The TOEFL and Its Imitators:
Analyzing the TOEFL and Evaluating TOEFL-Prep Texts

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Abstract

This paper reports the results of a study that analyzed the TOEFL and identified the specific content and question types that appear in the exam as well as their ratio and placement within particular test sections. Applying this analysis, taxonomies derived from the TOEFL were used to evaluate ten leading TOEFL-prep texts. It was found that commercial texts vary widely in the accuracy with which they represent the exam. In July 1995, the TOEFL exam underwent a selective revision. The authors also outline these changes, and in closing, offer guidelines to aid in the selection of commercial texts for TOEFL-prep programs.

Due to the TOEFL's frequent use--and misuse--as the main criterion for the admittance of foreign students to North American universities, the exam has arguably become the most important mass-administered English language test in the world. Each year more than 1 million non-native speakers of English take the exam. Despite the often repeated injunction of Educational Testing Service (ETS) that studying for the TOEFL is not apt to improve one's score, common sense--and the company's own research--suggests that TOEFL preparation can improve performance (see, for instance, Wilson, 1987). As a result, alongside the highly profitable TOEFL industry that grosses tens of millions of dollars a year for ETS, another type of quasi-educational business has sprung up: The TOEFL-prep trade which churns out scores of preparatory guides, seminars, and sample tests in countries around the globe. Although extensive analytical research has been done on the TOEFL exam itself, little effort has been undertaken to qualitatively, and quantitatively, evaluate the quality of commercial prep-texts. This paper attempts to break new ground in providing some basis for evaluating TOEFL texts. It takes as a first principle that *it is* possible to effectively prepare for the TOEFL

but that the effectiveness of that preparation will be relative, at least in part, to how accurately the preparation materials reflect the exam itself. TOEFL-prep texts vary widely in quality, and the results of the research reported here suggest that TOEFL materials have a wildly uneven relationship to the exam. Some authors and publishers of TOEFL-prep texts, for instance, appear hardly to have studied the make-up of the exam at all. Based upon careful analysis of TOEFL exams from the early and mid-1990's, this paper identifies the specific content and question types that appear in the TOEFL, as well as their ratio and placement within sections of the exam. Applying this analysis, it then evaluates ten leading commercial TOEFL texts to show- how accurately--or in some cases, inaccurately--these texts reflect the actual test.

Unfortunately, recent changes in the TOEFL to some extent limit the long-term application of certain aspects of this present study, for in the sumer of 1995 ETS revised the Listening and Reading Comprehension sections of the exam. Though no new items types were created, there has been a definite shift in the focus of particular sections of the test. In the Reading Comprehension portion of the test, for instance,

Comprehension portion of the test, for instance, largely due to criticism of the lack of semantic context in discrete-item vocabulary tests (see Schedl et.al, 1995), the discreate-item vocabulary section was dropped in favor of content-based vocabulary items tested as part of the reading passages. In the Listening section, the former Part A (restatement items), was eliminated and replaced by an expanded version of what had previously been Part B (short conversations). In addition, the present Part B is now based on extended conversations, and Part C exclusively composed of mini-talks (both of these item types had been subsumed under the former Part C). Few TOEFL prep-texts that conform to the new version of the test have yet been published; and only several copies of the new test have been released by ETS to the public--too few to draw more than tentative conclusions about the make-up of these new sections. The value of the present study is consequently twofold: it evaluates those TOEFL texts currently on the market and sets forth the basis for an analytical means by which future texts can be assessed.

The methodology for examining the TOEFL and TOEFL-prep texts was as follows: Using a sample of 10 TOEFL exams from the early to mid-1990's, question types and topic areas were identified and taxonomies created for both the Structure and Written Expression (Part II) and the Reading Comprehension (Part III) sections. Because the recent changes in the Listening Comprehension section are extensive and the question types and content of the section more difficult to taxonomize than those of the Structure and Reading sections, it shall not be dealt with in the same degree of specificity as the previous two sections. In evaluating TOEFL-prep texts, the taxonomies derived from the TOEFL were applied to two sample tests from each TOEFL-prep text; when there were more than two sample tests in a book the first and the last were examined. (Texts with fewer than two practice tests were excluded, and the analysis of practice tests was limited to two per book because several of the texts included only two tests.)

This same methodology was used throughout the study, with the results of the analysis shown in the tables displayed throughout this paper. The prep-texts evaluated were chosen on the basis of market share. According to the leading retailer of foreign books in Japan, the eight books by North American and British publishers and the two books by Japanese publishers selected for this study were the top-selling TOEFL-prep texts in Japan, one of the largest markets in the world for these types of materials.

