

英語教育に対する工学部学生の 意識に関する学年縦断的研究

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本研究では豊橋技術科学大学に在籍する1年生から4年生までの143名を被験者とし、二つのグループに分けて調査研究を行った。一つのグループは1年生、もう一つは2年生、3年生、4年生である。これら被験者を対象として英語に関する35項目からなる調査を実施した。目的はこの二つのグループ間でどのような項目で違いがあるかを確認することである。統計処理の結果、7項目を除いて、両グループ間には英語と英語教育に対して同様な考え方をしていることが検証できた。また、2年次以降英語および英語使用に対する意欲の減少が見られることが明らかになった。

Comparing Technical Students' Ideas on English Education Within the Same University

David Levin

Introduction & Background

Numerous studies over the past several years have looked at the attitudes Japanese students hold toward English education. At the university level, one study found overall positive attitudes toward foreign EFL instructors in Japanese universities (Long, 1998), and another study detailed the different attitudes Japanese university students held toward their foreign versus Japanese English teachers (Shimizu, 2000). Furthermore, in another study, the sources of Japanese student apathy toward English were investigated (Burden, 2002). In addition, I, along with other colleagues, have looked into Japanese university students' attitudes using the same or a previous version of the survey used in this paper (Levin, Truscott & Redfield, 1999; Redfield & Levin, 2000). Moreover, student attitudes have also been investigated at the university where this present study was conducted (Nozawa, et al., 1991; Ito, et al., 2007). However, research comparing attitudes between Japanese university students divided into year of study remains scant. Therefore, the purpose of this paper is to compare the attitudes held by two groups of Japanese students on English education within the same institution as determined by the year of study.

Method

Participants

143 students from Toyohashi University of Technology (TUT) took part in this study. All learners were taking required or elective English courses at the time of the study. Participants were divided into two separate groups according to year of study at the university. The first group consisted of 1st-year students only (G1); the second group (G2) contained 2nd-, 3rd- and 4th-year students. The

participants were chosen from English courses ranging low to high level.

Instrument

The participants were given a 35-item, bilingual English-interest survey (see Appendix). The survey employed a five-point Likert scale with responses including *strongly disagree* (5), *disagree* (4), undecided (3), *agree* (2) and *strongly agree* (1). This survey is designed to measure attitudes thought to be important in gauging student interest in English and English education. The items on the survey cover areas such as: A) the liking of English, B) future necessity, C) desirability for communication with non-Japanese individuals, D) usefulness for travel, E) usefulness in major subject, F) desire to take elective courses, G) desire to understand English movies/music, H) preference for certain English curricula and teaching methods, and I) opinions of instructors. Similarly worded items were employed on the survey, and the survey has been used in previous research.

Administration

The survey was given to participants at the end of the first term (three-term year) of the 2006/07 and 2007/08 academic years.

Statistical analysis

A crosstabulation was run using the SPSS statistical package for Macintosh to acquire frequencies and percentages, and a Pearson Chi-Square test was applied to determine possible differences between the two groups. The alpha for significance was set at the customary .05 level for this field and type of research.

Research question

1. Are there statistically significant differences between the answers given on each of the survey items between the two groups of participants?

Results

When the data were examined, it was found that only seven out of the total 35 items achieved the .05 level indicating a statistically significant difference between the two groups of students. These statistically significant items will be presented here in the order in which they appeared on the survey. Additionally, for the purposes of presenting these results, the choices "strongly agree" and "agree" will be conflated into one as well as the "strongly disagree" and "disagree" choices.

Statistically significant survey items

Question 9: Japanese university English instructors are good at teaching the language. 19.2 percent of G1 disagreed with this statement with 12.1 percent agreeing; 58.6 percent were neutral. G2 had 44.7 percent disagreeing with 5.9 percent agreeing; 49.4 percent were neutral. The Pearson Chi-Square was significant at .016 (see Table 1 for percentages and Figure 1 for graphical display).

