A Development of a Context-based Curriculum for TOEIC Level D Students of *Kosen* (National College of Technology)

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Abstract

The purpose of this report is twofold: one is to develop a context-based curriculum for post high school level learners that aims to foster comprehensive English communication skills by teaching listening, speaking and background knowledge. The other is to assess the impact of the curriculum on the TOEIC listening comprehension scores using the TOEIC listening section as a pre- and posttest. The scores were compared with the group that used a popular TOEIC preparation book. The results of the quantitative study indicated that the context-based curriculum worked as well as the TOEIC preparation textbook to improve TOEIC listening comprehension scores during the five-month treatment period without doing almost any TOEIC-style questions. A survey conducted after the treatment revealed that the majority of the students think that TOEIC-style question practice is necessary to improve their TOEIC score, while the students who studied the context-based curriculum requested significantly shorter amounts of time to work on those questions.
I) Introduction

1. Should TOEIC be Taught at School?

English communication skills are becoming increasingly important in this era of globalization, and appropriate responses are required in colleges and national colleges of technology (Kosen) by providing effective English classes for international communication. Shortly after the turn of the century, several major engineering companies such as Hitachi, Ltd., Toyota Motor Corp. and Matsushita Electric Industrial Co., Ltd. announced that they had adopted the TOEIC® test as the official evaluation of their employees’ English speaking competence, and made certain TOEIC scores a requirement for promotion. Therefore, engineering students as well as company employees often voice considerable concern about the TOEIC. In a survey conducted in June 2003 on the fifth-year students (those who are in their last year of school) of Gifu National College of Technology, 81% replied that they expected some kind of assistance for TOEIC preparation from the school.

There is another practical reason that TOEIC attracts the attention of educators. Colleges and universities are now struggling for survival as the result of decreased enrollment due to the falling birthrate. Students’ average TOEIC scores can therefore be used to measure the effectiveness of their English language programs as a means of external evaluation, as it’s widely-known, and the results come in scores rather than grades. For example, many Kosen are now undergoing an accreditation process for JABEE (The Japan Accreditation System for Engineering Education), where students’ TOEIC scores are publicly considered as objective evidence of the effectiveness of their respective English language programs.

However, introducing external examinations to schools has created a controversy among some educators. They fear that their respective educational goals will be compromised by those of the external organization, which can put them in an undesirable atmosphere by giving them the pressure of “TOEIC-score competition” between schools. There is also a concern that the students will pay more attention to TOEIC scores than English language proficiency itself. They believe that the skills that are not directly tested by multiple-choice questions, such as the productive skills of speaking and writing, might be disregarded.

On the other hand, it can be proven that external examinations do motivate students. A previous study (Shibata and Shimizu 2002) shows that the introduction of the TOEIC at Gifu National College of Technology, which is mandatory to take for all third year students, had a positive effect on motivating students to learn English and the average of their self-study hours increased.
2. The Need for New Teaching Materials

The lack of proper teaching materials is another factor that makes it difficult to introduce the TOEIC to English classrooms. There are numerous kinds of TOEIC preparation books published in Japan, but most of them are designed to prepare prospective test takers by asking them to solve TOEIC-style questions rather than prepare them to learn workplace and everyday English, which are used in the TOEIC.

The English class hours typically decrease during the students’ tenure in Kosen and engineering schools. Table 1 shows average English class hours per week in Kosens throughout Japan.

Table 1. The Average English Class Hours per Week in Kosens (ANCT 2003, p. 244)

<table>
<thead>
<tr>
<th>Grade</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Hours per Week</td>
<td>4.2</td>
<td>3.8</td>
<td>2.8</td>
<td>1.6</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: At most Kosens, one class session is 1.5 hours (90 minutes) long and offered on a weekly basis.

In the latter half of their tenure, when they are preparing for their future careers, approximately one English class per week is offered on average. Therefore, introducing the aforementioned TOEIC preparation books to classrooms may directly result in deprivation of the class hours that had been used for practicing speaking, writing and other skills that the multiple-choice test does not deal with. This seems to be going against the purpose of the introduction of the TOEIC—“to learn English for international communication.”

Therefore, English teachers who teach engineering students are facing an urgent need to develop a new curriculum and respective materials that meet the needs of both society and students. The curriculum should aim for the following:

1. It should foster comprehensive English language skills that enable the students to achieve an adequate level of English communication that society expects from an engineer in the era of globalization, and the acquired competence must be measurable by their TOEIC scores to fulfill the students’ career need as well as the practical demands of the school.