The Structure and Written Expression Section

In contrast to the Reading Comprehension and Listening sections, the Structure and Written Expression section of the TOEFL underwent no significant change in the recent revision of the test. The taxonomies posited below for Part A and Part B account for 96 percent to 97 percent, respectively, of all questions in these sections of the exam. Errors tested in only 1 percent of the questions, or less, were not included because, practically speaking, it is not time-efficient to study error types that rarely occur. This methodology also conforms to the overriding guideline used in designing the taxonomies: that the error types be categorized in a way that was both straightforward and pedagogically useful. Other taxonomies such as those created by authors of various TOEFL texts may also be helpful or valid, but many of them, probably in an attempt to avoid overlap, posit far too many categories, making these texts pedagogically much less useful than they could be. *Barron's,* for example, presents 170 different types of errors for the students to consider, far too many to be effectively studied during the limited duration of a TOEFL-prep program. Of course, in the broader taxonomy below some degree of possible overlap is unavoidable; for example, a parallelism question is by definition a part-of-speech problem. This potential overlap does not detract, however, from the value of a taxonomy to shed light on the make-up of the TOEFL and, subsequently, to provide a basis for evaluating TOEFL texts. After all, taxonomies are seldom naturally-occurring categories but rather heuristic constructions. Following are (1) the error types identified in our analysis and (2) tables showing the frequency of appearance of error types in the TOEFL as well as in ten leading TOEFL-prep texts. Please consult Appendix A for the entire taxonomy of error types illustrated with matching questions excerpted from actual TOEFL exams.

PART A - Structure (Fill in the blank):

1. WIAS (What Is A Sentence) - 52.7%

This category is based on the premise that one clause contains one subject and one verb

and *only one subject and one verb.* The authors' experience in teaching TOEFL-prep indicates that once students internalize this basic rule they quickly improve their ability to answer this type of question.

2. Word choice - 20.1%

As the name for this pattern suggests, this type of problem requires the student to choose the appropriate word or phrase to fit into the blank.

3. Word order - 12.0%

In this type of problem the distractors usually contain more or less the same words;

however, only one of the choices displays the proper word order.

4. Verb form - 9.4%

Usually this is a problem with tense or aspect--all or most of the distractors contain different forms of the same verb.

5. Parallelism - 1.3%

Even though this type of problem seldom occurs in Part A, appearing far more frequently in Part B, we have included it for pedagogical convenience--it is easy to teach and easy for students to learn.

TABLE 1: Question Types in Structure (Part A)*

Q-Type	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
WIAS	53	22	0	13	13	23	37	53	27	53	40
Word Choice	20	27	10	30	17	37	37	20	27	10	13
Word Order	12	2	10	17	13	13	10	10	10	13	33
Verb Form	9	24	13	13	40	20	10	10	23	7	7
Parallelism	1	2	0	0	0	3	0	7	3	7	0
Other	4	22	67	27	17	3	7	0	10	10	7

*Totals in the tables throughout do not always equal 100 because category percentages were rounded to the nearest whole number.

The table above yields a large amount of comparative data and can be analyzed in a variety of ways; there are, however, some general trends that should be noted. Seventy-three percent of all TOEFL questions in Part A can be classified as WIAS (What is a sentence) or Word Choice errors, but the representation of these two types of questions in a number of the commercial texts was far less frequent; for instance, they occurred only 30 percent in Aratake, and merely 10 percent in Cliffs. A few texts, namely, Newbury and Cambridge, had a somewhat similar distribution as the TOEFL, and two texts, Arco and Longman, had a nearly *identical distribution.* In fact, these latter two texts show a remarkable correspondence with the TOEFL throughout Part A, suggesting that the authors may have carefully studied the exam before producing their own.

PART B - Written Expression (error analysis)

1. Part of Speech - 21.6%

This type of error involves the incorrect substitution of one part of speech for another. Four types of improper substitutions are the ones most often tested: adverb vs. adjective, adjective vs. adverb, noun vs. verb, progressive predicate (-ing form) vs noun. The most common part of

speech error is the use of an adjective where an adverb is called for.

2. Plural - 16.8%

This category includes subject/verb agreement, pronoun agreement, and other errors with plural, e.g. using a singular noun when a plural is appropriate or placing a plural marker on an adjective.

3. Parallelism - 10.4%

As mentioned previously, this pattern is easy to spot and easy for the students to answer correctly.

4. Pronoun errors - 9.2%

This category represents word choice errors related to the choice of the appropriate pronoun.

5. Prepositional error - 7.6%

This category is concerned with the proper choice of preposition. This is one of the most difficult categories for students to grasp, since languages vary widely in how they tend to use prepositions to delineate semantic reality (Hilke & Aoshima, 1994).

6. Redundancy - 7.6%

This category includes repetitions and other unnecessary words, especially redundant pronouns. This is one of the easiest categories to teach.

7. Verb Form - 7.2%

Just as in Part A, this category refers to an incorrect usage of tense, aspect, or conjugation.

8. Deleted Word - 4.8%

This category is the converse of "redundancy"--instead of an unnecessary word being present, a necessary word is missing.

9. Word Order - 4.4%

Usually this is a case of two words simply being reversed. This type of error often causes problems because the student may read right past it when working quickly.

10. Article - 4.0%

This category is based on incorrect usage of the definite or indefinite article. Since this category also considers both the omission of an article and the inclusion of an unnecessary article, there is necessarily some overlap with the "deleted word" and "redundancy" categories.

