

A Study of Fostering Technical College Students' English Proficiency through a TOEIC Training Course

Li, Chiung-Li¹ Haggard, Sandy²

Abstract

English is an international language. In order for Taiwanese college students to be competitive in the world career market, they must be able to have adequate English skills. To face this challenge, the Taiwan government has advocated ways for college students to increase their English ability. One effective step toward this goal is for students to earn an English certificate prior to graduating from college. Therefore, it seems necessary for many college students to enhance their English proficiency. The purpose of this study was to develop technical college students' English proficiency through a TOEIC training course. The researchers used two mock tests of TOEIC as the research instrument. The subjects of this project were 42 technical college students at Meiho University. First, the subjects took a mock test of TOEIC as the pretest. Then, the researchers analyzed the pretest and found the subjects' average listening score and reading score were 130.4 and 131.3, respectively, and the total was 261.7, which was below 350—the criterion of passing. Next, the researchers provided the subjects with a 60-hour TOEIC training course. After the training course, the subjects took another mock test of TOEIC as the posttest, and answered some questions about taking the TOEIC training program. Then the researchers analyzed the posttest and found the subjects' average listening score and reading scores were 171.3 and 170.4, respectively, and the total was 340.1, which was still slightly lower than the criterion of passing of 350. Upon comparing the pretest and post-test, the researchers found the subjects' listening and reading abilities increased 30.6% and 29.8%, respectively. Though the total score in the posttest did not reach the criterion of passing; those participants showed their vocabulary and listening ability increased significantly, and they demonstrated more clarity regarding grammatical concepts after the training course. In other words, though the TOEIC training course did not effectively increase the subjects' English proficiency as much as the researchers expected; the participants did make good progress. Overall, it is still worth providing students similar training programs to enhance students' English proficiency.

Key words: TOEIC, English proficiency, technical college

INTRODUCTION

English is a global communication tool; therefore, many non-English speaking countries, such as Thailand, Japan, and South Korea, make English learning a priority to ensure national and worldwide competitiveness. Taiwan also pays much attention to English learning. For example,

¹ Associate professor, Applied Foreign Languages Department, Meiho University

² Lecturer, Applied Foreign Languages Department, Meiho University

English teaching in elementary school began in 2001, and earning English certificates has become a threshold to graduate from college. In order to reach the graduation criterion, many colleges in Taiwan provide training courses for students to improve their English proficiency. Meiho University in Pingtung County is no exception.

LITERATURE REVIEW

I. What is the TOEIC test?

“TOEIC” stands for the Test of English for International Communication. The TOEIC test is produced by the Educational Testing Service (ETS) of Princeton, New Jersey, USA. The TOEIC was first given in Japan in 1979 and in Korea in 1982. Now it is given all over the world. The TOEIC is an English language proficiency test for people whose native language is not English. TOEIC scores indicate how well people can communicate in English with others in the global workplace. The test does not require specialized knowledge or vocabulary, but it does measure the kind of English used in everyday activities. The TOEIC is a test designed to measure how well test takers understand the English that is used in international work and business situations. The TOEIC is the world’s leading test of English language proficiency in a workplace context.

The TOEIC is a 2-hour multiple-choice test consisting of 200 questions divided into two parts of 100 questions each for listening comprehension and for reading comprehension. All of the items are multiple-choice questions with three or four possible answers. The listening section tests the ability to understand spoken English. The reading section tests the knowledge of grammar and usage and the ability to read and understand short passages. Each candidate receives independent scores for written and listening comprehension on a scale from 5 to 495 points. The total score adds up to a scale from 10 to 990 points. The TOEIC certificate exists in five colors, corresponding to achieved results: orange (10-215), brown (220-465), green (470-725), blue (730-855), and gold (860-990).