2. It should be time-effective in the limited classroom hours of non-English major students.
3. Contents of This Paper

To achieve these objectives, the study developed a curriculum and pertinent teaching materials for post high school level engineering students, most of who are at the D level on the TOEIC proficiency scale. To narrow the argument, the current report focuses on their listening/speaking skills, and the effect of the curriculum was assessed by means of their TOEIC listening section scores after the instruction with the curriculum. The result was then compared with the students who had studied concurrently with conventional TOEIC preparation books. A survey was also conducted after the treatment to study their attitude toward the curriculum.
II) Background of the Study

1. Common Approach Used in TOEIC Preparation Classes

There are many colleges and language institutes that offer TOEIC preparation courses, but no comprehensive research has been done on the techniques used in those classrooms. However, by observing the TOEIC preparation books available in major bookstores, it is obvious that the most common approach is to solve TOEIC-style questions, as that is the approach every one of them adopted (except for the vocabulary books).

In the fall of 2000, when this study was at the planning stage, the researchers searched for a textbook for an English class for prospective TOEIC participants; a textbook that covers both English for business communication and TOEIC preparation, but such a book could not be found at the time. There were books that covered either business English textbooks with business specific expressions and terminology or TOEIC-style question books for test preparation. Since what is called “business English” in Japan is generally meant to be English used by office workers, not engineers, we adopted TOEIC-style question books as textbooks. After some semesters, the applicability of those textbooks for post-high school level EFL classrooms were reviewed from the viewpoint of our two curriculum objectives discussed in chapter I)-2. In conclusion, they appeared to be inappropriate in regard to the following three aspects:

1.1 Too Much New Language Materials

The TOEIC question books are not designed to introduce new language materials but to practice listening and answering questions in the TOEIC listening section. However, the listening practice does not work when too many new words are used in the listening materials. Japanese post high school level students typically learn academic English using textbooks for high school students certified by MEXT (Ministry of Education, Culture, Sports, Science and Technology) that use no workplace topics and only some everyday conversation topics. Therefore, the students’ common complaint during the TOEIC simulation quiz is that they do not understand what they hear because too many unknown words are used.

The introduction of new language materials that focus on workplace and everyday English should be emphasized in the curriculum and taught in a systematic manner before they try the TOEIC.
1.2 Lack of Background Knowledge

Students do not have a certain kind of knowledge that ordinary working adults consider to be ‘common knowledge’. For example, while explaining a question using the phrase ‘checking account’, the researcher had been asking the same questions for three years to 700 different students: “If you want to use a check in Japan, what kind of account do you have to have? What do we call it in Japanese?” Not a single student was able to come up with the Japanese phrase: toza-yokin. When the learners are still students, they sometimes do not understand the meaning of certain words, even if it is translated in their native language. Since Japanese students rarely have work experience, a lot of explanation on business-related topics, such as manufacturing, personnel issues and finance, is especially needed along with providing linguistic explanations with the textbook.

1.3 Absence of Productive Activities

Thirdly, the TOEIC preparation books do not cover productive exercises to improve speaking skills. This would create a problem in the future if students study English for the TOEIC without any productive training, because their employers assess their English “communication” skills by their TOEIC scores.

2. The Need for Context-based Curriculum

TOEIC-style question books are typically organized by skills, not by content, so if ten questions are printed on a certain page, ten different topics/situations are normally used. If the instructor tries to fill these three missing factors above: vocabulary introduction, background knowledge and speaking practice regarding each topic, the lesson will be quite time-consuming and distracting. Our solution for this is to develop a new curriculum organized by context. By organizing a curriculum by context, new language material and background knowledge can be taught systematically, and the learners can move smoothly onto listening and speaking practices utilizing the newly learned information. As for the instructor, he or she will find it easier to plan a communicative activity if certain context is provided.

Particularly, the inclusion of background knowledge is a key factor of the curriculum. It is generally agreed that background knowledge, often called schema, enhances comprehension, and there are several studies that suggest that background knowledge has a strong effect on listening comprehension in an EFL environment. For example, Long (1990) asked students studying Spanish
as a foreign language to listen to Spanish passages both with a familiar topic (a rock group) and an unfamiliar topic (gold rush), and then asked them to take a recall test and answer comprehension questions. The result suggested that when the participants possess relevant schemata, content schema plays a more important role than linguistic knowledge. Uematsu (1999) also claimed that the provision of the schemata contributed to improvements of the performances on the recall and comprehension tests.
III) Research Questions

This study was designed to answer the following question:
Given that post high school level learners in an EFL classroom are taught with a context-based curriculum that is developed to teach everyday and workplace English that includes speaking practice and other various activities, does their performance on the TOEIC listening section differ from that of the learners who are taught with a skill-based curriculum using exclusively TOEIC preparation books?

