

A Preliminary Study into the Development of an English-placement Test at the Faculty of Nursing

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Abstract

The purpose of this paper is to report on the processes and results of a small-scale preliminary study of the following research questions: (1) What kinds of test items are used and constructs measured in practice tests of commercially produced English-language proficiency tests? (2) How well do the test items reflect the content of the faculty of nursing's curriculum? In practice, the paper aims to examine the extent to which the test items and constructs of two commercially produced English-language proficiency tests frequently used for placement purposes in Japanese universities, Test of English as a Foreign Language (TOEFL) and Test of English for International Communication (TOEIC), use and measure orthographic knowledge and phonological awareness. The paper will first describe the materials and processes of assessment. Then, it will report on the results of the assessment.

Introduction

The primary purpose of the present study is to validate the development of an item bank that includes an array of test items designed to assess neglected areas of proficiencies in commercially produced English proficiency tests, such as orthographical processing skills, phonological processing skills, and syntactic processing skills. The development of an item bank for an in-house English placement test would enable the faculty to assign students to appropriate English-language classes, which would lead to students' successful completion of the English-language program in the tertiary-level institution. Moreover, it would benefit teachers of English because they could use the test's items for their formative assessments in order to gain information regarding students' strengths and weaknesses on a daily basis. In order to accomplish this, this preliminary study had explored features that are infrequently addressed in commercially produced English proficiency tests. As Cronbach (1988) points out, "Validators have an obligation to review whether a practice has appropriate consequences for individuals and institutions, and especially to guard against adverse consequences from meanings of the word validation, but you cannot deny the obligation" (p.6).

Materials

For each test, three types of materials are collected: (1) the official guide to

understanding the test scores, (2) the official collections of practice test items, and (3) the faculty of nursing's English-language curriculum.

The official guide to understanding the test scores

In this section, four types of material were used for the analysis:

- *A Guide to Understanding TOEFL IBT Scores*
- *TOEFL Monograph Series: TOEFL 2000 Reading Framework: A Working Paper*
- *TOEIC Reading Score Descriptors Table*
- *TOEIC Can-Do Guide Executive Summary Listening & Reading*

The official collections of practice test items

In this section, two types material were used for the analysis.

- *TOEFL Official Guide to the TOEFL Test with CD-ROM, 4th Edition.*
- *TOEIC Shin Koshiki Mondaishu Vol 5. [New Official Collection of Past Questions]*

The faculty of nursing's English-language curriculum

Curriculum for English language subjects at the faculty of nursing is relatively limited. Although all the liberal arts subjects at the faculty aim to "cultivate humanity and sensitivity... as well as broadening views," there are no explicit curriculums for each subject. All the English language subjects are categorized under a liberal arts education domain, and the purpose of the domain is "to broaden the perspectives of the students." There are six compulsory English language subjects for first- to fourth-year students: *English for Communication 1-4 and Medical English 1/2*. The statements of purpose on each subjects' syllabus are as follows:

- *English for Communication 1/2*

Students will acquire the basics of English communication skills by improving four basic language skills: reading, listening, writing, and speaking. In listening- and speaking-focused classrooms, English will be used as a medium of communication so that the students can acquire everyday conversation skills. In reading- and writing-focused classrooms, the ability to understand the organization and main ideas of English written texts will be stressed, as well as an ability to express ideas and thoughts clearly and concisely.

- *English for Communication 3/4*

Students will advance their English communication skills by engaging in four language skills: reading, listening, writing, and speaking. Moreover, students will learn the basic structures of medical English passages, as well as increase their medical English vocabulary.

• *Medical English 1/2*

Students will increase their medical English vocabulary and practice basic skills in order to read academic texts about nursing fluently and accurately. The class also focuses on using clinical expressions so that students can prepare for communicating with English speakers at hospitals in the near future.

A close reading the syllabuses reveals a hidden curriculum, which can be summarized as having one chief purpose; to stress that students should acquire both communication and academic skills in English. Goals should include fluent reading and listening skills in both medical and everyday English, expanded vocabulary in medical English, and basic speaking and writing skills for self-expression. According to this purpose and its goals, curriculum should expand not only students' medical English vocabulary but also their fluency in reading medical texts.