II. Why do people take the TOEIC?

Rogers (2006) showed that many businesses require people to take the TOEIC prior to being hired, prior to being considered for promotions, or prior to being allowed to travel overseas. People who work for large international corporations, for airlines, for hotels, for banks, and for government organizations may be asked to take the TOEIC. Occupations of test takers include managers, marketing experts, sales representatives, technicians, customer service workers, flight attendants, and hotel employees. In fact, almost anyone whose first language is not English can benefit from taking the TOEIC.

Bagnell et al. (2007) indicated that the TOEIC test is a way to prove one’s proficiency in English. The test is an assessment of what is known and of an ability to use English in the working world. Those who look for a job where English is a necessity are likely to need to take the TOEIC test. According to the ETS, more than two million people take the TOEIC every year,

with over 8,000 companies worldwide using the TOEIC to determine an employee's English ability. Based on the information from the ETS website, more than five million TOEIC tests were administered in 2008. And, for 30 years, TOEIC test scores have helped thousands of corporations, educational institutions and governments throughout the world recruit, hire and promote the most qualified candidates.

III. The New TOEIC

A new version of the TOEIC was released in 2006. The changes can be summarized as follows:

- Overall, passages have become longer.
- Part One has fewer questions involving photo descriptions.
- The Listening Section includes speakers of English from Britain, Australia, New Zealand and North America. The ratio is 25% each for American, Canadian, British, and Australian–New Zealand accents. However all the voice actors for the speaking test have lived in the United States for an extended period and have had the edge taken off their regional accents.
- Part Six no longer contains the error-spotting task, which has been criticized as unrealistic in a corporate environment. This section instead adopts the task wherein the test taker fills in the blanks in incomplete sentences.
- Part Seven contains not only single-passage questions but also double-passage questions wherein the test taker has to read and compare the two related passages, such as e-mail correspondence.

According to a survey conducted in 2006 by the Institute for International Business Communication, 56.8% of the respondents who took both the older and the revised versions of the TOEIC in Japan find the latter version more difficult. The lower the score the test taker achieves, the more marked this tendency becomes. As many as 85.6% of those who earned scores ranging from 10 to 395 points find the revised TOEIC more difficult, while 69.9% of those who earned 400 to 495 points think this way, as do 59.3% of those who earned 500 to 595 points. Among those who achieved 600 to 695 points 58.9% of them agree with these findings, 700 to 795 points 48.6%, 800 to 895 points 47.9%, and 900 to 990 points 39.8%.

IV. Some TOEIC results in 2009 and 2010

According to TOEIC Newsletter 3, there were 197,463 people taking the TOEIC test in 2010, and 162,968 people in 2009 in Taiwan. The average score was 544 (299.4 for listening and 244.5 for reading, respectively) in 2010, and 539 (295 for listening and 244 for reading, respectively) in 2009. In 2009, 59% of the TOEIC test-takers were college students or had a bachelor degree, and 64% in 2010 in Taiwan. Some TOEIC test results in 2009 and 2010 were summarized in Table 1, Table 2 and Table 3.

Table 1 : TOEIC Average Scores in Taiwan in 2009

School level of test-takers	Listening	Reading	Total	Number of test-takers
Elementary school	314	266	580	290
Junior high school	307	214	521	676
Senior high school	319	261	580	9,823
Vocational high school	257	192	449	3,473
Institution of technology/ technical college	249	180	429	27,940
Junior college	246	184	430	6,990
University	313	264	577	61,376

Source: summary from <http://www.toEIC.com.tw/>

Table 2 : TOEIC Average Scores in Taiwan in 2010

Educational level	Listening	Reading	Total	Number of test-takers
Elementary school	305	244	550	398
Junior high school	325	231	556	921
Senior high school	324	277	600	13,498

Vocational high school	270	202	472	5,089
Institution of technology/ technical college	248	178	427	38,118
Junior college	253	187	440	7,617
University	318	264	582	80,302