The purpose of this report is twofold: one is to develop a context-based curriculum for post high school level learners that targets the objectives discussed in I)-2. The other is to assess the impact of the curriculum on the TOEIC score using the TOEIC as a pre- and posttest. The score gain after the instruction is compared with a group that used a conventional approach using TOEIC preparation textbooks. Their attitude toward the two curricula is also studied and compared after the treatment.
IV) Development of the Curriculum

1. Language Materials

In order to compare the effects of the curriculum by means of the TOEIC score with the group that used conventional TOEIC preparation books, the language materials were coordinated with the TOEIC materials. The contexts used in the materials were chosen from the situation/context list in the *TOEIC Official Test-Preparation Guide* (The Chauncey Group International 2000). Using the list items as the category criteria, TOEIC test items that were published in the *TOEIC Official Test-Preparation Guide* (The Chauncey Group International, 2000 & 2002) were reviewed and assorted, and then the frequency of the test items that belong to each category was ranked. We selected the following seven context topics regarding 1) the possibilities that the learners encounter the context in the near future, 2) the frequency used in the TOEIC, and 3) topics used in the TOEIC preparation book that the control group used.

- Restaurant
- Shopping
- Travel (Airplane/Bus)
- Telephone conversation
- Meeting
- Job Application
- Miscellaneous Office Work

2. Methodology/Approach

To repeat the major points of the previous chapter, the elements of the context-based curriculum should include the following:

- input of language materials commonly used in everyday and workplace English
- input of background knowledge about everyday and workplace situations
- listening practice
- speaking practice

In order to integrate these four elements into a curriculum, we borrowed the concept of “script” by Schank (1977). “Script” is a type of background knowledge. It is “a structure that describes
appropriate sequences of events in a particular context...scripts handle stylized everyday situations (Schank, 1977, p. 41).” If a person has, for example, a “restaurant script”, he or she will not only be able to understand what the text “John ordered coq au vin, and paid by card.” means, but also infer things like “John probably ATE the coq au vin”, and “the restaurant is probably a fancy one”, since the restaurant script can complement the missing frames even though they are not explicit. Schank calls this cognitive mechanism that enables us to infer implicit information a “script applier”. According to his theory, a person possesses a great number of scripts from life experience. When he or she recognizes a few keywords called “script headers” while listening to an utterance, a matching script is activated, and works to infer implicit information and to quicken comprehension.

He points out that a script does “not provide the apparatus for handling totally novel situations (Schank, 1977, p. 41)”, and humans can understand novel situations without using a script, but it takes more time. Therefore, a script is effective only when the text describes a stylized everyday situation. Significantly enough, the language used in the TOEIC does describe stylized everyday/workplace situations, and there are quite a few test items that require inferential decisions such as the following:

Woman: Good morning, this is Standard Computer Services. Would you like to speak with someone in sales, service or research?

Man: Actually, I need to speak with Mr. Fong in personnel.

Woman: Please hold while I transfer your call.

55. What is the woman’s job?
(A) Telephone operator. (B) Computer technician.
(C) Sales representative. (D) Personnel supervisor.

(The Chauncey Group International 2000, p. 166)

If an examinee possesses the “telephone operator script”, the first line works as the “script header” that activates the script. By the time he/she hears the last line, he/she can confirm that this woman is a telephone operator. In this case, the script may work to quicken the comprehension and also help infer the implicit information (the woman’s job).

We tried to design lesson units so that the learners could organize the learned information
(curriculum elements) in a format of a “script”: a series of small events that makes the speaker do typical everyday/workplace activities such as “ordering dinner”, “checking-in at an airline counter”.