Table 1

Question 9 percentages

		1	2	3	4	5	Total
Group 1	Count	9	8	34	4	3	58
	% within Group	15.5%	13.8%	58.6%	6.9%	5.2%	100.0%
Group 2	Count	6	32	42	4	1	85
	% within Group	7.1%	37.6%	49.4%	4.7%	1.2%	100.0%
Total	Count	15	40	76	8	4	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

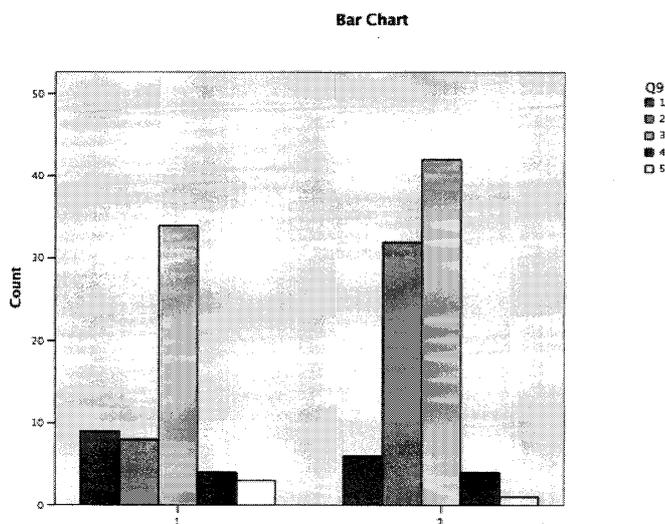


Figure 1. Graphical display of Question 9 results.

Question 13: It is possible to learn English directly through English. 8.6 percent of G1 disagreed with this statement with 48.2 percent agreeing; 43.1 percent were neutral. G2 had 14.1 percent disagreeing with 65.9 percent agreeing; 20 percent were neutral. The Pearson Chi-Square was significant at .021 (see Table 2 for percentages and Figure 2 for graphical display).

Table 2

Question 13 percentages

		1	2	3	4	5	Total
Group 1	Count	0	5	25	22	6	58
	% within Group	0%	8.6%	43.1%	37.9%	10.3%	100.0%
Group 2	Count	5	7	17	44	12	85
	% within Group	5.9%	8.2%	20%	51.8%	14.1%	100.0%
Total	Count	5	12	42	66	18	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

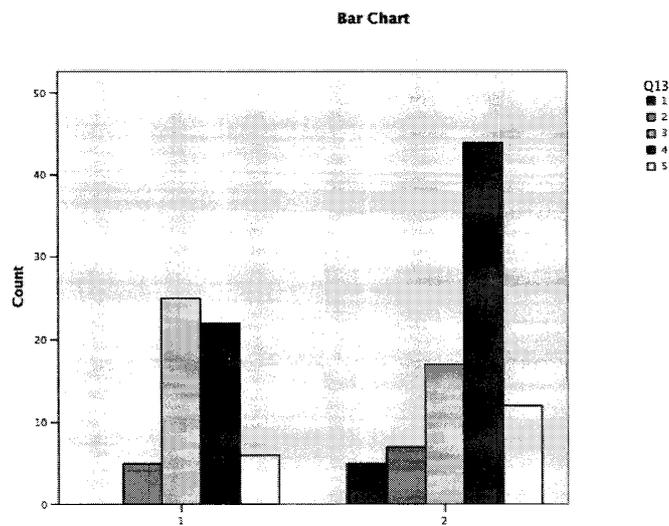


Figure 2. Graphical display of Question 13 results.

Question 18: Having a fun class is not compatible with serious learning. 65.5 percent of G1 disagreed with this statement with 1.7 percent agreeing; 32.8 percent were neutral. G2 had 68.2 percent disagreeing with 15.3 percent agreeing; 16.5 percent were neutral. The Pearson Chi-Square was significant at .031 (see Table 3 for percentages and Figure 3 for graphical display).