In the faculty of nursing, English fluency in reading medical texts is a crucial skill, especially for students seeking to pursue graduate study. Since most graduates of postgraduate courses will become teachers at tertiary-level institutions, many entrance examinations for postgraduate courses at schools of nursing consider English fluency in reading medical texts to be a requisite skill. As shown in Table 1, of five prominent schools of nursing within the Tokyo district (St. Luke's International University, Jyuntendo University, Kitasato University, Toho University, and Tokyo Women's Medical University), all but one (Tokyo Women's Medical University) consider English skills to be a pivotal entrance condition. English fluency in reading medical texts can provide future tertiary-level lecturers with ways to absorb new information and skills in nursing practices, all of which are vital to becoming educators of future nurses.

Table 1 Entrance Examination Subjects for Postgraduate Studies

University	English	Major Subject	Essay	Interview	Résumé
St. Luke's International	90 min test	75 min test	90 min essay	30 min interview	Required
Jyuntendo	60 min test	60 min test	N/A	60 min interview	Required
Kitasato	90 min test	90 min. test	N/A	30 min interview	Required
Toho	60 min. test	60 min. test	N/A	30 min interview	Required
Tokyo Women's Medical	N/A	N/A	N/A	N/A	Required

Reading fluency requires automatic recognition of words, which is based on the orthographic knowledge and phonological awareness of English words. Moreover, as Miyoshi, Naito, & Tozawa (2011) point out, the vocabulary used in medical English is relatively "challenging" for novice readers in English with limited orthographic knowledge and phonological awareness. Therefore, the measurement of accurate orthographic knowledge and phonological awareness in English placement testing is a

prerequisite for the students of the faculty of nursing.

Research Process

This section describes the ways in which the research was done on official guides and official collections of practice test items. In the latter section, the paper provides a brief overview of the types of tests that measure orthographic knowledge and phonological awareness.

The official guide to understanding the test scores

For the assessment of the official guide to understanding the test scores, the writer reads the whole description in order to detect whether test questions and reading passages are designed to assess test takers' orthographic knowledge and phonological awareness.

The official collections of practice test items

There are several types of tests to measure orthographic knowledge and phonological awareness (O'Brien, Wolf, Miller, Lovett & Morris, 2011; Cunningham, Perry & Stanovich, 2001). For example, O'Brien, Wolf, Miller, Lovett & Morris (2011) used four types of orthographic tests: (1) orthographic visual tests, where examinees choose a target letter from an array of 100 letters arranged in pseudorandom order, (2) pseudo-chomophone choice test, where examinees identify a correctly spelled word from an array of incorrectly spelled words, (3) letter string choice test, where examinees choose a orthographically plausibly spelled non-word and (4) test of silent word reading fluency, where students put space between un-spaced rows of words. Likewise, Stahl, Stahl & McKenna (1999) have measured examinee's knowledge of orthographic patterns using pseudo-chomophone choice tests while Akamatsu (2002) measured ESL readers' word recognition efficiency by requiring examinees to read monosyllabic words. Miyasako & Takatsuka (2004) measured examinee's efficiency of a phonological decoding skill by an articulation speed and accuracy in reading 80 English words.

From each official collection, test items from the reading section of one actual full-length test are chosen as research targets. The reading section of a TOEFL test has three reading passages and 14 questions. TOEIC's reading section consists of 40 fill-in-the-blank questions and 60 comprehension questions based on 20 reading passages, for a total of which makes 100 test questions.

The writer reads the passage, test questions, and explanations of test types if available, and then judges whether the test item assesses orthographic knowledge or phonological awareness.

