

日本大学理工学部

一般教育教室彙報

第 112 号

目 次

— 研究ノート —

2018年—2019年度大学院理工学研究科英語スピーキング・ライティング能力プログラム

…………… ジョナサン ハリソン, 鈴木 孝, ジョセフ ファラウト …… 1

2022年4月

2018年－2019年度大学院理工学研究科英語 スピーキング・ライティング能力プログラム

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(令和4年1月25日受理)

2018-2019 Graduate School English Speaking and Writing Proficiency Program

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(Accepted January 25, 2022)

Abstract

2018年から2019年度にかけて、大学院理工学研究科3専攻の院生55名を対象に、英語のスピーキングおよびライティング能力プログラムにおける習熟度を評価した。本報告書では、その評価のガイダンス、学習期間、テストなど、能力プログラムの実施について説明する。年度別の結果、再受験者の結果、ワークショップ参加者と非参加者の比較、英語による授業プログラムを受講した参加者と非参加者の比較などが示されている。予想通り、院生の習熟度は、スピーキング、ライティングともに、中級の下から上のレベルであった。また、再受験者の1年後の伸びについては、スピーキング力は横ばいまたは1レベル上昇、ライティング力は1レベル上昇または低下した。90分のワークショップでは、習熟度の高い院生には効果があった可能性が見て取れる。英語による授業とテスト結果については、スピーキングでは能力が高い院生が、ライティングではどのレベルの院生も、この授業プログラムから恩恵を受けていると考えられる結果となった。

During the 2018 and 2019 academic years, the English speaking and writing proficiency levels of 55 graduate students among 3 departments were evaluated. This report discusses the implementation of the program including guidance, the learning period, and testing. Results by academic year, results of return test takers, results comparing workshop attendees and non-attendees, and results comparing participants who took a graduate course taught in English compared with non-course participants are presented. As expected, student proficiency levels ranged from low to high intermediate in both speaking and writing. Regarding gains over 1 year for return test takers, speaking proficiency levels remained the same or increased by 1 level and writing proficiency levels increased or decreased by 1 level. Results regarding the educational effects of a 90-minute workshop were inconclusive, but higher proficiency students may have

benefitted. Results regarding test scores and a course taught in English are also inconclusive, but students with higher proficiencies in speaking and students at all writing proficiency levels seem to have benefitted.

Introduction

Currently, the College of Science and Technology (CST) of Nihon University offers two graduate courses taught in English, Academic Writing and Presentation I (AWI) during the first semester (Funabashi campus) and Academic Writing and Presentation II (AWII) during the second semester (Surugadai campus). To provide a means for graduate students to test their English language proficiency, a program to allow students to take the TOEIC Speaking & Writing was implemented in 2018. These are two tests offered as the TOEIC SW package via Educational Testing Services (ETS) and its Japan affiliate the Institute for International Business Communications (IIBC). This report will discuss the 3 main aspects of the program and results over 2 academic years.

Methods

The implementation, participants, and methods of analyses will be discussed. The program officially began in 2018 with approval of the Graduate School Committee. The program had 3 stages: guidance, a learning period, and testing. T. Suzuki and J. Harrison were program organizers, and J. Falout and J. Harrison took on educational roles.

The first stage was a 60-minute guidance session. Students of participating departments were informed of the guidance sessions via electronic and paper advertisements at each campus and asked to sign up via email if interested. In 2018, guidance was held Nov. 12 and 14, and in 2019, it was held on May 20 and 23 to facilitate a longer self-study period. At guidance sessions, students were informed about test formats, suggested means of self-study and learning opportunities, e.g. online materials, workshops, etc. Students were asked to tentatively schedule the test in groups of 5 (IIBC requirement) for November or December. Test dates were flexible until finalization one month prior to the test date. After guidance, budget approval was sought from participating departments.

The learning period, the second stage, included the guidance session and ended at the test. In 2018, students had approximately 3 weeks to prepare, and in 2019, students had approximately 5.5 months. There were 3 suggested methods of preparation. The first was through self-study. Secondly, there was guided voluntary study consisting of posted test information [1], practice tests [2], and other study materials in a Moodle course, and teacher support via email and Line. In 2019, students could also borrow TOEIC Speaking and Writing self-study textbooks [3], and 8 students (2 in

2018 and 6 in 2019) took advantage of this opportunity. Thirdly, in 2019 students could participate in 90-minute workshops held in the first week of July (one offered on each campus). Workshop contents included discussion of the test format, pair-speaking practice on describing things, pair-speaking practice asking and answering questions, a focus on vocabulary, teacher feedback on vocabulary and grammar use, and some tips on how to study and prepare for the tests.