11. Conjunction - 3.2%

This category refers to the misuse of a conjunction, either by substituting an incorrect conjunction or using a conjunction when another part of speech is called for.

TABLE 2: Question types in Written Expression (Part B)

Q-Type	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
Part of Speech	22	11	2	8	8	22	26	20	18	10	20
Plural	17	13	22	16	14	22	26	16	14	16	28
Parallelism	10	5	0	0	2	6	10	6	8	4	8
Pronoun	9	4	6	5	8	5	5	6	4	6	8
Preposition	8	9	12	14	4	10	10	2	6	2	4
Redundancy	8	9	2	0	10	12	6	6	2	4	0
Verb Form	7	18	26	12	10	8	16	12	20	8	24
Deleted Word	5	4	4	4	2	4	0	8	8	12	0
Article	4	2	4	6	4	2	0	6	6	8	0
Word Order	4	0	4	10	0	2	0	6	4	0	0
Conjunction	3	0	0	2	4	4	2	2	8	6	4
Other	3	15	18	24	34	4	0	10	2	24	4

The correspondence between question types in Part B of the TOEFL and Part B of the TOEFL-prep texts is not so easy to characterize principally because there is a larger number of error types. The majority of question types appearing in the TOEFL (74 percent) are found within the six most frequent question types (Part of Speech, Plural, Parallelism, Pronoun, Preposition, Redundancy): half of the texts listed in the table come relatively close to this proportion and half do not. Another way to assess the texts in the table is to trace the error types, line by line, to observe which texts consistently approximate by category the representation in the TOEFL. Longman, Heinle & Heinle, and Newbury, in particular, reproduce the TOEFL distribution rather closely while some of the other texts differ significantly. Yet another difference among texts is that some virtually ignore certain error types that consistently appear in the exam. For example, Arco, and Heinemann--which in other respescts appear to be faithful to the TOEFL--neglect to include any Word Order or Deleted Word questions, even though these items constitute 9 percent of error types in the exam..

It is possible of course to argue that in order to improve a TOEFL-taker's error identification skills and raise his or her score as much as possible, a TOEFL-prep text might increase its representation of certain types of errors (particularly those which are easier to master) and decrease its representation of others (those which are cognitively and linguistically more difficult to overcome) or vice versa. Nontheless, the texts used in this comparison nowhere acknowledged that they took such an approach, and in fact, typically claimed-- implicitly and explicitly--to reliably represent the exam. It should also be noted that even if for pedagogical reasons (i.e., to increase test performance) a TOEFL-prep book intended to distort the error types within its instructional material, the practice tests analyzed in our methodology should not be affected, or if affected, would not be apt to deliver a very accurate estimate of the test-taker's TOEFL score.

Although often unrecognized, the content of the TOEFL exam (i.e., the various topics used in constructing both the reading passages and the sentences of the Structure and Written Expression section) is specific and predictable. Drawn largely from natural and social science and from North American and natural history, it attempts to reflect the general type of prose students who enroll in North American universities are likely to encounter. This is particularly true in the Reading section where the subject matter of the passages is highly consistent in topic distribution and level of difficulty. Even though accurate representation of topic areas typically found in Structure items may be far less important than in the reading passages, and the ability to identify sentence-level errors less content-dependent than the subject-specific schemata beneficial to correctly answering reading comprehension questions, TOEFL-prep texts with the integrity to draw on the same topics as the TOEFL are more likely to better prepare prospective TOEFL takers for the test. Referring to Table 3 , it can be seen that 87 percent of TOEFL items in Part A are concerned with the first four topics (Natural Science, Biography, Geography, and Social Science). While several of the texts are reasonably close to this distribution, four of the texts do not closely resemble the TOEFL, and Cliffs and Aratake at 13 percent, and Unicom, at a mere 6 percent, do not appear to have based their topics on the TOEFL at all.

TABLE 3: Topic Areas in Structure (Part A)

Topic Area	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
Natural Science	49	39	3	3	3	30	33	50	33	26	33
Biography	23	4	0	0	0	17	13	0	17	23	27
Geography	8	7	3	0	0	13	20	17	13	20	7
Social Science	7	13	7	3	10	20	3	20	27	17	13
History	5	9	0	0	3	3	3	3	10	10	7
Math.Logic	5	4	0	0	0	7	3	0	0	0	0
Econ/Bus/Law	3	4	3	0	7	7	10	7	0	0	7
Art/Music/Lit	1	0	0	0	0	3	13	0	0	0	0
Non-NA	1	4	0	0	0	0	17	0	0	47	0
"Un-TOEFL"	0	18	83	93	77	0	0	3	0	3	7

Part B, as represented in Table 4, reveals a similar pattern: 90 percent of the TOEFL items are based on the five most common topics. Table 4 further reveals that six of the ten texts are generally faithful to the TOEFL topic distribution, having at least 70 percent of their items fall within these content areas. In contrast, three of the texts--Unicom, Aratake, and Cliffs--are greatly underrepresented in these topic areas, ranging from 34 percent to a scant 4 percent.