In each material unit, a model conversation is presented as a dialogue with 10 to 15 lines, which is long enough to describe, for example, “ordering dinner” from beginning to end, while TOEIC-style three-line conversations only describe a segment of a scene. The dialogue is accompanied by a group of illustrations in a narrative sequence (or a flowchart); each picture illustrates each event such as “waiter asks if the guests are ready to order”, then “taking their main course order”, then “asking how they like their meat” and so on. The chart is the key tool of this teaching material; at the beginning of the lesson, the learners use it to do short activities that evoke their own background knowledge about the topic before they listen to the recorded dialogue. For example, they guess what the waiter with a memo pad in his hand is saying at the table. After learning the main dialogue and variety of substitute expressions using written text, they use the chart again to practice improvising their original conversation by following serial pictures. They work in pairs and create their own conversation by adopting the newly-learned language related to each picture.

The script is not a fixed memorized dialogue but rather a conceptual sequence, therefore, the serial pictures work like a cognitive map; they visually show the learners the series of events so the learners can connect the words and phrases they have learned to them. This can guide them into spontaneous conversation practice. It is especially useful to teach conversation points in situations that learners have never been exposed to; such as conversing in an airport and an office. They can understand and mentally visualize what is expected to happen at an airport check-in counter. These practices may help the learners to be confident in their future communications as well as help them to prepare for listening tests.

3. Lesson Plan and Material Development
Appendix 1 to 3 are sample material for one unit lesson with the topic of “Dinner at a Restaurant”. The model conversation covers a conversation typically heard at a restaurant from a waiter asking, “How many?” to ordering dessert, which is not a segmented pieces of conversation, but tries to cover whole sequence of events at a restaurant. The conversation was divided into three parts that make up three lesson units.
The teaching material for one unit lesson consists of four parts:

- a model conversation
- a group of illustrations in a narrative sequence
  (in some lessons, a chart that guides the sequence such as a flowchart, a reception form, etc. are used.)
- a “wordbank” for substitute expressions
- supplementary materials

The following is a basic lesson plan using the material. The instructor adds and omits activities to create a lesson plan for each set of lesson materials.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DESCRIPTION</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Warm-up Exercise</td>
<td>Short class discussion about the topic in English</td>
<td>To focus on the topic and review existing vocabulary</td>
</tr>
<tr>
<td>(5 min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Filling in the blanks</td>
<td>Learners are given serial illustrations without text, and they come up with the content in English and fill in the blanks</td>
<td>To link the learners’ linguistic and background knowledge to the lesson topic</td>
</tr>
<tr>
<td>(5 min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Dictation (15 min.)</td>
<td>Instructor dictates sample dialogue and learners fill in the blanks</td>
<td>To practice listening (dictation)</td>
</tr>
<tr>
<td>4 Explanation (15 min.)</td>
<td>Instructor hands out printed dialogue and gives explanations on vocabulary, grammar and foreign customs</td>
<td>To understand the vocabulary, grammar and foreign customs</td>
</tr>
<tr>
<td>5 Reading aloud (5 min.)</td>
<td>Learners listen to the model conversation and repeat it</td>
<td>To practice pronunciation</td>
</tr>
<tr>
<td>6 Vocabulary Expansion 1</td>
<td>Instructor introduces vocabulary from the “wordbank” so that the learners can learn different expressions to use in each stage</td>
<td>To expand one’s vocabulary</td>
</tr>
<tr>
<td>(15 min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Vocabulary Expansion 2</td>
<td>Learners look at supplementary materials (i.e. dinner menu at a restaurant, restaurant advertisement, food-name section of a picture dictionary)</td>
<td>To expand one’s vocabulary To generate interest in foreign customs/cultures</td>
</tr>
<tr>
<td>(15 min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Conversation Practice</td>
<td>Learners practice conversation in groups while following the serial illustrations</td>
<td>To practice speaking (spontaneous reproduction)</td>
</tr>
<tr>
<td>(10 min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Review Quiz</td>
<td>Learners review the new language materials and take a fill-in-the-blank quiz at the beginning of the next session</td>
<td>To check memorization of the new language materials</td>
</tr>
<tr>
<td>(5 min., following session)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V) Quantitative Study

1. Participants

The participants of the study were the students of a national college of technology who belonged to four different classes. They were in their third year and their average age was around 18 years old. They did not differ considerably with respect to year in school. They took the TOEIC listening section (pretest) before the treatment. Then, the four classes were divided into two groups (two classes + two classes) so that the mean score of two classes of students roughly could match the other two classes of students. One group (that belonged to two different classes) was taught along the context-based curriculum developed in the study as the experimental group (hereafter “Context Group”), and the other group (that belonged to two different classes) was taught along a skill-based curriculum using a major TOEIC preparation textbook (Lougheed 1989) as the control group (hereafter “Test Prep Group”). The total number of the participants who took both the pre- and posttests were 65 in the Context Group, and 76 in the Test Prep Group.