Finally, students were tested at the IIBC testing center at their scheduled time.[4] In 2018 students were tested in 3 groups over 2 days (Dec. 3, 11), and in 2019 students were tested in 5 groups over 3 days (Nov. 8, 9, 11). In total 60 tests were taken by 55 participants from 3 departments (Electrical Eng. 17, Transportation Systems Eng. 42, Math 1). Respectively, there were 28 (2018) and 32 (2019) tests taken, and 5 participants took the test in both years.

As the sample size was quite small, the results were first tabulated and analyzed by year. Simple descriptive statistics were used to discuss how test takers scored according to the 0-200 point scales used by ETS. Proficiency levels are used to describe the kinds of skills and tasks that test takers should be capable of.[5, 6]

Then, 3 possibly related factors were analyzed for possible effects. First, the results of the 5 return test takers were analyzed to provide insight into whether proficiencies might be increasing or decreasing. Second, in 2019 some test takers attended a 90-minute workshop. Lastly, some test takers participated in AWI courses which may have affected test results. Due to repeat test taker sample size, the limited 90-minute workshop duration, and the non-business research paper writing and presentation focus of the AWI course, significant results were not expected.

Results

General results and proficiency level descriptive statistics, given in the order provided by IIBC, will be followed by figures which illustrate the proficiency levels. The TOEIC Speaking and Writing tests are separate tests packaged together. Therefore, results vary per test, and there is no combined total score. Table 1 gives the ranges, means, and standard deviations (SD), which were similar

Table 1. 2018 Results ($n=28$) and 2019 Results ($n=32$)

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
2018 Range	10-110	1-5	1-2	1-2	40-140	2-7
2018 Mean	68.57	3.18	1.61	1.54	88	4.46
2018 SD	27.04	1.10	0.62	0.62	24.04	1.26
2019 Range	10-150	1-6	1-3	1-3	30-140	1-7
2019 Mean	62.50	2.78	1.41	1.34	75	3.88
2019 SD	22.79	0.97	0.49	0.50	29.60	1.43

for both groups. Mean scores were slightly higher in 2018, but the mean speaking and writing proficiency levels when rounded were the same. Regarding distribution of speaking scores, in 2018 93% of test takers were within 1 SD, which means that overall the data were closer to the mean than in the case of a normal distribution. In 2019 the distribution was near normal. For writing, in 2018 only 39% of test takers were within 1 SD, and in 2019, 53% of test takers were within 1 SD and all were within 2 SDs. This means that the 2018 writing scores were distributed further away from the mean than for the 2019 results.

To express these results, ETS uses 8 proficiency levels for speaking and 9 levels for writing. Figures 1 and 2 are approximately close to normal distribution curves.

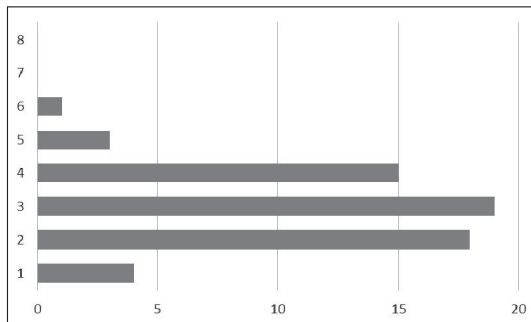


Fig. 1. Test Takers per Speak. Prof. Lvl.

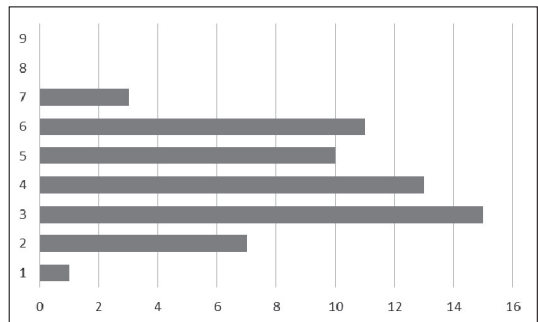


Fig. 2. Test Takers per Writ. Prof. Lvl.