Table 3

Question 18 percentages

			1	2	3	4	5	Total
Group 1	Count		12	26	19	1	0	58
	% within Group		20.7%	44.8%	32.8%	1.7%	0%	100.0%
2	Count		20	38	14	11	2	85
	% within Group		23.5%	44.7%	16.5%	12.9%	2.4%	100.0%
Total	Count		32	64	33	12	2	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

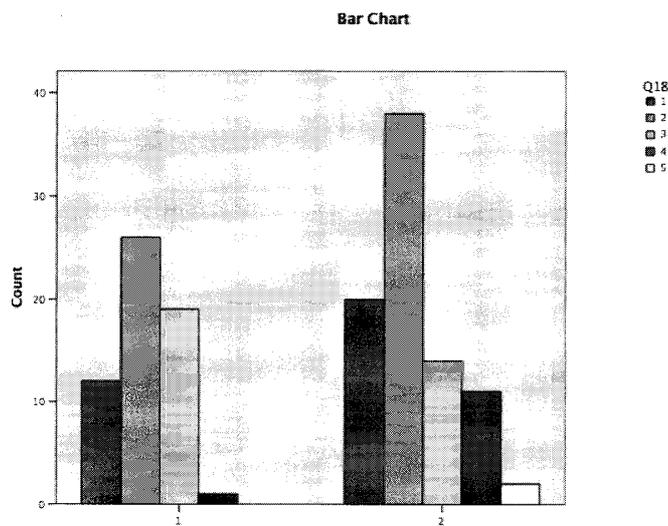


Figure 3. Graphical display of Question 18 results.

Question 29: I would like to communicate in English with non-Japanese people. 3.4 percent of G1 disagreed with this statement with 67.2 percent agreeing; 29.3 percent were neutral. G2 had 14.2 percent disagreeing with 58.8 percent agreeing; 27.1 percent were neutral. The Pearson Chi-Square was significant at .033 (see Table 4 for percentages and Figure 4 for graphical display).

Table 4
Question 29 percentages

			1	2	3	4	5	Total
Group 1	Count		1	1	17	17	22	58
	% within Group		1.7%	1.7%	29.3%	29.3%	37.9%	100.0%
Group 2	Count		2	10	23	34	16	85
	% within Group		2.4%	11.8%	27.1%	40.0%	18.8%	100.0%
Total	Count		3	11	40	51	38	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

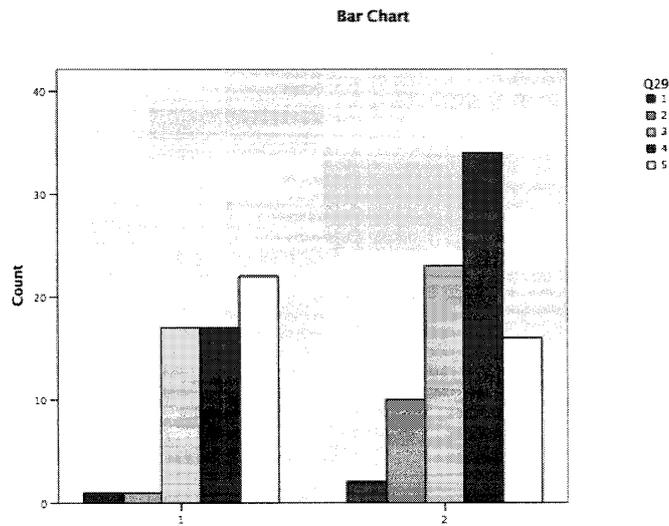


Figure 4. Graphical display of Question 29 results.

Question 32: I would like to be able understand movies and music in the original language (English). 5.1 percent of G1 disagreed with this statement with 82.7 percent agreeing; 12.1 percent were neutral. G2 had 3.5 percent disagreeing with 76.5 percent agreeing; 20 percent were neutral. The Pearson Chi-Square was significant at .008 (see Table 5 for percentages and Figure 5 for graphical display).