Source: summary from <http://www.toEIC.com.tw/>

Table 3: Some comparisons in 2009 and 2010

	Scores of Technical College test-takers Total score (listening/reading)	Scores of Junior College test-takers Total score (listening/reading)	Scores of University test-takers Total score (listening/reading)
2009	429 (249 / 180)	430 (246 / 184)	577 (313 / 264)
2010	427 (248 / 178)	440 (253 / 187)	582 (318 / 264)
change	- 2 (-0.4% for listening/ - 1.1% for reading)	+ 10 (+2.8% for listening/ + 1.6% for reading)	+ 5 (+0.9% for listening/ no difference for reading)

Source: summary from <http://www.toEIC.com.tw/>

Based on Table 1 and Table 2, the scores of technical college test-takers were far behind those of university test-takers in both 2009 and 2010. In other words, technical college students' English proficiency is much lower than university students'. Obviously, it is quite necessary for technical college students to improve their English competence.

On November 11th, 2010, ETS in Taiwan reported the difference of English competence in workplace settings between Taiwan and the rest of the Asian countries in 2009 test results, and showed that the scores of China and Korea TOEIC test-takers were much higher than those of Taiwan TOEIC test-takers. The report indicated that college students in China and Korea have better English proficiency, and they progress rapidly in English. Moreover, based on the Taiwan TOEIC scores in different majors, the scores of people who major in English, law, politics, economic, international trade, finance, or management were higher because they had more opportunities to use English in their fields. Those who major in medicine or engineering received lower scores in the TOEIC test because they usually had pressure from their professional courses,

and they may not have had much time to study English, and also many of them studied in technical college and did not achieve high English proficiency. In other words, those majoring in engineering have inadequate English competence in Taiwan, and that will be a potential problem for Taiwan's high-tech industry in the future.

In addition, based on the TOEIC Newsletter of ETS in Taiwan on December, 2010, the 2009 TOEIC Scores of Taiwan was behind those of China and South Korea (shown as in Table 4). ETS in Taiwan showed that the reason may be in the past, English education, policy, and practice in Taiwan had some negative effects on students' English reading and listening levels. According to the report, most TOEIC test takers in Taiwan earned 200-220 points in reading, and 34.81% of test takers cannot reach 450 points in total; only 0.04% of test takers earned a perfect score, behind Japan and South Korea, 0.07% and 0.22% respectively.

In fact, in the past few years, the TOEIC average scores in Taiwan were between 530 and 550 points which is equivalent to the intermediate level of the GEPT (General English Proficiency Test). Such kind of English performance is behind many Asian countries, such as India, Turkey, the Philippines, China, and Korea. Without a doubt, lower English competence will weaken Taiwan's international competitiveness.

Table 4 : TOEIC Average Scores of Asian Countries in 2009

Country	Listening	Reading	Total	Ranking
India	430	391	821	1
The Philippines	399	330	729	2
China	358	352	710	3
Turkey	359	296	656	4
North Korea	330	282	612	5

Taiwan	295	244	539	6
Japan	280	229	508	7
Thailand	281	219	500	8
Hong Kong	272	210	483	9
Indonesia	269	214	483	10
Saudi Arabia	280	179	458	11
Vietnam	205	198	403	12

Source: summary from <http://www.toEIC.com.tw/>

Furthermore, from the Table 4, the TOEIC score of Taiwan in 2009 was 539 points, behind that of the globe 27 points (shown as table 5). Moreover, the listening score of Taiwan was 295 points which was much better than the reading score—244 points. Based on the Table 4, most test takers in Taiwan and the world have inadequate English reading ability, but it was more prevalent in Taiwan.