Results for return test takers

Regarding return test taker results, within the group of 60 test takers, 5 students took tests in both 2018 and 2019. The statistics in Table 2, scores and proficiency levels provide a complete picture of the results. Although scores for 4 of the 5 graduate students increased by 10-30 points, the proficiency level increased only with the 30-point gain by one of those students. Test results for pronunciation as well as intonation and stress indicated 4 of the 5 had identical scores with 1

Table 2. Repeat Test Taker Results ($n=5$)

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
2018 Range	40-80	2-4	1-2	1-2	40-140	2-7
2018 Mean	56.00	2.80	1.40	1.40	82.00	4.20
2018 SD	14.97	0.75	0.49	0.49	34.87	1.72
2019 Range	50-110	2-5	1-3	1-3	50-130	3-6
2019 Mean	68.00	3.00	1.20	1.20	78.00	4.00
2019 SD	22.27	1.10	0.40	0.40	29.26	1.10

test taker being marked down one level in both areas; however, speaking proficiency levels were not affected. The results for writing have less variation as student scores increased or decreased by 10-20 points. However, there was more variation by proficiency level as 3 students decreased and 2 increased. Each increase or decrease resulted in a proficiency change. In sum, speaking scores increased for those who took the test again in 2019, but only 1 in 5 had proficiency gains. For writing, scores both increased and decreased and proficiency levels fluctuated by 1 level. However, conclusions cannot be drawn from this limited data set.

Results for workshop attendees

In 2019 90-minute workshops were offered as teacher guided preparation for the test. The Funabashi workshop was attended by 5 students, 4 of whom took the test, and the Surugadai workshop was attended by 7 students, 6 of whom took the test. Table 3 shows general statistics on the attendees (A) and non-attendees (NA). The maximum and minimum scores were higher for attendees, but the mean scores were similar. Mean proficiency levels for both groups on both tests were the same. This suggests that a 90-minute workshop is not long enough to impact test scores.

Table 3. 2019 Workshop Attendee ($n=10$) and Non-Attendee Results ($n=22$)

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
Att. Range	30-150	1-6	1-3	1-3	40-140	2-7
Att. Mean	62.00	2.80	1.50	1.40	77.00	4.00
Att. SD	32.80	1.40	0.67	0.66	30.02	1.48
Non-att. Range	10-110	1-5	1-2	1-2	30-130	1-6
Non-att. Mean	62.73	2.77	1.36	1.32	74.55	3.82
Non-att. SD	22.80	1.00	0.48	0.47	29.96	1.47

To account for group size differences and performance variations, the attendee and non-attendee groups were divided into nearly equal high, middle, and low proficiency groups. Results between proficiency groupings differ slightly, as shown in Table 4. For speaking, 90% ($n=9$) of workshop attendee scores were within 1 SD of the mean, with the majority of scores below the mean. The remaining 10% ($n=1$) scored above the mean by 4 SDs in speaking and 2 SDs in writing. On the other hand, non-attendee scores had a near normal distribution. For writing, both workshop attendees and non-attendees had near normal distributions, yet 100% of non-attendees were within 2 SDs. If the workshops affected speaking, they may have benefitted the top proficiency students more, and if writing was affected, higher and lower proficiency students may have benefitted.

Table 4. Workshop Attendee/Non-attendee Scores by Proficiency Grouping

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
Workshop Participants (<i>n</i> =3, 4, 3)						
High Range	60-150	3-6	1-3	1-3	100-140	5-7
High Mean	96.67	4.33	2.00	2.00	116.67	6.00
High SD	38.59	1.25	0.82	0.82	17.00	5.00
Mid Range	50-60	3	1-2	1-2	60-80	3-4
Mid Mean	57.50	2.75	1.5	1.25	70.00	3.50
Mid SD	4.33	0.43	0.50	0.43	10.00	0.50
Low Range	30-40	2-3	1-2	1-2	40-50	2-3
Low Mean	33.33	1.33	1.00	1.00	46.67	2.67
Low SD	4.71	0.47	0	0	4.71	0.47
Workshop Non-participants (<i>n</i> =7, 8, 7)						
High Range	70-110	3-5	1-2	1-2	110-130	5-6
High Mean	90.00	4.00	1.71	1.57	110.00	5.57
High SD	11.95	0.53	0.45	0.49	18.51	0.49
Mid Range	50-70	2-3	1-2	1-2	60-90	3-5
Mid Mean	57.50	2.50	1.25	1.38	71.25	3.63
Mid SD	8.29	0.50	0.43	0.48	11.66	0.70
Low Range	10-50	1-2	1-2	1	30-50	1-3
Low Mean	41.43	1.86	1.14	1.00	42.86	2.29
Low SD	13.55	0.35	0.35	0	7.00	0.70

Results for AWI course participants

Regarding AWI course participant results, in 2018 and 2019, 19 of the 55 TOEIC SW takers took the course, including all 5 repeat test takers. Table 5 shows that the maximum scores for writing were identical at 140. The mean scores for speaking were 66 and 65, and the mean scores for

Table 5. AWI Participants (*n*=19) and Non-AWI Participants (*n*=36)