TOEFL Official Collections of Practice Test Items

TOEFL's official collection of practice test items categorizes the test questions into eleven categories as Table 2 shows below:

Table 2 TOEFL Reading Questions Types (The Official Guide to the TOEFL Test, 4th Edition, 2012)

	Number of questions per set
(1) Factual Information Questions	3 to 6
(2) Negative Factual Information Questions	0 to 2
(3) Inference Questions	1 to 3
(4) Rhetorical Purposes Questions	1 to 2
(5) Vocabulary Questions	3 to 5
(6) Reference Questions	0 to 2
(7) Sentence Simplification Questions	0 or 1
(8) Insert Text Questions	1
(9) Prose Summary Questions	1
(10) Fill in a Table Questions	1

The writer first affirms whether the explanations of official collections correspond to the writer's categorization. When a disagreement is found between the categorization of the writer and the explanation of the official collection of practice tests regarding the type of skills and constructs the test item is measuring, the writer invites another evaluator to assess the test items. If the perspective of the second evaluator corresponds with the categorization of the official collection, then the official collection's categorization is adopted. Then, the writer will assess whether the vocabulary test questions measure orthographic knowledge or phonological awareness.

TOEIC Official Collections of Test Items

Unlike TOEFL's official practice test collection, the TOEIC's official practice test collection does not provide explanations about the type of skills the item is measuring. The reading section of the TOEIC test is composed of three parts: fill-in-the-blank of short sentence questions, fill-in-the-blank of short sentences within a text, and reading comprehension that includes 1-2 passages and 2-4 corresponding questions. Although the official collection states that part three aims to test reading comprehension skills, there are test items that appear to assess the test taker's vocabulary and grammar skills. (For example, "The word 'noted' in paragraph 4, line 8, is closest in meaning to (A) indicated, (B) well-known, (C) observed, or (D) knowledgeable.) Therefore, all the items in the reading section of TOEIC are the targets of the study. Of these 100 test items, the writer will first categorize all the test items into three categories: (1) grammar, (2) vocabulary, and (3) comprehension. The writer will perform a second categorization one week after the first categorization. If the two categorizations performed by the writer show inconsistencies, the writer will invite a second evaluator to categorize the test items. When the second evaluator has completed his or her categorization, the writer and the second evaluator will discuss the results and make final decisions. If it is not possible to reach an agreement, the writer will omit the test

item from the research target. Then, the writer will assess whether the vocabulary test questions measure orthographic knowledge or phonological awareness.

Results

The official guide to understanding test scores

A Guide to Understanding TOEFL IBT Scores

As described in Table 3, TOEFL aims to measure the test taker's ability to read academic texts. The subcategories of the "academic reading abilities" appear to be vocabulary, grammar, inference, synthesis, identification of an expository structure of a text, and ability to retrieve a main idea from a text. With regards to vocabulary, the official guide provides advice for improvement for each level of test takers. The advice for low-level test takers appears to indicate acknowledgement of orthographic knowledge and phonological awareness. It states "Increase your vocabulary by analyzing word parts; study roots, prefixes and suffixes; study word families." (ETS, 2008) The analysis of word parts, including prefixes and suffixes, will eventually lead to increased knowledge of the systematic order of spelling.

Table 3 A Guide to Understanding TOEFL IBT[®] Scores (ETS, 2014)

Level	High (22-30)	Intermediate (15-21)	Low (0-14)
Your Performance	<p>Test takers who receive a score at the HIGH level typically understand academic text in English that require a wide range of reading abilities regardless of the difficulty of the texts.</p> <p>Test takers who score at the HIGH level typically:</p> <ul style="list-style-type: none"> • have a very good command of academic vocabulary and grammatical structure • can understand and connect information, make appropriate inferences and synthesize ideas, even when the text is conceptually dense and the language is complex • can recognize the expository organization of a text and the role that specific information serves within the larger text, even when there is conceptually dense 	<p>Test takers who receive a score at the INTERMEDIATE level typically understand academic texts in English that require a wide range of reading abilities, although their understanding of certain parts of the texts is limited. Test takers who receive a score at the INTERMEDIATE level typically:</p> <ul style="list-style-type: none"> • have a good command of common academic vocabulary, but still have some difficulty with high-level vocabulary • have a very good understanding of grammatical structure • can understand and connect information, make appropriate inferences, and synthesize information in a range of texts, but have more difficulty when the vocabulary is high level and the text is conceptually dense 	<p>Test takers who receive a score at the LOW level typically understand some of the information presented in academic texts in English that require a wide range of reading abilities, but their understanding is limited. Test takers who receive a score at the LOW level typically:</p> <ul style="list-style-type: none"> • have a command of basic academic vocabulary, but their understanding of less common vocabulary is inconsistent • have limited ability to understand and connect information, have difficulty recognizing paraphrases of text information, and often rely on particular words and phrases rather than a complete understanding of the text • have difficulty identifying the author's purpose, except when that purpose is explicitly stated in the text or easy to infer from the text

