 15-week TOEFL writing course participated in the study. Open-ended questionnaires and interviews were used to track changes in how students perceived performance. Various measurements of proficiency were also collected. Students had common concerns such as time management and word processing skills that they believe influenced their performance. These perceptions changed little over time. Descriptive statistics of the essays indicated that although rater score and length of essay increased, syntactic complexity did not greatly improve.

海外留学を目指す日本人学生にとってTOEFLのライティング・セクションは障壁であり続けている。本稿は、TOEFL iBT イ ンディペンデント・タスク・ライティングの成績に対する学生達の意識に関する授業研究報告であり、演習と訓練を重ねるにし たがって生じた彼らの意識変化を理解するために複数の英語力測定を行っている。研究参加者は15週間のTOEFLライティン グ・コースを受講した大学1年生7名である。自由記述形式の質問票とインタビューを用いて成績に対する意識変化を記録し、英 語力を測る様々なデータも収集した。学生達の間には、時間管理やワープロ技術など、彼らの成績に影響を与えたと考えるも のへの共通の懸念が見られ、受講期間中に変化することはなかった。エッセイの評価スコアと長さが伸びた一方で、統語的複 雑性には大きな向上がなかったことがエッセイの記述統計によって示唆された。

PODUCING A coherent and fluent piece of writing is often one of the most challenging tasks that language learners face. Success depends on integrating a variety of writing skills and strategies (Matsuhata, 2000) and familiarity with rhetorical conventions and genre types (Olshtain & Celce-Murcia, 2003). For a growing number of Japanese students who need to take the TOEFL iBT (Internet-based test), which contains a writing component, success is measured in meeting minimum targets. Japanese English language learners, in particular, have difficulties in written performance. In a study by Kroll (1990), Japanese test-takers ranked worst in rhetorical competence, had the most errors, and generated the smallest corpus. Izzo (2002) had similar findings and claimed that Japanese students are not meeting the writing standards expected of university EFL students. A primary reason is that writing does not fit into Japan's exam culture because it is difficult to assess, due in part to the limited language proficiency of the teachers (Hamp-Lyons, 2007). On the writing section of the TOEFL iBT, Japan was one of the lowest ranked countries in Asia in 2012, with an average writing score of 18 (out of a possible 30). Only

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Cambodia and Mongolia had a lower average score, according to Educational Testing Service (ETS; 2012).

This issue will become more pressing if the Japanese government succeeds in making TOEFL mandatory for entrance exams to all Japanese universities starting in fiscal 2015. A plan has been introduced that would require students at 30 elite colleges to score a total of 90 (out of a possible 120) to graduate and mandates that all high school students score 45 or better (Matsutani, 2013). To address these developments, English language teachers in Japan need a better understanding of their students' needs and experience, as well as their assumptions about writing, to provide meaningful and relevant instruction.

There are many factors that can influence written performance and how learners perceive performance. Kobayashi and Rinnert (2002) argued that a learner's L1 can play a pivotal role. Learners who share the same L1 can have completely different experiences and training, which can influence perceptions and the skills and strategies used in an L2. Consequently, learners who use poor models to learn L1 writing will often apply these models to L2 writing tasks (Kobayashi & Rinnert, 2004). Many junior and senior high schools in Japan still emphasize English grammar instruction. Seldom are students asked to produce paragraphs in high school, thus they struggle at the tertiary level to convey their ideas and opinions effectively in written English (Nishigaki & Leishman, 2001). Hirayanagi (1998) and Takagi (2001) pointed out that to survive, many students simply transfer their L1 writing style into their L2 writing.

Other studies about L1 and L2 writing have found differences between skilled writers and unskilled writers. Unskilled L2 writers are similar to unskilled L1 writers in that they tend to plan less and revise more at the word and phrase level (Sasaki, 2002; Zamel, 1983). Also, L1 proficiency appears to influence L2 writing (Bosher, 1998; Cumming, 1989), and it is dependent on the model of writing one experiences.

Bereiter and Scardamalia (1987) argued that skilled and novice writers use different models of processing complexity. They label these as knowledge-transforming models. Novice writers use a knowledge-telling model, which means they write down ideas on paper exactly in the order that they think of them. Compared to more skilled writers, novice writers plan less, revise less often and less extensively, have limited goals, and are mainly concerned with generating content. Skilled writers, on the other hand, use the writing task to analyze problems and rework ideas to change their text.