Before the treatment (during the first three months of the academic year), all of the participants took the same English lessons and studied for the TOEIC reading section. They all were familiar with the format of the TOEIC questions, and had experienced answering TOEIC-style questions prior to the study.

2. Materials

The Context Group (experimental group) used the material developed in the study and followed the lesson plan as shown in Table 2. The Test Prep Group used a popular TOEIC preparation textbook (Lougheed 1989) that was used in TOEIC preparation classes in colleges and language institutes. Each chapter of this textbook was designed to prepare each part of the TOEIC (Part I to VII). The lessons under the treatment of the study covered two chapters of the book (Part II and III) with a TOEIC simulation question set at the back of the textbook. The text in the textbook consists of one to three-line statements/dialogues, as they are in the format of TOEIC questions. It used more topics on daily life and workplace English than the material for Context Group. Both groups used audio material that was recorded in natural speed American English.

The lessons of the Test Prep Group consisted of:
1. listening comprehension exercises simulating TOEIC
2. listening exercise (multiple-choice) with the textbook and the instructor’s explanations
3. vocabulary practice with the textbook and the instructor’s explanations
4. (in the following lesson) a review quiz to check memorization of the new words and phrases

The volume of printed English texts for both groups was controlled to approximately two pages worth (including illustrations, directions and questions) for each 90-minute session.

3. Procedure

First, all of the participants took a TOEIC listening section before the treatment as the pretest. Then, they were taught by the same instructor (one of the researchers) with each curriculum in a weekly 90-minute class for five months (average total instruction hours were 24 hours in 16 sessions). Finally, they took another TOEIC listening section as the posttest. Two sets of the listening section portion of the TOEIC (100 questions each) were used as the pre- and posttest.

The experimental group was not assigned to do any kinds of TOEIC-style questions during the treatment. However, in order to avoid the unfamiliarity to the test format biases the result, both groups practiced answering all four parts of the TOEIC listening section during a classroom session prior to the pretest (one 60-minute session at the beginning of the academic year, which was 10 weeks before the pretest) and once again, prior to the posttest (one 60-minute session at the last class before the posttest).
4. Results and Discussion

The framework of the statistical analysis used in the present study followed Taira (1993), and Taira and Oller (1994). Throughout the present study, StatView version 5.0 was used for all statistical analyses.

Table 3. The Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>MAX</th>
<th>MIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context Pretest</td>
<td>76</td>
<td>171.8</td>
<td>38.8</td>
<td>270</td>
<td>90</td>
</tr>
<tr>
<td>Test Prep Pretest</td>
<td>65</td>
<td>176.5</td>
<td>43.4</td>
<td>315</td>
<td>95</td>
</tr>
<tr>
<td>Context Posttest</td>
<td>76</td>
<td>194.0</td>
<td>40.2</td>
<td>275</td>
<td>105</td>
</tr>
<tr>
<td>Test Prep Posttest</td>
<td>65</td>
<td>184.3</td>
<td>38.7</td>
<td>275</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 gives the basic statistics of the pre- and posttest scores from the TOEIC listening section (full mark = 495). On the pretest there was no significant difference between the two groups ($t = 0.678, p = 0.499$). Because it was also observed that the Test Prep Group obtained higher means on the pretest, this group seemed to have a small advantage going into the experiment.

The point of interest is the effect of instruction after some intervals. ANCOVA is an appropriate way to contrast the experimental and Test Prep Group treating the pretest as a covariant with the posttest. The interaction between the group and the pretest showed no evidence of violation of the equal slope assumption ($F(1, 137) = 0.269, p = 0.605$). Therefore, the regression of the posttest on the pretest is the same for both types of instruction.
The results of the main effect are shown in Table 4.

Table 4. ANCOVA Comparing the Groups Based on the Posttest

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>4578.185</td>
<td>4578.185</td>
<td>3.149</td>
<td>0.067</td>
</tr>
<tr>
<td>Pretest</td>
<td>1</td>
<td>32229.599</td>
<td>32229.599</td>
<td>24.072</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>138</td>
<td>184765.234</td>
<td>1338.879</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From this table, we can see that there was no contrast between the Context and Test Prep Groups ($F_{1, 138} = 3.149, p = 0.067$). This result shows that the Context Group was able to perform just as well as the Test Prep Group, which studied to prepare exclusively to answer the TOEIC listening section questions.