Table 5 : The comparison of TOEIC score between Taiwan and the world in 2009

	Listening	Reading	Total
Average Score in the world in 2009	308	259	566
Average Score in Taiwan in 2009	295	244	539
The difference between Taiwan and the globe in 2009 TOEIC Score	-13	-15	-27

Source: summary from <http://www.toEIC.com.tw/>

Based on the TOEIC Newsletter 3, in Taiwan, the average score was 544 (299.4 for listening and 244.5 for reading, respectively) in 2010, and 539 (295 for listening and 244 for reading, respectively) in 2009. Seemingly, the score in 2010 was better than that in 2009 by 5 points. In fact, it was still far behind the score of the world in 2009—566 points. In other words, there is much room for the test takers in Taiwan to make efforts in English learning.

V. Adult Education literature review

Because the subjects of this project are all college students, they are all adults; some literature regarding adult education should be taken into consideration.

1. Psychological traits of adult learners

(1) More mature in psychical and mental development

Hurlock(1980) showed that maturation describes an individual who has grown up in size and muscularity. Huang (2000) indicated that maturation included a person's physiology, psychology, emotion, and social behaviors all reach a stable and fixed level. Therefore, mature people can decide their learning objectives and choose their learning needs by themselves. Therefore, it is much easier to persuade adult learners to learn English if they think English is important for their study or career.

(2) The concept of differentiation

Huang (2000) showed that when individuals become adults, their abilities, interests, and skills are different and multiple. Socially, a similar phenomenon appears in the interaction with others. Therefore, it is hard to design a course or learning activity for a big group of adults. That is to say, self-study may be a good way for adult learners; especially if they have clear learning goals and expectations.

(3) The roles of adults

In fact, adults play multiple roles at the same time, such as parents, spouses, employees, or coworkers. In other words, the life of adults is complex and variable, unlike young people. Therefore, Houle (1961) found that most adults had several kinds of learning motivation simultaneously, including objective-oriented, activity-oriented, and learning-oriented motivation. The roles of adults change with their age, family, occupation, and position. At different stages, adults would have different educational needs. In this study, though all the subjects are students, they will play different roles in the near future.

(4) Time perception of adults

Time is an important factor to have effects on adults' career planning and behavior performance. Adults are different from teenagers in concept of time; adults realize that life is short and attempt to use their time productively; teenagers may use a cumulative view to look upon time. Therefore, adults prefer immediate effective learning activities. On the other hand, Smith (1982) also showed that one major characteristic of adult learning is that they feel time is short and limited. Therefore, adults demand clear learning efficiency, and it is essential to encourage adults to join learning activities. In other words, it is very important for teachers to organize teaching materials and activities for adult learners.

(5) Variability among adults

The difference among adults is much more obvious than children or teenagers physically, psychologically, and socially. In other words, individualized teaching and learning will be best for adults. However, it is almost impossible for a teacher to implement individualized teaching. Therefore, when a teacher designs his or her teaching planning for adults, it will be better to meet learning objectives for the majority of the learners.

2. Learning characteristics of adults

Huang (2000) indicated that adults have five learning characteristics as follows:

- (1) Clear learning outcomes: adults expect to apply what they learned in daily life.
- (2) Problem-centered learning framework: Long (1990) showed that most adult education scholars agree that adult learning was problem-oriented. McClusky (1964) also indicated that a “problem” was a natural unit of adult learning, and a “problem” became a learning incentive, a learning procedure, and a learning content. Therefore, adult educators could try to find the problems bothering adults and use those problems as a guide in learning activities.
- (3) Internalized learning motivation: adults’ learning motivation mainly come from an individual inner force, including self-promotion, promotion of the quality of life, and the pursuit of self-development. Therefore, adult educators should think about how to evoke adults’ intrinsic motivation and engagement in learning, and how to transform intrinsic motivation into extrinsic expectancy motivation.
- (4) Experience as a learning boost or obstruction: adults’ experiences are various in quality and quantity; therefore, adult educators should employ multiple teaching materials and methods to meet adults’ needs, adjust learners’ learning pace, and pay attention to individual learning style and strategy. Moreover, abundant learning experiences are important resources to learn. When giving new teaching materials to adults, the teacher had better connect teaching materials with adults’ previous experiences. Group discussion, role play, and imitation are some suitable ways for adults.
- (5) Participating in learning activities actively: adults can make decisions by themselves and can be responsible for themselves. In other words, adults take part in a learning activity willingly and spontaneously.