Level	High (22-30)	Intermediate (15-21)	Low (0-14)
Your Performance	<ul style="list-style-type: none"> • can abstract major ideas from a text, even when the text is conceptually dense and contains complex language 	<ul style="list-style-type: none"> • can recognize the expository organization of a text and the role that specific information serves within a larger text, but have some difficulty when these are not explicit or easy to infer from the text • can abstract major ideas from a text, but have more difficulty doing so when the text is conceptually dense 	<ul style="list-style-type: none"> • can sometimes recognize major ideas from a text when the information is clearly presented, memorable or illustrated by examples, but have difficulty doing so when the text is more demanding
Advice for improvement	<p>Read as much and as often as possible. Make sure to include academic texts on a variety of topics written in different genres and with different degrees of conceptual density as part of your reading.</p> <ul style="list-style-type: none"> • Read major newspapers, such as <i>The New York Times</i> or <i>Science Times</i>, and websites (National Public Radio [NPR] or the BBC). • Write summaries of texts, making sure they incorporate the organizational pattern of the originals. <p>Continually expand your vocabulary. Continually practice using new words you encounter in your reading. This will help you remember both the meaning and correct usage of the new words.</p>	<p>Read as much and as often as possible.</p> <p>Study the organization of academic texts and overall structure of reading passages. Read an entire passage from beginning to end.</p> <ul style="list-style-type: none"> • Pay attention to the relationship between the main ideas and the supporting details. • Outline the text to test your understanding of the structure of the reading passage. • Write a summary of the entire passage. • If the text is a comparison, be sure that your summary reflects that. If the text argues two points of view, be sure both points of view are reflected in your summary. <p>Continually expand your vocabulary by developing a system for recording unfamiliar words.</p> <ul style="list-style-type: none"> • Group words according to topic or meaning and study the words as a list of related words. • Study roots, prefixes and suffixes; study word families. • Use available vocabulary resources, such as a good thesaurus or a dictionary of collocations (words commonly used together). 	<p>Read as much and as often as possible. Develop a system for recording unfamiliar words.</p> <ul style="list-style-type: none"> • Group words into lists according to topic or meaning and review and study the words on a regular basis so that you remember them. • Increase your vocabulary by analyzing word parts; study roots, prefixes and suffixes; study word families. <p>Study the organization of academic texts and overall structure of a reading passage. Read an entire passage from beginning to end.</p> <ul style="list-style-type: none"> • Look at connections between sentences; look at how the end of one sentence relates to the beginning of the next sentence. • Look for the main ideas and supporting details and pay attention to the relationship between them. • Outline a text to test your understanding of the structure of a reading passage. • Begin by grouping paragraphs that address the same concept. • Write one sentence summarizing the paragraphs that discuss the same idea. • Write a summary of the entire passage.

TOEFL Monograph Series: TOEFL 2000 Reading Framework: A Working Paper

ETS (2000) argues that the construct the TOEFL test measures is “a single broad construct that includes the four academic reading purposes (p. 4).” The four purposes are: (1) reading to find information, (2) reading for basic comprehension, (3) reading to learn, and (4) reading to integrate information across multiple texts. The paper states that all the reading “requires a combination of word recognition/processing efficiency and comprehension abilities.” Although the TOEFL official guide does not explicitly include statements that directly lead to a measurement of orthographic knowledge and phonological awareness, there is a need to identify whether practice test items are measuring “word recognition/processing efficiency.”

TOEIC Reading Score Descriptors Table & TOEIC Can-Do Guide Executive Summary Listening & Reading (ETS 2008)

TOEIC not only provides test takers with a score report but also a score descriptor and a can-do guide on its homepage to facilitate the test taker’s score interpretation. Each test taker receives a score report, which includes information on abilities measured in the test. For example, the ETS claims that the reading section of the TOEIC test measures the ability to: (1) infer based on information in written texts, (2) locate and understand specific information in written texts, (3) connect information across multiple sentences in a single written text and across texts, and (4) understand vocabulary and grammar in written texts.