TABLE 4: Topic Areas in Written Expression (Part B)

Topic Area	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
Natural Science	46	35	4	20	10	34	54	42	42	40	48
Biography	16	7	0	0	0	20	2	18	16	10	4
Geography	10	0	0	0	0	17	6	2	4	2	4
Art/Music/Lit	10	0	0	4	10	6	10	4	2	2	0
Social Science	8	11	0	10	0	8	14	6	20	22	20
History	4	15	0	0	2	2	6	16	10	6	8
Econ/Bus/Law	3	5	0	0	8	6	2	6	2	0	4
Language	2	0	0	2	0	0	0	0	2	0	0
Math.Logic	1	2	0	0	2	8	4	0	0	2	12
Non-NA	1	2	0	4	8	2	6	0	0	20	0
"Un-TOEFL"	0	26	96	64	68	0	2	6	2	16	0

What certain TOEFL texts choose to include, moreover, is often as significant as what they fail to include. It is rare, for instance, for the TOEFL to include items drawn from content related non- North American topics, a convention for which the test has sometimes been criticized, perhaps unfairly (Angoff, 1980). Longman, Cliffs, Heinle & Heinle, and Heinemann, have been

careful to steer clear of subjects related to other geographic areas, but Cambridge contains many items that have a non-North American focus. In matters of history and geography, for example, the TOEFL concentrates exclusively on Canada and the United States; some TOEFL-prep texts, nevertheless, include passages and items related to European, African, or Asian topics not treated in the test. Cambridge, at 47 percent use of these items in Part A, is the worst offender. Perhaps even more serious, however, are the figures for what are referred to here as "un-TOEFL" items. These are items which the TOEFL does not use because they are too informal and non-academic: "The record albums left sitting on the floor by the window have been damaged by the sun" (Longman); "She wanted to serve some coffee to her guest; however, she did not have much sugar " (Cliffs). Whereas Newbury and Arco contain virtually none of these suspect items, Cambridge and Barron's inappropriately use a number of "un-TOEFL" items (in Part B, 16 and 26 percent, respectively). Far worse though are Aratake, Unicom, and Cliffs which include an even greater number--more than two-thirds of the structure items contained in these three texts are unlike questions students would encounter on an actual TOEFL test.

Reading Comprehension Section

Unlike the Structure and Written Expression section of the TOEFL, the Reading Comprehension section was modified last July. Reading passages were slightly lengthened and several vocabulary questions were added to each passage to compensate for the elimination of the separate vocabulary section; usage and organization questions were also slightly increased. The typical content and format of the reading passages, however, remains unchanged, as do the question types and the relative frequency of their appearance. Just as in the taxonomies created for Structure and Written Expression, the categories of reading comprehension questions are intended to be straightforward and pedagogically useful. As in the structure section, the taxonomy also contains a potential degree of overlap between categories; for example, a factual question which involves understanding paraphrased information inherently demands vocabulary and inference; in some respects, such a question could be classified as a "vocabulary" or "inference"

question. Nonetheless, despite some occasional ambiguity, the categories used in this study are easily identified and have a great deal of heuristic value for illuminating the types of questions in the TOEFL, and the question types listed below account for essentially all of the questions which appear on a typical exam. Following are (1) the types of reading comprehension questions identified in the present analysis, and (2) a table showing the frequency of appearance of question types both in the TOEFL and in leading TOEFL-prep texts. See Appendix B for examples of each type of reading question excerpted from recent TOEFL exams.

1. **Factual - 31%**

These are questions which ask for particular information to be retrieved from the passage.

2. **Inference - 15%**

This question type requires the student to understand what was implied or suggested, i.e. information that was not directly conveyed by the text.

3. **Main Idea - 13%**

These questions ask the student to identify the main idea of the passage.

4. **Vocabulary - 10%**

These items test vocabulary in context, as opposed to discrete-item testing.

5. **Usage - 9%** (Pronoun reference, quotation use, etc.)

This type of question primarily tests pronoun reference, although it may occasionally ask how a given phrase is used in the context of the passage.

6. **Negative Factual - 7%**

These items require the student to scan the text and identify which of the distractors contains information not presented in the passage.

7. **Minor Idea - 6%**

Unlike main idea questions, which ask the student to demonstrate a global understanding of the text, these items focus on a particular section or paragraph in the passage.

8. **Location - 4%**

This type of item asks the student to locate where in the passage specific information is mentioned.

9. **Viewpoint/tone - 3%**

These types of questions ask the student to examine the tone of the passage or the

viewpoint from which the author has written the passage.

10. Organization - 2%

These are questions about the passage's structure or what the topic of preceding or succeeding paragraph would likely be.