METHOD

I. Sample

The researchers applied convenience sampling. The sample in this study was 42 technical college students at Meiho University. They actively took part in a free after-school TOEIC training program.

II. Measure

The researchers employed two TOEIC mock tests as the assessment instruments. The first mock TOEIC was taken by all of the 42 participants before the TOEIC training course. After 60-hour listening and reading training course, the same participants took the second mock TOEIC. Then, the researchers calculated the two mock TOEIC tests and made a comparison of the two tests. Also, the researchers gave the subjects an open-ending question about their opinion after the 60-hour training program (as shown in the appendix). In order to avoid

misunderstanding, the question was translated into Chinese.

III. Design

The researchers designed the TOEIC training course according to the requirement of the TOEIC test. Then the researchers gave the participants a three-hour reading and listening training every week. The first 1.5 hours were a listening training program; the researchers let the participants listen to some short paragraphs, long paragraphs and dialogues. Then the researchers explained the listening course. The second 1.5 hours were a reading training program; the researchers let the participants read some short and long reading passages; in the reading course, the researchers taught the participants sentence patterns and grammar. At the same time, the researchers gave the participants vocabulary based on different topics, such as general business, office issues, personnel, purchasing, financing and budgeting, management issues, restaurants and events, travel, entertainment, and health.

IV. Procedure

The procedure of the project was pretest→training program→posttest→analysis. In other words, before the TOEIC training program, all of the 42 participants took a mock TOEIC as the pretest. Based on the results of the pretest, the researchers designed a series of listening and reading training courses. Then all of them took part in the three-hour listening and reading training program in the afternoon on Wednesday or Thursday. After the 60-hour training program, the participants took another mock TOEIC as the posttest. Next, the researchers analyzed and compared the pretests and posttests. Then, the researchers collected and analyzed the subjects' opinions about the training program. Finally, the researchers drew a conclusion according to the findings.

FINDINGS AND DISCUSSION

According to the participants' pretests and posttests, the researchers used Table 6 to express participants' test results as shown below.

Table 6: The Results of Participants' Pretests and Posttests

No.	Pretest score in listening	Pretest score in reading	Total of pretests	Posttest score in listening	Posttest score in reading	Total of posttests
1	159	77	236	138 (-21)	116(+39)	254
2	216	116	332	237(+21)	134(+18)	371
3	96	60	156	138(+42)	28(-32)	166
4	129	134	263	138(+9)	170(+36)	308
5	96	134	230	138(+42)	170(+36)	308
6	138	248	386	216(+78)	297(+49)	513
7	138	28	166	138(+0)	97(+69)	235