With the widespread use of the TOEFL computer-based test (CBT) and TOEFL iBT to measure writing proficiency, research has focused on new issues related to computers such as individual typing speed. Kirsch, Jamieson, Taylor, and Eignor (1998) surveyed 90,000 TOEFL examinees in their study investigating the relationship between performance and the examinees' access to, attitude about, and experience using computers. The results suggested that computer familiarization was necessary for individuals who would take the computer-based TOEFL, and writing classes should include word-processing to prepare students for such tests. In a more recent study, Barkaoui (2013) investigated the impact of keyboarding skills on test-takers' scores in the context of the TOEFL iBT writing task. Ninety-seven test-takers from various English language proficiency levels and keyboarding skills completed two TOEFL iBT writing tasks on the computer. The results indicated that although English language proficiency and writing ability contributed substantially to variance in scores, keyboarding skill also had a significant effect.

Another important area of research has been whether certain discourse characteristics, such as fluency (number of words and T-units) and syntactic complexity (number of clauses per T-unit), can distinguish writing performance. Cumming et al. (2006) analyzed discourse characteristics in a sample of 36 essays and found that the discourse characteristics varied among

JALT2013 CONFERENCE PROCEEDINGS writers with different levels of proficiency and among task types. Longer responses and greater syntactic complexity were associated with higher scores. The study investigated essays that were assigned scores of 3, 4, and 5 (the top three scores), and the discourse characteristics were consistent among each proficiency level.

In the research to date, several issues have been overlooked regarding written performance on the TOEFL iBT. One overlooked issue is student perceptions of performance. Another relevant issue is which discourse characteristics help students produce better essays.

Research Questions

The primary purpose of this classroom-research study was to provide a more well-informed practice that will address the concerns that students face when writing the independent task on the TOEFL iBT and trace changes in how students perform over time. Two specific research questions were the focus of this study:

- 1. What are student perceptions concerning what they need in order to perform more effectively when writing for the timed TOEFL iBT independent writing task? How do their perceptions change with increased exposure and practice?
- 2. How does student performance change with increased exposure and practice?

The Study

Participants

Participants in this study were seven Japanese 1st-year undergraduate students who had been admitted into an aviation program offered at a Japanese university. All seven participants, six males and one female, were 18 or 19 years old at the start of the course and had 6 years' of secondary school EFL. All of the participants had limited experience in writing in English, and no one reported having had any process-oriented writing instruction. Participants were grouped at the intermediate level based on their essay scores on a university-administered placement test.

Instructional Context

A 15-week study was undertaken in the spring of 2013. Students met twice a week for a 90-minute writing course taught by the researcher and designed to develop writing skills and strategies to succeed on the TOEFL iBT. The TOEFL iBT is a major hurdle for 1st-year aviation students because they must score above a minimum target of 71 (out of 120) to enter the flight training part of the program conducted at a North American university. Failure to meet this target results in delaying their flight-training and thus graduation. The writing section consists of two essays. The first essay is an integrated writing task that requires a summary-type response by combining information heard in a lecture with information in a text. The second essay, the one examined in this study, is an independent writing task. This essay requires expressing and supporting an opinion based on one's knowledge and experience.

The total time for the independent writing task is 30 minutes and ETS advises students to write roughly 300 words. To help students reach the minimum score, the course follows a rigorous weekly schedule of writing exercises and authentic timed TOEFL iBT practice writing sessions. Before this weekly routine begins, 3 weeks are allotted to help students learn about how to write a good essay for both writing tasks on the TOEFL iBT (i.e., offering support, using rhetorical structures, and presenting clear main ideas) and to practice strategies such as using templates, organizational structures, repeating lexical chunks from the prompt, and brainstorming. Instruction thereafter typically follows a set pattern. In the first class, textbook homework is reviewed; then students are taken to a computer lab to practice both writing tasks under timed test-like conditions. Throughout the semester, all 35 aviation students from five different classes sit in assigned seats in a computer room, and each completes one timed practice session per week for a total of 10 timed practice sessions. The students submit their essays electronically, and the teacher prints them, provides feedback, and gives each a score from 0-5 (with half point intervals). The scores are based on the holistic rubric that ETS uses to rate the TOEFL iBT. The independent writing rubric contains standards related to task response, argument development, essay structure, syntax, and lexis, but these may be grouped together or separated out depending on the level. The second class of every week consists of reviewing the overall content of the essays and presenting strategies and textbook exercises that will help students revise their essays. The remaining time in class is spent on student conferencing to review the teacher comments on drafts of previously submitted essays.