TABLE 5: Question Types in Reading Comprehension

Q-Type	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
Factual	31	69	62	56	73	42	52	36	32	48	40
Inference	15	5	7	25	9	16	12	17	18	22	17
Main Idea	13	13	2	7	11	16	17	13	10	12	13
Vocabulary	10	3	6	10	2	4	10	10	10	3	5
Neg Factual	8	5	23	0	5	7	5	12	10	15	12
Usage	9	0	0	0	0	4	0	0	7	0	3
Minor Idea	6	0	0	2	0	4	0	0	2	0	0
Location	4	1	0	0	0	0	0	0	0	0	0
Viewpoint/Tone	3	3	0	0	0	7	0	5	7	0	5
Organization	2	0	0	0	0	0	3	7	5	0	5

As with the Structure and Written Expression section, a line-by-line analysis of the question types in the Reading Comprehension section yields a great deal of information. The most notable congruities and incongruities between the TOEFL and TOEFL-prep texts are found in the over-representation and under-representation of particular question types. All of the texts, for instance, over-represent Factual questions. Several--such as Barron's, Cliffs, Unicom, and Aratake--contain nearly (or more than) twice as many than the test. Perhaps even more significant is the *absence* of particular kinds of questions in many of the texts. Usage, Minor Idea, Location, Viewpoint/Tone, and Organization questions comprise nearly one-fourth of the TOEFL, and yet these question types are not even represented in three of the texts (Cliffs, Aratake, and Cambridge) and barely represented in three others (Barron's, Unicom and Arco). One of the most important but apparently overlooked characteristics of the TOEFL Reading Comprehension section is that it uses a variety of question types, requiring a variety of reading skills (i.e., skimming, scanning, intensive reading, inference drawing, etc.) to assess reading skills. A surprisingly large number of prep-texts fall short of this diversity. Some are even deficient in the main question types: only 2 percent of the questions in Cliffs, for instance, were Main Idea questions (one entire practice test in this text had no Main Idea questions whatsoever) even though this is one of the most common TOEFL questions (one is included for most reading passages).

Similarly deficient is Unicom which included no Negative Factual questions at all despite the fact that usually about two questions of this type appear on each TOEFL. On a more positive note, among the texts whose question distribution most closely resembled that of the TOEFL were Newbury, Heinle & Heinle, and Heinemann.

As described earlier, the content of the TOEFL exam (i.e., the various topics used in constructing the reading passages as well as the sentences of the Structure and Written Expression section) is specific and predictable. Moreover, it attempts to reflect the type of general prose and general-knowledge subjects that students are likely to encounter in basic courses in American and Canadian colleges. It is difficult to dispute that subject-specific schemata are helpful in comprehending reading passages and correctly answering comprehension questions; a student with a background in biology, for instance, is far more likely to understand--and respond correctly to questions about--a reading passage drawn from biology than is a test-taker with an economics background (see Hale's extensive study on TOEFL Reading Comprehension performance by majors in the humanities/social sciences and natural/physical sciences). Some of the value of a prep-text is in the degree to which it exposes the prospective test-taker to various topics and text-types featured in the TOEFL; namely, Natural Science, American and Natural History (listed in these tables only as "History"),

Biography, and Social Science. See Appendix C   topics in the ten tests used in this study.
for a specific list of all of the reading passage

TABLE 6: Topic Areas in Reading Comprehension

Topic Area	TOEFL	Barron	Cliffs	Unicom	Aratake	Newbry	Arco	Long.	H&H	Cambr.	Heine.
Natural Science	38	50	42	42	36	20	40	40	50	55	36
History	32	0	25	8	18	20	10	10	20	22	27
Biography	16	8	8	0	0	10	10	20	10	0	9
Social Science	8	33	0	50	9	30	20	30	20	11	18
General Interest	6	8	25	0	36	20	20	0	0	11	9
Non-NA	0	17	25	10	20	0	10	0	10	11	0
Un-TOEFL	0	0	0	0	0	0	0	0	0	0	0

Among the general trends observable in Table 6 is that most texts rather accurately represented the ratio of Natural Science passages in the TOEFL. Many of them, however, over-represented Social Science and under-represented History and Biography. Despite the fact that Social Science passages account for only 8 percent of all TOEFL passages, four texts (Barron's, Unicom, Newbury, and Longman) drew 30 percent or more of their passages from this topic area. By contrast, even though Biography commonly provides the content for passages, three texts (Unicom, Aratake, and Cambridge) included no Biography at all. Many texts--especially Barron's, Cliffs, and Aratake--contained reading passages on History or Biography that had little or no relationship to North America and would not appear on the TOEFL. Among the texts which appear to have most faithfully reproduced the content topics used in the TOEFL reading section are Newbury, Longman, Heinle & Heinle, and Heinemann.

The Listening Comprehension Section

In contrast to the Structure and Reading sections, which deal exclusively with academic topics, the Listening section draws from a much broader semantic domain: spoken English that the student would likely encounter during his or her student life in North America. Accordingly, topic areas are not limited to the classroom. In fact, only 22 percent of the content of short conversations (the current Part A) have in the past been based on speech that would occur at the university. Far more common have been utterances related to daily life, such as those used

when paying the bills, shopping in stores, or eating at restaurants. Because this range of potential topics is so wide, the Listening section does not lend itself neatly to the type of taxonomic classification possible in the other two sections. Furthermore, as previously mentioned, the changes made to this section in July 1995 were extensive. Since few prep-texts reflective of these changes have appeared and since sufficient numbers of actual TOEFL tests in the new format have not been released, it would be inappropriate to evaluate currently available prep-texts in the area of Listening.