Table 4 TOEIC Reading Score Descriptors (ETS, 2014)

Level	Strengths	Weaknesses
450	<p>Test takers who score around 450 typically have the following strengths:</p> <ul style="list-style-type: none"> • They can infer the central idea and purpose of a written text, and they can make inferences about details. • They can read for meaning. They can understand factual information, even when it is paraphrased. • They can connect information across an entire text, and they can make connections between two related texts. • They can understand a broad range of vocabulary, unusual meanings of common words, and idiomatic usage. They can also make distinctions between the meanings of closely related words. • They can understand rule-based grammatical structures. They can also understand difficult, complex, and uncommon grammatical constructions. 	<p>Test takers who score around 450 typically have weaknesses only when the information tested is particularly dense or involves difficult vocabulary.</p>

Level	Strengths	Weaknesses
350	<p>Test takers who score around 350 typically have the following strengths:</p> <ul style="list-style-type: none"> • They can infer the central idea and purpose of a written text, and they can make inferences about details. • They can read for meaning. They can understand factual information, even when it is paraphrased. • They can connect information across a small area within a text, even when the vocabulary and grammar of the text are difficult. • They can understand medium-level vocabulary. They can sometimes understand difficult vocabulary in context, unusual meanings of common words, and idiomatic usage. • They can understand rule-based grammatical structures. They can also understand difficult, complex, and uncommon grammatical constructions. 	<p>Test takers who score around 350 typically have the following weaknesses:</p> <ul style="list-style-type: none"> • They do not connect information across a wide area within a text. • They do not consistently understand difficult vocabulary, unusual meanings of common words, or idiomatic usage. They usually cannot make distinctions between the meanings of closely related words.
250	<p>Test takers who score around 250 typically have the following strengths:</p> <ul style="list-style-type: none"> • They can make simple inferences based on a limited amount of text. • They can locate the correct answer to a factual question when the language of the text matches the information that is required. They can sometimes answer a factual question when the answer is a simple paraphrase of the information in the text. They can sometimes connect information within one or two sentences. • They can understand easy vocabulary, and they can sometimes understand medium-level vocabulary. • They can understand common, rule-based grammatical structures. They can make correct grammatical choices, even when other features of language, such as difficult vocabulary or the need to connect information, are present. 	<p>Test takers who score around 250 typically have the following weaknesses:</p> <ul style="list-style-type: none"> • They do not understand inferences that require paraphrase or connecting information. • They have a very limited ability to understand factual information expressed as a paraphrase using difficult vocabulary. They often depend on finding words and phrases in the text that match the same words and phrases in the question. • They usually do not connect information beyond two sentences. • They do not understand difficult vocabulary, unusual meanings of common words, or idiomatic usage. They usually cannot make distinctions between the meanings of closely related words. • They do not understand more-difficult, complex, or uncommon grammatical constructions.
150	<p>Test takers who score around 150 typically have the following strengths:</p> <ul style="list-style-type: none"> • They can locate the correct answer to a factual question when not very much reading is necessary and when the language of the text matches the information that is required. • They can understand easy vocabulary and common phrases. 	<p>Test takers who score around 150 typically have the following weaknesses:</p> <ul style="list-style-type: none"> • They cannot make inferences about information in written texts. • They do not understand paraphrased factual information. They rely on matching words and phrases in the text to answer questions. • They are often unable to connect information even within a single sentence.

Level	Strengths	Weaknesses
150	<ul style="list-style-type: none"> • They can understand the most-common, rule-based grammatical constructions when not very much reading is necessary. 	<ul style="list-style-type: none"> • They understand only a limited range of vocabulary. • They do not understand even easy grammatical constructions when other language features, such as difficult vocabulary.