Another factor of interest is, of course the difference of scores between the pre- and posttest. Table 5 compares the performances between the pre- and posttest.

Table 5. MANOVA Comparing Performances between the Pre- and Posttest

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>439.540</td>
<td>439.540</td>
<td>0.196</td>
<td>0.659</td>
</tr>
<tr>
<td>Residual</td>
<td>139</td>
<td>312023.935</td>
<td>2244.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-/Posttest</td>
<td>1</td>
<td>15703.254</td>
<td>15703.254</td>
<td>15.759</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>Group * Pre-/Posttest</td>
<td>1</td>
<td>3633.396</td>
<td>3633.396</td>
<td>3.646</td>
<td>0.058</td>
</tr>
<tr>
<td>Residue</td>
<td>139</td>
<td>138509.157</td>
<td>996.469</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was observed by comparing the pre- and posttest scores that there was a contrast between them ($F_{1,139} = 15.759, p < 0.000$). On the other hand, the results also reconfirmed that there was no significant difference between the groups ($F_{1,139} = 0.196, p = 0.659$). These results occurred because interaction possibly existed between the groups and the tests, even though there was no significance between them ($F_{1,139} = 3.646, p = 0.058$). Both groups improved their TOEIC scores.
after the intervention, and the higher showing of the Test Prep Group on the pretest balances the higher showing of the Context Group on the posttest. Moreover, the group*pre-/posttest interaction seemed to be derived from the fact that the Context Group advanced to exceed the Test Prep Group, which started out with an advantage of English language ability.

Given these findings, two conclusions are drawn. First, it is clear that, even over a five-month learning period, TOEIC D-level Japanese learners of English can improve their TOEIC scores. This suggests that these students gained valuable information to improve their English proficiency that can be measured by the TOEIC. Second, the context-based curriculum developed in this study was as useful as the TOEIC preparation textbook to obtain higher TOEIC scores in the five-month learning period. By observing the slopes of differences on pre- and posttest scores shown in Figure 1, we have determined the possibility that the Context Group might obtain better scores than the Test Prep Group if they are taught over a longer period of time.
VI) A Study about the Participants’ Attitude Toward the Curriculum

Some possible problems that could be caused by the use of the TOEIC preparation books in the classroom were pointed out in the former sections, and the statistical studies have suggested that the context-based approach was as effective as the TOEIC preparation book to gain better TOEIC scores. However, the discussion lacked a perspective from the learners: It is natural to assume that a certain teaching/learning method is more effective when the learners believe so. A survey was conducted to discover the learner’s attitudes and opinions toward the curriculum and teaching materials used in this study.

1. Research Questions

The survey was conducted to answer following three research questions:

1. What kinds of tasks do the target learners think are most effective in improving “their TOEIC score”?
2. What kinds of tasks do the target learners think are most effective in improving “their English listening competence” itself? Do the answers differ from the answers for the question 1?
3. Do the target learners think they need to practice TOEIC-style questions? If so, how much?

2. Participants

The participants of the survey were students who received the experimental or control treatment for the experiment described in the previous chapter. They belonged to four different classes. A total of 144 effective responses were obtained from the Context Group (69) and the Test Prep Group (75).

3. Procedure

A questionnaire was handed out during the class one or two weeks after the participants had received the test results of the TOEIC as the posttest. At this point, the participants were not informed about the study or the result of the quantitative study.

Table 6 shows the questions and choices.
Table 6. Questions on the questionnaire (translated into English from original Japanese version)

Q1. Which of the following do you think is the most effective way to improve your current TOEIC listening score?
1. To practice TOEIC-simulating questions that are the same level as the real ones.
2. To practice easier listening questions.
3. To read textbooks that explain listening techniques.
4. To memorize important words by repeatedly listening to them and writing them.
5. To review the grammar from the basics.
6. To repeatedly listen to practical conversation tapes.
7. To memorize practical conversational expressions and practice conversation.
8. To listen to a lot of English for pleasure or for information (movies, news, etc.)

Q2. Regardless of the TOEIC, which do you think is the most important way to improve your listening competence?
Q3. How many minutes do you think we should spend practicing TOEIC-style questions in a 90-minute lesson?