As a result, the present study shall confine itself to outlining the sort of breakdown likely to be useful in future analyses. Part A, short conversations, features two-statement dialogues (usually between a man and a woman) followed by a question. The types of questions used in the short dialogues can generally be separated into four general categories: questions calling for restatement of factual information, recognition of context, knowledge of idioms, and logical inference. In Part A, the questions for approximately 45 percent of the short dialogues are based solely on the second utterance; 40 percent of the questions require understanding of one or two words in the first utterance (usually marked by stress and rising intonation) and understanding of the second utterance. In only 15 percent of the cases does a correct answer to a question require complete comprehension of both utterances. In Parts B and C, restatement and inference items such as those in Part A are also prevalent; however, other types of questions such as main topic, identification of speakers or

audience, tone and viewpoint, purpose for speech, and the location of the talk may additionally be asked. Roughly half of the content and contexts of the extended conversations and longer talks have had an academic focus. Based on the limited information released so far by ETS, it is too early to predict whether this trend is likely to continue.

Choosing a Text

It was not the purpose of this study to endorse or reject particular texts (moreover, as mentioned at the outset, the recent revision of the TOEFL makes the texts analyzed here somewhat outdated). In closing, however, it may be useful to offer some general guidelines for choosing a book, either for personal use or as the text in a TOEFL-prep course. First, the text should cover the most frequently-occurring question types, as outlined in the taxonomies above. Check to be sure that all major item types are represented in the text. At the same time, however, note that the text does not cover the material in inordinate detail; texts with long sections on structure and a plethora of error types are probably best avoided.

Second, the contents of the passages should generally reflect the TOEFL, particularly in the Reading Comprehension section; be wary of prep-texts with passages and structure items dealing with non-North American topics. Third, pay attention to the length of the reading passages; the new version of the TOEFL presents the students with much more text to read. Fourth, consider how well-written and well-edited the text is (is it lucid and well laid-out, with ample and easy-to-understand exercises?) and whether the practice tests are formatted like the TOEFL. It is not difficult to choose a typeface and layout that reflects the test; if the author and publisher have not bothered to do so, they have probably not been careful in representing other aspects of the test as well. Finally, the more practice students receive taking faithfully simulated TOEFL tests under exam conditions, the greater their improvement on the actual TOEFL is likely to be; therefore, consider whether the text includes an adequate number of model tests for the students to practice on.

References

Angoff, W. (January 1980). "Context Bias in the Test of English as a Foreign Language." *TOEFL Research Reports* 29

Gear, J. (1993) *Cambridge Preparation for the TOEFL Test.* Cambridge: Cambridge University Press

Hale, G. (January 1988) "The Interaction of Student Major-Field Group and Text Content in TOEFL Reading Comprehension." *TOEFL Research Reports* 25

Hilke, R. and Aoshima M. (March 1994). "Eigo no Zenshichi no Tsukaekata" [The Use of Prepositions in English]. *The English Journal* 24, 3

Kennedy, D. Kenyon, D.M. and Matthiesen, S.J. (1989). *Newbury House TOEFL Preparation Kit.* New York: Newbury House,

Mahnke, M. Duffy, K. and Duffy, C. (1992). *The Heinemann TOEFL Preparation Course.* Oxford: Heinemann

Morita, K. (1992) *TOEFL Mondaishu* [Practice Tests for the TOEFL]. Tokyo: Aratake Shuppan, 1986. 18th Printing

Ogasawara, R. and Stricherz, G. (1992). *Shinkeiko no Mondai Gaido* [Question Guide for the New TOEFL]. Yokohama: Unicom, 1988. 6th printing

Phillips, D. (1989). *Longman Preparation Course for the TOEFL.* New York: Longman

Pyle, M.A. and Munoz, M.E. (1991). *Cliffs TOEFL Preparation Guide* [Fourth Edition]. Lincoln, Nebraska: Cliffs Notes

Rogers, Bruce. *The Complete Guide to TOEFL.* Boston: Heinle & Heinle, 1994.

Schedl, M, Thomas, N. and Way, W. (1995) "An Investigation of Proposed Revisions to Section 3 of the TOEFL Test." *TOEFL Research Reports* 47 (March 1995).

Sharpe, P.J. (1994). *How to Prepare for the Test of English as a Foreign Language* [Seventh Edition]. Hauppauge, New York: Barron's Educational Series

Wilson, K. (1987). "Patterns of Test Taking and Score Change for Examinees Who Repeat the Test of English as a Foreign Language." *TOEFL Research Reports* 22 (January 1987).