Table 5
Question 32 percentages

		1	2	3	4	5	Total
Group 1	Count	2	1	7	13	35	58
	% within Group	3.4%	1.7%	12.1%	22.4%	60.3%	100.0%
Group 2	Count	0	3	17	36	29	85
	% within Group	0%	3.5%	20.0%	42.4%	34.1%	100.0%
Total	Count	2	4	24	49	64	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

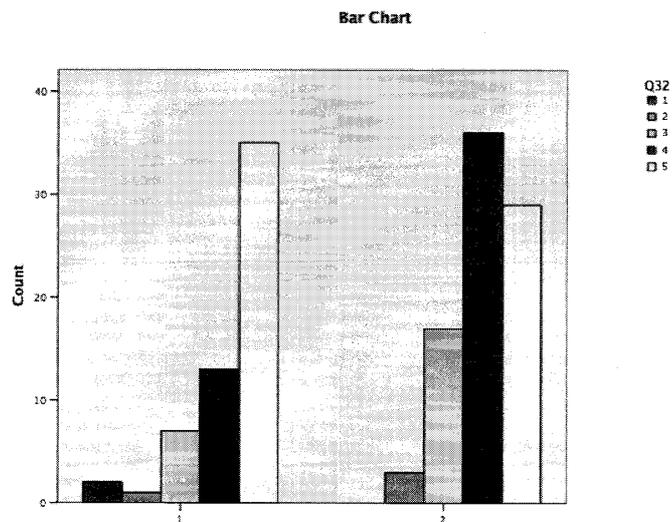


Figure 5. Graphical display of Question 32 results.

Question 34: I am interested in foreign culture. 5.1 percent of G1 disagreed with this statement with 56.9 percent agreeing; 37.9 percent were neutral. G2 had 10.6 percent disagreeing with 49.4 percent agreeing; 40 percent were neutral. The Pearson Chi-Square was significant at .002 (see Table 6 for percentages and Figure 6 for graphical display).

Table 6

Question 34 percentages

		1	2	3	4	5	Total
Group 1	Count	1	2	22	11	22	58
	% within Group	1.7%	3.4%	37.9%	19.0%	37.9%	100.0%
Group 2	Count	3	6	34	33	9	85
	% within Group	3.5%	7.1%	40.0%	38.8%	10.6%	100.0%
Total	Count	4	8	56	44	31	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

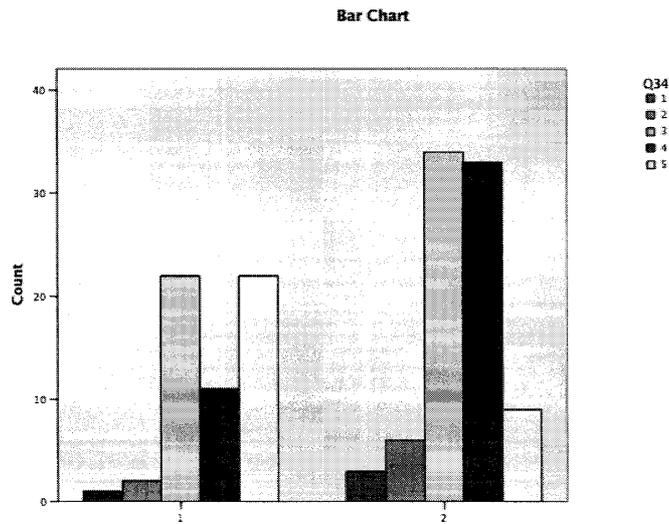


Figure 6. Graphical display of Question 34 results.

Question 35: I prefer to speak to foreign teachers in Japanese (rather than English) outside of class. 17.2 percent of G1 disagreed with this statement with 32.7 percent agreeing; 50 percent were neutral. G2 had 22.4 percent disagreeing with 23.5 percent agreeing; 54.1 percent were neutral. The Pearson Chi-Square was significant at .049 (see Table 7 for percentages and Figure 7 for graphical display).