Students are encouraged to submit three drafts and a final version of each essay. Because the program is highly competitive and the stakes are high, students are rarely absent (only one student missed class all semester) and generally submit every draft because rewrites allow students to earn additional points, which are added to their original score. This means that each student produces about 40 essays for the independent writing task and 40 essays for the integrated writing task. In addition, the homework assigned each week includes two or three additional essays and a wide range of activities from the textbook. The amount of time varies depending on the students' motivation, commitment, and proficiency level, but generally students spend 6 to 8 hours a week completing the work assigned as homework. A list of the topic that the participants wrote about and the question type for each independent writing task are in the Appendix. The topics were chosen in advance by the coordinator of the English curriculum for the aviation program, and the types of questions were chosen to reflect the strong preference of the TOEFL iBT to choose "agree or disagree" prompts. The independent essays are referred to as TW (timed writing), and are numbered chronologically (e.g., TW8 is the eighth independent timed writing).

Data Collection and Research Design

Three instruments were used: weekly surveys administered immediately following the independent writing tasks, three semi-structured interviews, and descriptive statistics based on the students' independent essays. The surveys asked students to write what they thought they needed to perform more effectively. The survey was introduced in class and possible responses were discussed to ensure that the quality of responses would be more accurate and meaningful. Although the survey was in English, students could write their responses in Japanese. The same survey was administered after each independent writing task because TOEFL iBT field tests have indicated that the highest degree of variance exists in the writing section (ETS, 2005). Thus performance may fluctuate based on the level of familiarity or difficulty of the writing prompt, which in turn may impact how students perceive their performance.

Each semi-structured interview lasted approximately 10 to 15 minutes. The interviews with the instructor/researcher were conducted in English but Japanese was encouraged if students had problems expressing themselves clearly. Notes were taken by the instructor during the interviews, but they were also recorded with the participants' permission. The preliminary interview, which took place in the 2nd week of the course, elicited information about the participants' background and experience. The first interview (I1), given the week after TW5, and the second interview (I2), given the week following TW10, were administered to clarify ambiguous responses written on the surveys in order to group the responses correctly. To help recall specific comments, students could examine what they had written on their surveys and essays. All responses to the survey questions and interviews were translated and transcribed. The transcripts were analyzed, and comments that contained similar themes were grouped together.

Descriptive statistics were calculated for each timed writing session (see Table 1). Fluency was measured by the number of words written in the essay (Polio, 1997) and the number of T-units, which is a main clause with all subordinate clauses attached to it (Hunt, 1965). Syntactic complexity was measured by the number of words and clauses per T-unit (see Hunt, 1965; Polio, 2001). Scores were assigned by the researcher. The scores were based on the TOEFL iBT rubric used by the ETS. The researcher has more than 7 years' experience in rating TOEFL essays and participates in norming sessions with other TOEFL writing teachers to help improve rater reliability. TW2 and TW7 were eliminated from the study because the types of prompts were different than the others (i.e., they were not agree/disagree prompts), which would add another variable that might have influenced perceptions and performance (Cumming et al, 2006).

Results and Discussion Research Question #1

Table 2 summarizes what students perceived they needed to perform effectively on the independent writing task. These are divided into 66 responses given from TW1 to TW5 and during I1, and 58 responses given from TW6 to TW10 and on I2, in order to look for any changes in how students perceived their performance. Pseudonyms are used to report the responses.

Typing speed was the most commonly reported issue. In I1 Ryo stated, "My typing speed is hurting my essays because even when I have enough ideas, I do not have enough time to put them in my essay." Hide commented in I2 that "My typing speed is still slow. I can only write about 220 words. Even if I can write three main ideas, I don't write enough words to help me score better. I need to write more than 300 words."

Poor time-management was another commonly reported concern, particularly in I1. Saku stated that planning was essential to be efficient:

I need be aware of the time I am spending writing my ideas so I can check my sentences. I am still wasting time by writing and rewriting sentences without a clear idea

Table 1. Descriptive Statistics on 10 TOEFL Independent Writing Tasks, Means (N = 7)

Measurement	TW1	TW2*	TW3	TW4	TW5	TW6	TW7*	TW8	TW9	TW 10
Essay length	196.6	226.7	260	243.4	233.8	282	237	288	306	286
Number of T-units	18.14	18.14	21	21.57	20.14	24.57	22.14	25.85	28.28	22.57
Words per T-unit	11.2	12.7	11.6	11.5	12.1	11.8	11.5	11.8	11.1	13.2
Clauses per T-unit	1.8	1.97	1.68	1.83	1.91	1.87	1.73	1.97	1.66	1.96
Rater score	1.57	1.78	2.14	2.36	1.28	2.29	1.36	2.93	3.00	2.43

Note. * eliminated from study.

about what I want to say. If I plan better before I write, I can have more time.