Zhong, Grace Yi Qiu and Sullivan, P.N. (1993) *Arco TOEFL Super Course.* 2nd edition. New York: Prentice Hall

Appendix A: Examples of Structure and Written Expression Error Types

PART A - Structure (Fill in the Blank)

1. **WIAS (What Is a Sentence) - 52.7%**
    Based on her studies of contrasting patterns of culture, Margaret Mead years ago came to the conclusion _____ extremely malleable.
    (A) is human nature which
    (B) which is that human nature
    (C) is human nature
    (D) that human nature is

    _____ who was the first Black woman to run for the office of President of the United States in 1972.
    (A) Shirley S. Chisolm
    (B) It was Shirley S. Chisolm
    (C) Shirley S. Chisolm was
    (D) When Shirley S. Chisolm

2. **Word choice - 20.1%**
    Uranium is extremely reactive _____ it combines vigorously with oxygen.
    (A) such
    (B) and
    (C) which
    (D) what

    Parasitic round worms have _____ problem of drying out once they have located a host, which furnishes them a moist environment.
    (A) no any
    (B) never the
    (C) not
    (D) no

3. **Word order - 12.0%**
    Bellevue, the oldest town in Nebraska, was founded in the nineteenth century as a _____.
    (A) center fur-trading
    (B) fur center-trading
    (C) trading fur-center
    (D) fur-trading center

    Out of the Pacific Ocean's great spaces _____ on Earth.
    (A) some of them blow the most destructive storms
    (B) of the most destructive storms blow some
    (C) blow some of the most destructive storms
    (D) the most destructive storms blow some of them

4. **Verb form - 9.4%**
    Playwright Lillian Hellman _____ noted for the mixture of strength and sensitivity she gave to her female characters.
    (A) was
    (B) had
    (C) been
    (D) being

The naming of a Black woman to the Washington, D.C. school board in 1895 _____ an important precedent.
(A) was set
(B) set
(C) setting
(D) had been set

5.   Parallelism - 1.3%
Before starting on a sea voyage, prudent navigators learn the sea charts, _____, and memorize lighthouse locations to prepare themselves for any conditions they might encounter.
(A) sailing directions are studied
(B) study the sailing directions
(C) to direct sailing studies
(D) studies direct sailing

Cobalt resembles iron and nickel in tensile strength, appearance, _____.
(A) is hard
(B) although hard
(C) has hardness
(D) and hardness

PART B - Written Expression (error analysis)

1.   Part of Speech - 21.6%
While the twentieth century, the field of dentistry has developed branches that specialize in the treatment of individual dental problems.

Photovoltaics, commonly called "solar cells," convert sunlight direct into electricity.

2.   Plural - 16.8%

2a.   Plural
Approximately fifty percent of the package utilized in the United States are for foods and beverages.

Papaya fruits has pulpy flesh and a thick rind, and is normally found in the tropics.

Rock decay or weathering is the results of reactions between elements in the atmosphere and the rock's constituents.

2b.   Subject/Verb Agreement
Maine's abundant forests and rivers has made it a haven for many kinds of wildlife.

Though it has taken diverse forms and have sometimes seemed almost dead, the struggle for women's equality may be the world's oldest continuous social movement.

2c.   Pronoun Agreement
In proportion to its size, the hungriest animal is the shrew, which must consume several times their own weight every day.

The value of gold, like those of any other commodity, results from the interplay of the forces of supply and demand.

3.4. Parallelism - 10.4%

The zircon, a <u>semiprecious</u> stone, <u>occurs</u> in many <u>shades</u> of red, green, and <u>bluish</u>.

The barnacle has been <u>described as</u> a shrimplike animal <u>that</u> stands on its head in a limestone house and <u>kicking</u> food <u>into</u> its mouth with its feet.

5.   Pronoun error - 9.2%

Raspberries <u>contain</u> salicylic acid, <u>whose</u> is the <u>active</u> compound in <u>common</u> aspirin.

A motion picture <u>director</u> for over twenty years, Lois Weber stamped her films <u>with herself</u> style and <u>personal</u> conviction.

The pioneer John Chapman <u>received</u> the nickname "Johnny Appleseed" because he <u>planted</u> apple seedlings during <u>him travels</u> in <u>what</u> are now Ohio, Indiana, and Illinois.

6.   Prepositional error - 7.6%

Wild elephants are <u>almost</u> continuously waving their <u>trunks</u>, both <u>up</u> in the air and down <u>aside</u> the ground.

Recent studies have shown that air <u>into</u> a house <u>often</u> has higher concentrations of contaminants than <u>heavily</u> polluted <u>air outside.</u>

7.   Redundancy - 7.6%

<u>Often called</u> "Father of the Blues," W.C. Handy <u>he helped</u> establish and develop <u>the musical</u> genre <u>known as</u> the blues.

In conduction <u>and convection</u>, <u>moving particles they transmit</u> heat.

Ice is <u>less denser than</u> the liquid <u>from which it</u> is formed.

Oriental rugs are considered <u>valuable and</u> because their <u>designs</u> are <u>intricate</u> and the <u>weaving process</u> is time-consuming.