Table 5 Percentages of TOEIC Test Takers, by Reading Score Level, Who Indicated that They could Perform Various English-language Reading Tasks Either Easily or with Little Difficulty (ETS, 2008)

I can:	5-135	140-195	200-255	260-315	320-375	380-435	440-495	M	SD	Corr. with TOEIC reading scaled score
Read the letters of the alphabet	91	95	96	95	96	97	99	4.81	0.61	.08
Read and understand a restaurant menu	65	72	79	83	86	87	95	4.22	0.88	.23
Recognize memorized words and phrases (e.g., "Exit," "Entrance," and "Stop")	63	72	78	82	87	92	97	4.16	0.84	.27
Read and understand a train or bus schedule	49	59	70	77	84	90	96	4.00	0.91	.34
Read, on storefronts, the type of store or services provided (e.g., "dry cleaning," "book store")	47	64	69	72	81	90	91	3.95	0.95	.31
Read and understand a simple postcard from a friend	43	58	65	75	83	90	97	3.94	0.92	.37
Read office memoranda in which the writer has used simple words or sentences	36	50	61	72	81	88	96	3.83	0.92	.39
Read and understand traffic signs	40	51	61	68	77	86	90	3.81	0.98	.33
Read tables, graphs, and charts	31	40	54	64	73	83	93	3.69	0.94	.38
Read and understand directions and explanations presented in technical manuals written for beginning users	26	34	46	58	66	78	87	3.56	0.97	.40
Read and understand simple, step-by-step instructions (e.g., how to operate a copy machine)	24	34	45	55	64	79	90	3.52	0.97	.39

I can:	5- 135	140- 195	200- 255	260- 315	320- 375	380- 435	440- 495	M	SD	Corr. with TOEIC read- ing scaled score
Find information that I need in a telephone directory	23	34	42	52	64	76	89	3.48	1.00	.39
Read and understand a letter of thanks from a client or customer	18	26	39	53	66	81	94	3.45	0.97	.47
Read entertainment-related information (e.g., tourist guides)	15	25	32	45	57	72	85	3.34	0.97	.41
Read information about products (e.g., advertisements)	14	22	29	40	52	68	88	3.27	0.98	.42
Read and understand a travel brochure	10	18	26	38	51	68	86	3.22	0.98	.44
Read and understand an agenda for a meeting	6	14	22	34	46	62	84	3.09	1.00	.48
Read and understand the main points of an article on a familiar topic in an academic or professional journal	10	17	23	30	40	53	79	3.07	0.96	.37
Read English to translate text into my own language (e.g., letters and business documents)	5	12	16	23	36	50	74	2.92	1.01	.39
Read and understand a popular novel	7	10	15	23	31	43	67	2.91	0.92	.40
Identify inconsistencies or differences in points of view in two newspaper interviews with politicians of opposing parties	7	8	13	20	30	43	69	2.82	0.97	.43
Read highly technical material in my field or area of expertise with little use of a dictionary	5	10	14	19	27	40	59	2.76	1.01	0.38
Read a newspaper editorial and understand its meaning as well as the writer's intent	6	7	10	17	25	35	57	2.71	0.95	0.41
Read and understand a proposal or contract from a client	4	7	11	17	25	42	58	2.68	1.01	0.44
Read and understand magazine articles like those found in <i>Time</i> or <i>Newsweek</i> , without using a dictionary	3	5	5	11	19	30	47	2.6	0.91	0.42

While score descriptors provide information about test takers' strengths and weaknesses and recommended practices for improvement, the can-do guide provides information on the kinds of tasks each level of test taker can achieve with ease or difficulty. As shown in Table 5, most of the tasks illustrated are connected to real-world activities, such as "read [ing] information about products," or "read [ing] and understand [ing] the main points of an article on a familiar topic in an academic or professional journal." As a whole, however, neither the score descriptor nor the can-do guide provides test items that appear to measure orthographic or phonological awareness.

Official collections of practice test items

TOEFL Official Guide to the TOEFL Test with CD-ROM, 4th Edition

As previously described, a reading section from an actual full-length TOEFL test usually includes three or four reading passages with 12-14 questions each. The length of each passage is approximately 700 words. The types of test items included in the test are shown in Table 6 below.