8	75	97	172	129(+ 54)	170(+ 73)	299
9	96	77	173	159(+ 63)	170(+ 93)	329
10	129	170	299	216(+ 87)	226(+ 56)	442
11	96	97	193	159(+ 63)	187(+ 90)	346
12	96	97	193	159(+ 63)	77(- 20)	236
13	159	207	366	216(+ 57)	248(+ 41)	464
14	96	28	124	195(+ 99)	77(+ 49)	272
15	47	248	295	129(+ 82)	297(+ 49)	426
16	117	170	287	159(+ 42)	226(+ 56)	385
17	237	18	255	237(+ 0)	97(+ 79)	334
18	96	97	193	138(+ 42)	170(+ 73)	308
19	129	187	316	138(+ 9)	187(+ 0)	325
20	237	297	534	237(+ 0)	352(+ 55)	589
21	216	226	442	237(+ 21)	237(+ 11)	474
22	96	97	193	116(+ 20)	116(+ 19)	232
23	75	170	245	129(+ 54)	216(+ 46)	345
24	129	5	134	159(+ 30)	97(+ 92)	258
25	75	187	262	138(+ 63)	97(- 90)	235
26	117	28	145	129(+ 12)	97(+ 69)	226
27	129	187	316	216(+ 87)	226(+ 39)	442
28	75	358	433	129(+ 54)	358(+ 0)	487
29	75	134	209	195(+ 120)	97(- 37)	292
30	159	28	187	138(- 21)	134(+ 106)	272
31	96	134	230	117(+ 21)	170(+ 36)	287
32	117	226	343	216(+ 95)	237(+ 11)	435
33	237	97	334	258(+ 21)	187(+ 90)	395
34	129	116	245	216(+ 87)	170(+ 54)	386
35	117	170	287	129(+ 12)	216(+ 46)	345
36	195	60	255	216(+ 21)	97(+ 37)	313
37	117	97	214	237(+ 120)	97(+ 0)	334
38	216	116	332	237(+ 21)	170(+ 54)	407
39	216	187	403	237(+ 21)	226(+ 39)	463
40	96	170	266	139(+ 43)	226(+ 56)	365
41	117	116	233	75(- 42)	170(+ 54)	245
42	96	18	114	117(+ 21)	18(+ 0)	135
average	130.4	131.3	261.7	171.3	170.4	340.1
progress	-	-	-	30.60%	29.80%	29.99%

As shown in Table 6, there were 42 subjects who took the pretests and the posttests. The average listening score of the pretests was 130.4 points, and reading score 131.3 points. The

average total score of the pretests was 261.7 points. It was far below the minimum standards of TOEIC test for technical college—470 points. That is to say, the participants' English background was very weak. Therefore, the participants not only needed to improve their reading but also needed to enhance their listening abilities urgently. The participants needed to increase their reading abilities, including vocabulary, sentence completion, error identification, and short passages. In addition, they also needed to improve every part of listening, including sentences about photographs, questions/responses, dialogs and short talks.

After analyzing the pretest in detail, the researchers found that the participants' vocabulary was quite inadequate, and they did not have clear concepts regarding sentence patterns. The reasons may be that all of the participants are technical college students; most of them did not have enough English background in the past, such having inadequate vocabulary, unclear grammatical concepts, and weak learning motivation. Under such kind of conditions, they may be very afraid of learning English or unwilling to learn English because of lacking confidence. Besides, most of them rarely listen to English radio programs or watch English television shows; therefore, their listening hardly showed any progress. Furthermore, most of them did not read English newspapers or magazines regularly; therefore, their reading ability naturally was not adequate.

After the 60-hour training program, the average listening score of the posttests was 171.3 points, and reading score 170.4 points. The average total score of the posttests was 340.1 points. In other words, the participants increased 40.9 points in listening, 39 points in reading, and 78.4 points in total. Without a doubt, the training program was helpful to improve the test results no matter how poor the participants' English background. However, it was not easy for them to reach the technical college students' minimum criterion in the TOEIC test—470 points in a short amount of time. On the other hand, the researchers believed that the participants possessed some basic knowledge of English. In the pretest, most of the participants underperformed prevalently because of memory decay or inadequate English background. However, through the training course, many of them remembered some of the English they had learned in prior years.

In addition, the researchers taught them some tips for preparing for the TOEIC, including reading strategies and listening strategies. Moreover, most of the participants had more intent for learning more English and getting an English certificate which is beneficial for their graduation and work in the future. Nevertheless, it was unfortunate that at times some of the participants could not attend the training program because they had to go somewhere, such as to a part-time job or to school association meetings. The researchers feel that if all participants could have attended the training program for the full 60 hours, they would have much better performance on the posttest.