Students also commented on spending too much time on one or two parts of their essays. Ken wrote after TW4, "I didn't use my time well. I spent too much time on my second reason."

Other problems reported by the students were organization, confusion about the meaning of the prompt, difficulties in thinking of reasons to support their positions, and the need to write better (for instance, providing examples, writing clear general statements in the introduction, and using complex sentence structures). Little change was observed in how students responded over the course. One issue that emerged was that organizational concerns were often associated with problems with time-management. In other words, students who had problems organizing their ideas often did not have enough time to complete their essays. In these cases, students were asked to clarify their responses in the interviews. Ren commented in I2, "When I started, I had some good ideas, but it took too long to figure out where I wanted them." In this case, Ren attributed lack of organizational skills to be the primary problem. More than half of the students reported difficulties with understanding two prompts in particular (TW4 and TW10). For example, Taku responded after TW4, "What exactly is a serious movie or an entertaining movie? This made it difficult for me to think of examples." Similarly, Ryo reported during I2 that certain prompts were more ambiguous than others because of the way they were stated, "I felt it was difficult because prompt doesn't ask what someone 'should do' or 'should not do,' it asks whether I think it is true or not true."

Table 2. Student Perceptions of Performance, from Surveys and Interviews

Reported perception	Responses from TW1 to TW5 and I1	Responses from TW6 to TW10 and I1
Need to type faster	12	8
Manage time better	11	6
Organize ideas better	8	7
Need to think of reasons to support position faster	8	6
Be better at reading/understanding the prompt	6	4
Write more appropriate/relevant examples	5	5
Decrease time procrastinating	5	4
Learn how to write a better introduc- tion	3	4
Need more knowledge of grammar	2	4
Need more vocabulary knowledge	2	4
Write more complex/clear sentence structures	1	2
Become better at spelling	0	2
Be more open-minded	1	1
Little or no background knowledge of topic	1	0
Be more relaxed when writing	1	0
Need more confidence in my writing ability	0	1



The responses illustrate the importance of word-processing skills. Many students commented on being preoccupied with getting enough words on the screen and that their typing speed was one of the primary factors to achieve this end. Although students were instructed to spend the first 5 minutes to brainstorm and the last 5 minutes to review and edit what they had written, most were eager to start typing to ensure that they could complete their essays. The larger proportion of comments concerning time-management reported in the first set of responses could be due to students' lack of experience with the essay structure and unfamiliarity with composing in their L2. With repeated exposure and practice students became less concerned with time-management. Perhaps they became more familiar with the amount of time they could spend on each paragraph to complete their essay on time. Studies by Zamel (1983) and Sasaki (2002) found that less proficient students needed to make better use of planning to be more efficient writers. In general, the results indicate that students voiced more concerns, particularly in the first half of the course, about efficiency, organization, and self-regulation than on lexical or grammatical issues. Although aware that vocabulary and sentence structure play a big part in how they are holistically rated, students attached greater importance to word processing skills, organizational skills, and time-management.

Research Question #2

To answer the second research question, changes in scores on essays between the first and second halves of the course were examined (Table 3).

Table 3. Changes in Descriptive Statistics of the Independent Writing Tasks, Means (N = 7)

Measurement	TW1-TW5	TW6-TW10	
Essay length	233.5	290.5	
Number of T-units	20.21	25.32	
Words per T-unit	11.6	11.98	
Clauses per T-unit	1.81	1.86	
Rater score	1.84	2.66	

There were considerable differences in essay length, number of T-units, and rater score between the two sets of essays. In the second set, students averaged close to the 300-word target that ETS recommends. This is also reflected in the number of T-units, which increased by more than five. The average rater score also increased by .82 in the second set. Although increased exposure and practice may have attributed to the increase in the number of words, number of T-units, and rater score, the number of clauses per T-unit did not likewise improve. This finding is similar to the results in the Cumming et al. (2006) study, in which examinees that scored a "3" averaged 14.6 and 15.6 words per T-unit on the two essays, those scoring a "4" averaged 15.2 and 15.7, but the number of clauses per T-unit was nearly identical across all proficiency levels (averaging 1.7 to 1.8). In examining performance on the individual essays in the current study (Table 1), the number of clauses per T-unit (syntactic complexity) and the number of words and T-units (fluency) did not have an impact on rater score. For example, TW4 and TW5 were similar in both fluency and syntactic complexity, however, the average score differed considerably (2.36 versus 1.28). The data indicate that syntactic complexity did not improve as much as fluencybased measures. The weakest areas on the students' holistic score sheets were grammar, sentence structure, and vocabulary.