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
2018 Range	40-80	2-4	1-2	1-2	40-140	2-7
2018 Mean	56.00	2.80	1.40	1.40	82.00	4.20
2018 SD	14.97	0.75	0.49	0.49	34.87	1.72
2019 Range	50-110	2-5	1-3	1-3	50-130	3-6
2019 Mean	68.00	3.00	1.20	1.20	78.00	4.00
2019 SD	22.27	1.10	0.40	0.40	29.26	1.10

writing were 83 and 80. The minimum scores for speaking were identical at 10, and the minimum scores for writing were 40 and 30. Only the maximum scores for speaking were different at 150 and 110, due to individual student differences as the maximum score holder was an international student. This would also account for the slightly higher mean of the AWI course attendees. Mean proficiency levels for both groups were the same for both tests.

Here, too, the course participant group and the non-participant group were divided into nearly equal high, middle, and low proficiency groups, shown in Table 6. For speaking, AWI non-participants had a normal distribution, while 74% of AWI participants were within 1 SD. For writing, distributions were similar but 100% of AWI participants were within 2 SDs. The results between groups differ slightly, but if the course affected speaking, it may have benefitted the top proficiency students more than the other students. As for writing, although the differences are small, the mean scores of each proficiency group were higher than the mean scores of each non-course participant group. The distribution of scores was also closer to the mean.

Table 6. AWI Participant/Non-participant Scores by Proficiency Grouping

	Speak. Score (0-200)	Speak. Prof. Lvl. (1-8)	Pron. Lvl. (1-3)	Int. & Stress Lvl. (1-3)	Writ. Score (0-200)	Writ. Prof. Lvl. (1-9)
AWI Participants (<i>n</i> =6, 7, 6)						
High Range	70-150	3-6	2-3	2-3	100-140	5-7
High Mean	98.33	4.33	2.17	2.17	125.00	6.17
High SD	26.72	0.94	0.37	0.37	15.00	0.69
Mid Range	60-70	3	1-2	1-2	60-100	3-5
Mid Mean	62.86	3.00	1.43	1.43	80.00	4.14
Mid SD	4.52	0	0.49	0.49	16.04	0.83
Low Range	10-50	1-2	1-2	1	40-60	2-3
Low Mean	36.67	1.67	1.17	1.00	45.00	2.33
Low SD	13.74	0.47	0.32	0	7.64	0.47
AWI Non-participants (<i>n</i> =12, 12, 12)						
High Range	80-110	4-5	1-2	1-2	90-140	5-7
High Mean	90.00	4.08	1.83	1.67	112.50	5.75
High SD	10.00	0.28	0.37	0.47	14.22	0.6
Mid Range	50-80	2-4	1-2	1-2	60-90	3-5
Mid Mean	63.64	3	1.64	1.64	79.17	4.08
Mid SD	16.56	0.86	0.58	0.56	7.59	0.49
Low Range	10-50	1-2	1-2	1	30-60	1-2
Low Mean	42.31	1.85	1.08	1.00	42.31	1.85
Low SD	11.43	0.37	0.28	0	9.54	1

Conclusion

To summarize, the English speaking and writing proficiency levels of 55 graduate students among 3 departments were evaluated and ranged from low to high intermediate. For return test takers, after 1 year speaking proficiency levels remained the same or increased by 1 level and writing proficiency levels increased or decreased by 1 level. Results regarding the educational effects of a 90-minute workshop were inconclusive, but higher proficiency students may have benefitted from it. Results regarding the effects of a course taught in English were also inconclusive, but students with higher proficiency in speaking and students at all writing proficiency levels seem to have benefitted. Although the sample sizes were small, it appears that the limited exposure to English that students have through coursework does not make a noticeable impact on the students' TOEIC SW scores. In the future, results from larger sample sizes and more exposure to English through coursework will potentially lead to more conclusive results.

Acknowledgements

The authors acknowledge the Graduate School Committee and departments, the Educational Affairs Office, the IT Center, and the CALL Committee. We offer a special thanks to Prof. Akira Tanioka for his vision, dedication, and assistance.

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一般教育教室彙報 第112号

発行日 令和4年4月30日
 発行者 日本大学理工学部 一般教育教室
 勢力尚雅
 印刷者 日本フィニッシュ株式会社
 高橋嘉久

BULLETIN
OF
DEPARTMENT OF GENERAL EDUCATION
COLLEGE OF SCIENCE AND TECHNOLOGY
NIHON UNIVERSITY
No. 112

CONTENTS

Monograph

2018-2019 Graduate School English Speaking and Writing Proficiency Program

..... Jonathan HARRISON, Takashi SUZUKI, Joseph FALOUT 1

April, 2022