8.   Verb Form - 7.2%

<u>Scientists finding</u> out that the universe <u>is even</u> larger and <u>more complex</u> than anyone <u>has ever imagined</u>.

Stalagmites <u>are produced when</u> water <u>to drop</u> directly <u>to the</u> floor of a cave.

Guppies are sometimes <u>call</u> rainbow <u>fish because of</u> the males' <u>bright</u> colors.

Copernicus found that <u>the orbits of the</u> planets <u>will be</u> more symmetrical if the Sun rather than the Earth were regarded as the center of the planetary <u>system</u>.

9.   Deleted Word - 4.8%

That <u>sunlight</u> is <u>a blend</u> of <u>many colors can proved</u> by passing it through a prism.

A dictionary allows <u>quick</u> access to the <u>meaning</u> of a word <u>only</u> if one knows <u>how spell</u> the word.

Antique auctions <u>have become</u> popular in the United States <u>because a</u> steadily increasing <u>awareness of</u> the investment <u>value of</u> antiques.

10. **Word Order - 4.4%**

Were it not for the winds, which transport hot air from away the equator, the polar caps would be colder and the tropics would be hotter.

Much than smaller the gorilla, the male adult chimpanzee measures between four and five feet in height and weighs from 150 to 200 pounds.

11. **Article - 4.0%**

Until the Second World War, only few dozen clusters of galaxies had been identified.

A dancing is the oldest and liveliest of the arts.

The Montreal International Exposition, "Expo '67," was applauded for displaying an degree of taste superior to that of similar expositions.

By a nineteenth century, adult education was beginning to develop as a formal, organized movement in the Western world.

12. **Conjunction - 3.2%**

In the 1912 Olympic Games, Jim Thorpe became the first athlete to win either the pentathlon and the decathlon.

Abstract Expressionism was a movement in American painting that flourished from the mid-1940's and the mid-1950's.

The innovative poetry of Walt Whitman motivated later poets to experiment with both meter or subject matter.

Appendix B: Examples of Question Types in Reading Comprehension

1. **Factual Questions - 31%**
   When did ...
   Which of the following does the author mention as the ...
   According to the passage, what is ...

2. **Inference Questions - 15%**
   It can be inferred from the passage that ...
   The author implies that ...
   It can be concluded from the passage that ...
   Which of the following generalizations is supported by the passage?
   In which paragraph does the author most clearly express an opinion?

3. **Main Idea - 13%**
   What does the passage mainly discuss?
   What is the author's main point?
   What is the main purpose of the passage?
   What is the main topic of the passage?
   Which of the following would be the best title for the passage? (infrequent)

4. **Vocabulary Questions - 10%**
   The term "heavily armed" in line 16 is closest in meaning to ...
   What does "extremity" in line 7 mean?

In line 10, the phrase "steel skeleton" suggests that ...

In line 15, the word "roughly" could best be replaced with which of the following?

5.   Usage Questions - 9%

In line 15, to which of the following does the word "it" refer?

The word "claims" is put in quotation marks because ...

In line 10, the word "there" refers to ...

6.   Negative Factual Questions - 8%

Which of the following is NOT mentioned ...

The author mentions all of the following reasons for ... EXCEPT ...

Which of the following is NOT mentioned as a purpose of ...

According to the author, which is the LEAST ...

7.   Minor Idea - 6%

In the second paragraph, the author primarily discusses ...

Which of the following is most extensively discussed in the last paragraph?

8.   Location - 4%

Where in the passage does the author classify ...

Where does the author indicate an important change in ...

9.   Viewpoint/Tone - 3%

To which profession does the author probably belong?

The tone of this passage could best be described as ...

10.   Organization - 2%

What does the paragraph following or preceding the passage probably discuss?

Which of the following statements best describes the organization of the passage?

The author organizes the discussion according to which principle?

Appendix C: Reading Passage Topics in Ten Recent TOEFL Exams

Natural Science (biology, chemistry, physics, astronomy, geology, meteorology, etc.): astronomy, sleep, trees, bee navigation, origin of Rocky Mountains, sponges, tomatoes, primate child development, moon compared with earth, immune system, the make-up of plastics, bacteria, novas, flying squirrels, air masses, the sloth, field stone movement, the octopus, immunization research.

North American and Natural History (including geography): the settling of Canada, the horse in the New World, the Navajo, history of nursing in America, origin of skyscrapers, exploration of a shipwreck near Miami, truss bridges, fire and pre-historic humans, Banff National Park, pottery-making in the Colonial Period, Tom Sawyer, the growth of American cities, urban decay and historic preservation, the British colonization of America, Jamestown.

Biography (individual and group): Harriet Tubman, James Whistler and other painters, Mary Morris the photographer, women aviators, Langston Hughes, Pearl S. Buck, Robert Herrick, Gertrude Stein. *Note that there is a relative parity in Biography between women and men and between Americans of European descent and Americans of African descent.*

Social Science (economics, sociology, psychology): child development, consumer price index, conformity experiments, economic reports, political cartoons, advertising, industrial organization, mass media, the US legal system, behavioral research.