4. Results and Discussion

4.1 Learners’ Notions toward “Most Effective Task”
Figures 2 and 3 show the frequency distribution of participants who selected each question choice when asked what the most effective task was for them (TOEIC score and listening competence).

Q1: Most effective task for improving my TOEIC score
Q2: Most effective task for improving my listening competence

Figure 2. Histogram for Q1
Figure 3. Histogram for Q2
By comparing the two histograms, it is clear that the most popular choices were far different. Most of the participants thought that solving TOEIC-style questions is the most effective task to improve their TOEIC score (as shown in Figure 2), and listening to plenty of English for pleasure/information is the most effective way to improve their listening competence (as shown in Figure 3).

By further analyzing the replies for Q1 and Q2, the participants could be divided into two groups: those who selected two different choices for Q1 and Q2 (hereafter referred to as “Q1 ≠ Q2 group”). These participants assume that to learn for better listening competence and to prepare for the TOEIC should be different. Others selected the same choice for Q1 and Q2 (hereafter “Q1 = Q2 group”). This group of people expect that if one study for better listening competence, he/she will obtain a better TOEIC score (or vice versa). Table 7 describes the frequencies and percentages of both groups.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Context</th>
<th>Test Prep</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
</tr>
<tr>
<td>Q1 ≠ Q2</td>
<td>100</td>
<td>71.94%</td>
<td>46</td>
</tr>
<tr>
<td>Q1 = Q2</td>
<td>39</td>
<td>28.06%</td>
<td>18</td>
</tr>
<tr>
<td>Sum</td>
<td>139</td>
<td>100.00%</td>
<td>64</td>
</tr>
</tbody>
</table>

The distribution table reveals that more participants answered two different answers for Q1 and Q2. That means more students consider the TOEIC needs special preparation in order to achieve certain score levels.

On the other hand, approximately 30% of the students selected the same answer for both Q1 and Q2. Figure 4 shows the frequency distribution of Q1 = Q2 group who selected each choice.
The distribution resembles Figure 3. Therefore it can be said that the Q1=Q2 group students tend to expect that if one focuses on improving one’s listening competence, his or her TOEIC score will improve as well. To put this another way, as choices 1, 2 and 3—all TOEIC strategies—were rarely selected by those students, they do not expect that TOEIC-style question practice results in the improvement of listening competence.

The ratio of the Q1≠Q2 group and the Q1=Q2 group was almost the same between the Context and Test Prep Groups. The correlation between the groupings (either Q1=Q2 or Q1≠Q2) and the TOEIC score at the posttest was also calculated, but no significant difference was observed (t = -0.889, p = 0.375).

4.2 Learners’ notions toward “TOEIC-style Question Practice”

If more students think TOEIC-style question practice is necessary, how much should we offer it? The third question in the survey asked the students how much time within a 90-minute-session they think is necessary for TOEIC-style question practice. The following is the frequency distribution for the Context Group (Figure 5) and for the Test Prep Group (Figure 6).
During the treatment described in the former chapter, the participants in the Context Group were not instructed to work on any TOEIC questions, but the survey revealed that most of them did want to work on them during the session. However, the distributions of Figure 5 and 6 are significantly different. The results indicated that the Context Group required a shorter amount of time than the Test Prep Group. This difference indicates that the treatment worked to reduce the need for TOEIC strategies. Sixteen (23.1%) out of the 72 Context Group students replied that TOEIC-style question practice is not needed at all during the session, while only two (2.6%) replied so in the Test Prep Group.
VII) Conclusions

As it was revealed in the study about the participants’ attitude (chapter VI), the majority of the learners assume that special preparation is needed in order to improve their TOEIC scores, and just learning for better English competence itself is not enough. When designing English classes for technology students (those who are to work in the field where a certain level of TOEIC score is valued), this common assumption may result in the use of TOEIC-style question books in the classroom. As a consequence, opportunities to practice other skills such as speaking (the competence that would be truly needed in their future career) can be reduced. However, despite this common belief, the quantitative study suggested that the context-based curriculum, which is designed to encourage conversation and to learn background knowledge, worked as well as the TOEIC preparation textbook to improve TOEIC scores during the five-month treatment period without doing almost any TOEIC-style questions. By observing the slopes of the difference on pre- and posttest score means, there was even a possibility that the learners might obtain better scores with this curriculum than the learners with TOEIC preparation books if they are taught a longer period of time. The curriculum also worked to change the learners’ attitudes toward it. The survey revealed that the students who studied along the context-based curriculum feel that they should spend less time working on TOEIC-style questions during a classroom session.