Finally, the researchers collected the subjects' opinions about the training program. Two-thirds of them felt their English was very weak and needed to be improved before graduation, and after the training program, they would study English for themselves and the training program was very useful for them. Moreover, over two-thirds of them showed their English vocabulary was very inadequate, and after the training program, they learned many work place vocabulary words. In addition, over half of them showed their listening was improved after the training program. Overall, they understood their weakness in English learning and the goal they should

make efforts to reach.

CONCLUSION AND IMPLICATIONS

Upon analyzing the findings, the researchers can draw some conclusions. First, the average score of the participants increased about 40 points in the listening portion of the TOEIC after the training program. Second, the average score of the participants raised about 39 points in the reading portion after the training course. Third, the average score of the participants added about 78 points in their total score after the 60-hour training course. Fourth, the participants expressed high English learning desire during the training program. Fifth, the participants showed they were happy about the progress in their English listening and reading even though they still needed to work hard in the future. Moreover, the researchers would like to give some implications for English learners and future studies based on the findings.

Regarding English learners, the researchers suggest that the best way to get a general understanding of English is to use English as much as possible. That is, the best way to increase background knowledge of English is to simply use English whenever feasible. Likewise, the 1111 Job Bank indicates that improving English proficiency cannot be completed in a short amount of time. Technical college students should look for suitable ways to improve English, such as going through with their study plan, using English in daily life, and so forth. Some ways English learners can use English are as follows:

1. Take English language courses; conversation courses, reading/writing courses, and grammar courses.
2. Look for chances to speak English. Become friends with English-speaking people or join an English club.
3. Read English newspapers and magazines regularly.
4. Listen to the news in English on the radio or on television.
5. Try to write a daily journal entry in English.
6. Write down new vocabulary on note cards or in a notebook.
7. Listen to songs in English. Try to write down the lyrics.
8. Watch TV shows and movies in English.

In addition, increasing vocabulary is best done through reading rather than trying to memorize long lists of vocabulary words. Learners can remember things more easily when they are presented as ideas and situations rather than in individual bits of information. In addition, pen pals and e-mail buddies can provide a great deal of writing practice. Writing is a very good way to study a foreign language because learners have to “think” in that language. It is a good review of vocabulary, grammar, and spelling.

With respect to future studies, the researchers suggest that the sample can be much bigger, and the sample can be from different technical colleges or different areas in Taiwan, such northern Taiwan, central Taiwan, or southern Taiwan; then the findings can make a generalization more appropriately. Second, the subjects' age, gender, major course of study, English learning experiences, or English learning hours per week can be taken into consideration as variables in future studies.

REFERENCES

Bagnell, B., Laird, S., Graham, J., McGraw, S., Woods, F., Russell, F., and Steadwood, A. (2007). *Practical Guide to the New TOEIC test*. Taipei: Chih-Ivy Publication.

Houle, C. O. (1961). *The Inquiring mind*. Madison: The University of Wisconsin Press.

<http://toEIC.com.tw/>

<http://www.ets.org/portal/site/ets/menuitem>.

Huang, F.S. (2000). *Introduction to Adult Education*. Taipei: Wu Nan Publication.

Hurlock, E. B. (1980). *Development psychology*. (5th Ed.) New York: McGraw-Hill.

Long, H. B. (1990). Understanding Adult Learners. In M. W. Galbraith (Ed.). *Adult Learning Methods*. Malabar: Roberte, Krieger, 23-37.

McClusky, H. Y. (1964). The Relevance of Psychology for Adult Education. In G. Jensen, A. A. Liveright, W. Hallenbeck (Eds.). *Adult education: Outlines of an emerging field of university study*. Washington, D. C.: Adult Education Association of the U.S.A., 155-175.

Rogers, B. (2006). *Introductory Guide to the TOEIC Test*. Boston: Thomson.

Smith, R. M. (1982). *Learning how to learn: Applied learning theory for adults*. New York: Cambridge.

Taylor, A. and Malarcher, C. (2005). *Starter TOEIC*. (2nd ed.) Compass Publishing.

Appendix

What do you understand after the TOEIC training program?