Conclusion

This study investigated changes in student perceptions regarding their performance on the independent writing task of the TOEFL iBT as well as how their performance changed. Although there is a lot of reported research on the reliability and validity of the TOEFL iBT, little attention has been paid to how learners view their written performance on the TOEFL iBT. Two main findings can be drawn from this study: (a) many responses on the surveys and interviews, particularly in the first set of essays, included the need for better word-processing and organizational skills and self-regulation strategies (e.g., time management); and (b) the slight decrease in the number of responses in these areas in the second set suggests that students turned their attention to other concerns because they were becoming closer to reaching their 300-word target. The perceptions reported by students indicate that they are aware of what is needed to become more skilled writers. Students favored quantity over quality particularly in the first part of the semester. Multiple drafts submitted after students received corrective feedback and teacher-student conferences may have encouraged reflection and stressed the need to develop students' abilities to plan, analyze their essays, and propose and evaluate solutions. Perhaps the greatest challenge in developing more skilled writing practices among Japanese students is overcoming poor L1 writing models to empower writers to develop more effective L2 writing skills (Kobayashi & Rinnert, 2004, Hirayanagi, 1998; Takagi, 2001). If Flower and Hayes' (1981) model of writing, which uses a plan-write-revise framework, is adopted earlier in Japan and emphasis placed on paragraph writing, students should have fewer concerns about their speed, organization, and planning.

To answer the second research question, various measurements of performance were examined to trace changes over the course in the two sets of essays. The measurements provide additional opportunities for students and teachers to interpret the quality of independent task essays by examining discourse characteristics. Increases in the essay length and number of Tunits are consistent with the essays in the Cumming et al. (2006) study that were rated a "3." Greater improvements in fluency and rater score were found but this would seem likely after prolonged exposure and practice. Because only a slight increase in syntactic complexity was found between the two sets of essays, syntactic complexity does not seem to be a good indicator to discriminate the level of writing proficiency. These findings may assist TOEFL instructors in helping unskilled writers to increase their writing fluency by stressing word-processing skills early in the course. In addition, it is important for instructors to provide ample writing practice in timed settings for students to learn the skills they need to manage time and the strategies to compose effectively under pressure. With exposure and practice, these skills and strategies will be developed.

Bio Data

John Peloghitis is presently teaching as a Junior Assistant Professor in the Foreign Language Center at Tokai University in Japan. He serves on committees that design course materials and evaluation. He has been living in Japan for over 12 years and is interested in second language writing, learner strategies, syllabus design, and discourse analysis. In the near future he would like to pursue a PhD in Applied Linguistics. <jpeloghitis@hotmail.com>

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Appendix

List of TOEFL Independent Writing Topics in the Study

TW#	Independent writing prompt	Question type
1	Do you agree or disagree with the follow- ing statement? Telling the truth is the most important consideration in any relation- ship. Use specific reasons and examples to support your opinion.	Agree/Disagree
2*	People spend time doing things that they should do while others spend their time for personal enjoyment. Which do you prefer? Use specific reasons and examples to support your answer.	Choice / Preference
3	Do you agree or disagree with the follow- ing statement? Boys and girls should at- tend separate schools. Use specific reasons and examples to support your opinion.	Agree/Disagree
4	Do you agree or disagree with the follow- ing statement? It is better to watch serious movies than to watch entertaining movies. Use specific reasons and examples to sup- port your opinion.	Agree/Disagree
5	Do you agree or disagree with the follow- ing statement? People behave differently when they wear different clothes. Use specific reasons and examples to support your opinion.	Agree/Disagree

TW#	Independent writing prompt	Question type
6	Do you agree or disagree with the follow- ing statement? A zoo has no useful pur- pose. Use specific reasons and examples to support your opinion.	Agree/Disagree
7*	If you were asked to send one thing rep- resenting your country to an international exhibition, what would you choose? Use reasons and specific examples to support your answer.	If/What
8	Do you agree or disagree with the follow- ing statement? Life today is easier and more comfortable than it was when your grandparents were children. Use specific reasons and examples to support your opinion.	Agree/Disagree
9	Do you agree or disagree with the follow- ing statement? Computers have made our life easier. Use specific reasons and examples to support your opinion.	Agree/Disagree
10	Do you agree or disagree with the follow- ing statement? Most experiences in our lives that seemed difficult at the time be- come valuable lessons for the future. Use specific reasons and examples to support your opinion.	Agree/Disagree

Notes. TW = timed writing; * eliminated from study.