Table 6 Types of Test Items Included in the Reading Section of TOEFL

	Number of Questions		
	Passage 1	Passage 2	Passage 3
(1) Factual Information Questions	4	4	3
(2) Negative Factual Information Questions	1	0	0
(3) Inference Questions	1	0	1
(4) Rhetorical Purposes Questions	1	1	1
(5) Vocabulary Questions	3	4	3
(6) Reference Questions	0	1	1
(7) Sentence Simplification Questions	1	1	1
(8) Insert text Questions	1	1	1
(9) Prose Summary Questions	1	1	0
(10) Fill in a Table Questions	0	0	1
Total	13	13	12

Vocabulary questions ask readers to choose "the closest meaning" of a word or phrase. In either case, the test asks the readers to choose the meaning "as it is used in the passage." None of the vocabulary test items, however, assess the orthographic knowledge or phonological awareness of the test takers. All of the questions require the test takers to choose the closest meanings of the suggested words or phrases from four choices.

As for the word recognition efficiency, a test taker must read 1971 words in TOEFL's reading sections within 60-80 minutes. Of these 1,971 words, 1,445 words (73.3%) are categorized as the "1,000 most-frequently used words" in Laufer & Nation (1995)'s

lexical frequency profile. Laufer & Nation (op, cit.) have developed this lexical frequency profile that categorizes words into 1,000 most-frequently used words (K-1), second 1,000 most-frequently used words (K-2), and 570 most frequent academic words (Academic), and unlisted words (Off-list). The table below shows the numbers and percentage of words in TOEFL's reading passages.

Table 7 Numbers and Percentage of Words in TOEFL's Reading Passages

	The number of words	Percentage
K-1	1445	73.3%
K-2	125	6.3%
Academic	150	7.6%
Off-list	251	12.7%

Nation & Warning (1997) state that approximately 80% of English words written by native speakers of English belongs to K-1 and K-2. The vocabulary level in TOEFL'S reading passages appears to range in the same extent since approximately 80% of words used in the passages are in K-1 and K-2.

TOEIC Shin Koshiki Mondaishu Vol 5. [New Official Collection of Past Questions]

As described in the previous section, TOEIC's reading section is composed of three parts: (1) 40 fill-in-the-blank short sentences, (2) 12 fill-in-the-blank short sentences in texts, and (3) 48 reading comprehension test items. The types of test questions in the TOEIC's reading sections are as follows:

Table 7 Types of Test Questions in the TOEIC's Reading Section

	Part 1	Part 2	Part 3
Grammar	30	6	0
Vocabulary	10	6	3
Reading Comprehension	0	0	45
Total	40	12	48

As can be seen from the Table 7, 12% of the test items appear to assess the test taker's vocabulary skills. None of the vocabulary test items, however, assess the orthographic knowledge or phonological awareness of the test takers. All of the questions require the test takers to choose the closest meanings of the suggested words or phrases from four choices.

As for the word recognition efficiency, the number of words a test taker must read 3,620 words in TOEIC's reading sections passages within 75 minutes. Of these 3,620 words, 2,842 (77.5%) are categorized as K-1 and K-2 in Laufer & Nation (1995)'s lexical frequency profile.

Table 8 Numbers and Percentage of Words in TOEIC's Reading Passages

	The number of words	Percentage
K-1	2548	70.4
K-2	258	7.1%
Academic	289	8%
Off-list	525	14.5%

Discussion

As described above, the first research question of this paper was to report on the kind of test items the two commercially produced English-language proficiency tests use and the kinds of constructs they measure. As for the test items, both tests evaluated reading comprehension, grammar, and vocabulary. With regards to the construct, TOEFL assesses "reading for a purpose", as described and TOEIC assesses reading comprehension, grammar and vocabulary. Neither TOEFL nor TOEIC appears to measure orthographic knowledge or phonological awareness. The number of words students have to recognize in the TOEIC test, however, is two times greater than that in the TOEFL test. In this respect, the TOEIC test might be slightly shifting towards measuring word recognition efficiency, which leads to reading fluency in written English texts.

As for the second research question, --whether the test items reflect the faculty of nursing's curriculum--, TOEIC might be slightly more suitable for assessing students' reading fluency in English texts. With respect to orthographic knowledge and phonological awareness, however, neither the TOEFL nor TOEIC test items appear to directly measure the two skills. In this respect, the two commercially produced English-language proficiency tests might not be useful for placement purposes in the faculty of nursing.

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