Therefore, what the results practically suggest is something very plain: When designing an English course curriculum, the goal should be to enhance the learners’ understanding and use of spoken English. Their TOEIC scores will improve as they progress. TOEIC-style practice may be effective if the learners are stimulated and motivated by working on it, but it should not spend too much classroom hours, as very few students replied they wanted to work on them more than 60 minutes in a 90-minute session.

This conclusion was an expected one, because, needless to say, TOEIC is designed to “measure English communication skills” and not only listening skills. The TOEIC Technical Manual (ETS 2002) shows strong correlations between some major oral proficiency tests and the TOEIC Listening Comprehension section, which suggests that a candidate’s speaking ability can be measured by the TOEIC even though it is a pencil-and-paper test. The current study resulted in supporting their result: aural training enhanced TOEIC scores. However, the correlation between TOEIC scores and speaking abilities is virtually disregarded or not taken at face value by people who believe in TOEIC
strategies---at the expense of communicative English learning. The validity of the TOEIC score is the area that requires more studies by third-party researchers. Without sufficient evidence that TOEIC measures English language competence to communicate with others, more people will spend their time to master strategies to get good scores, which results in the deprivation of the opportunity to practice to increase communication skills. We hope the findings of this study help to develop effective course curricula for young engineers who can take active parts in an international environment in the future.
NOTES

1) “Kosen” is a short form of “Kogyo-Koto-Senmon-Gakko (College of Technology)”. There are 55 national and 8 other Kosen throughout Japan accepting junior high school graduates and providing five-year engineering education courses in the field of electronic, mechanical, civil engineering, architecture, etc.

2) Textbooks used in the year 1999 (used along with a textbook for high school students certified by MEXT)


Textbooks used in the years 1999, 2000 and 2001


3) Based on the setting/situation list in the TOEIC Official Test-Preparation Guide (The Chauncey Group International 2000).

4) It was so in 2000 when the project started, but as of March 2004, some publishers have developed TOEIC preparation textbooks that are organized by topic/context.
REFERENCES


If you were one of the guests, what do you say to the waiter? Write your own answer, then listen to the model conversation on the CD.
CONVERSATION 2: Ordering a Meal

1. Waiter: Are you ready to order?

   Wordbank: Have you decided?  
              Can I have your order?  
              May I take your order?  
              Would you like to order now?

2. Guest 2: Yes, I'd like the king salmon, please.

   Wordbank: May I have the king salmon?  
              Could I order the prime rib?  
              Could I have the soup of the day?  
              I'll have the clam chowder.  
              I'll take the salad bar.

3. Guest 1: I'll have the medium-sized cut prime rib.

4. Waiter: How would you like your king salmon cooked?

5. Guest 2: Please make it grilled.

   Wordbank: fried  
              baked  
              steamed  
              sautéed

6. Waiter: And your prime rib?

7. Guest 1: Medium-rare, please.

   Wordbank: rare  
              medium-well  
              well-done

8. Waiter: OK. Would you like soup or salad with that?

9. Guest 2: What kind of soup do you have?

   Waiter: We have Boston clam chowder or Minestrone.

   Guest 2: I'll have the Minestrone.

10. Guest 1: I'd like to try the salad bar. Is it all-you-can-eat?

    Waiter: Yes, it is.
## MENU

### Appetizers

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrimp cocktail</td>
<td>2.50</td>
</tr>
<tr>
<td>Nachos</td>
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</tr>
<tr>
<td>Chicken wings</td>
<td>4.50</td>
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### Soups and Salads

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<tbody>
<tr>
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<tr>
<td>Soup of the day</td>
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<tr>
<td>Caesar salad</td>
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<tr>
<td>Seafood salad</td>
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### Entree

<table>
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<td>Prime rib</td>
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<tr>
<td>(medium or large cut)</td>
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<tr>
<td>Top sirloin steak</td>
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<td>(medium or large cut)</td>
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<tr>
<td>Alaskan King Salmon fillet</td>
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<tr>
<td>(prepared to your liking)</td>
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<tr>
<td>Leg of lamb</td>
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<td>Spaghetti and meatballs</td>
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### Desserts

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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Apple pie</td>
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</tr>
<tr>
<td>Blueberry cobbler</td>
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</tr>
<tr>
<td>New York style cheesecake</td>
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</table>