Table 7

Question 35 percentages

			1	2	3	4	5	Total
Group 1	Count		4	6	29	9	10	58
	% within Group		6.9%	10.3%	50.0%	15.5%	17.2%	100.0%
Group 2	Count		2	17	46	16	4	85
	% within Group		2.4%	20.0%	54.1%	18.8%	4.7%	100.0%
Total	Count		6	23	75	25	14	143

(1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree)

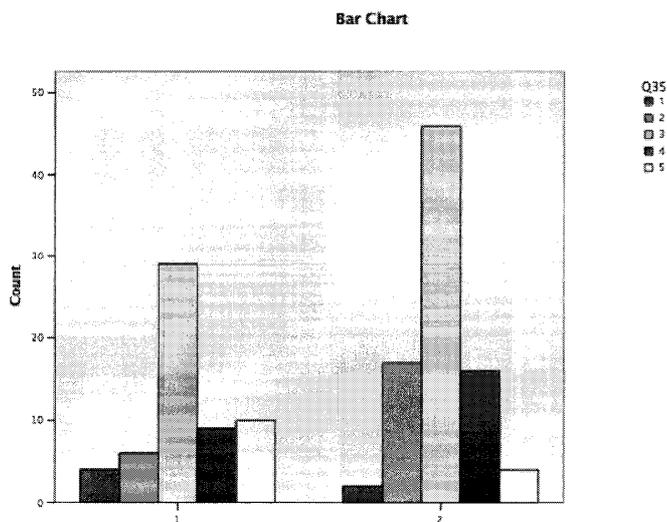


Figure 7. Graphical display of Question 35 results.

Discussion

In general, the two groups of participants did not show too many differences in their attitudes toward English and English education as measured by the survey in this study. Only 7 out of the entire 35 items on the survey indicated a statistically significant difference—only 20 percent. At least at TUT, we can say that 1st-year students along with 2nd-, 3rd-, and 4th-year students hold similar attitudes toward English education. The differences that did exist seem to be explained as a general "tapering of enthusiasm" for English and its uses, as students progressed beyond their first year. Here is a brief discussion of the items that showed a difference between the two groups.

First, regarding the participants preference for Japanese individuals as their English instructors (question 9), we see that the older students trended toward a more unfavorable view of these instructors. Given that the majority of their instructors are Japanese, this could easily be explained as the consequences of a general weariness with taking English in general after their first year. In this case, it might well be that instruction didn't matter as much as English itself. On the other hand, the students might also be expressing dissatisfaction with traditional teaching methods of English—something to consider for curriculum design.

Next, there was a difference that focused on using English as the medium of instruction (question 13). The results here are encouraging as it seems to indicate that initial apprehension to studying English with instructors who mainly use English for explanations—as opposed to direct translation into Japanese—eases past the first year. Students gradually become accustomed to English for instruction and, hopefully, are improving their English listening skills. However, the remaining results tend to go against this positive outcome.

The results to questions 29, 32, 34, and 35—questions relating to actual use of English in communication as well as interest in foreign culture—show a lessening of enthusiasm for English in students past their first year. As mentioned before, it is possible that after the first year, a more realistic view toward actual progression in English ability begins to set in. Students begin to see that there will be no "magic" way to acquire the language; Students realize that a major effort will be required of them to reach the level of English required for advanced communication and cultural appreciation. This feeling may also be indicated in the results for question 18—they realize learning English is not going to be all fun and games.

One limitation to this study should be mentioned regarding these seven items that showed statistically significant differences. When using the Pearson Chi-Square test for analysis of this sort, it is advised that caution should be used in the interpretation of data for items where response frequency is less than 5, as was the case here. It could be that observed differences in percentages for these seven items might not actually be rising to a statistically significant difference. A future

study that included a greater number of participants would help strengthen the observations found in this paper.

Finally, only the differences between the two groups of participants were discussed for the purposes of this study. Data concerning responses to other items on the survey might be included in future research as useful information for English curricula development at Japanese universities. In addition, considering these data come from technical university students only, it would be of interest to compare the attitudes found here with those held by students in different fields of study.

Conclusion

143 undergraduate students from the same university (Toyohashi University of Technology) were divided into two groups, 1st-year students in one, 2nd-, 3rd-, and 4th-year students in the other, and they were administered a 35-item English-interest survey to determine differences, if any, between the two groups on each of the items. In general, based on the statistical results, the two groups held similar views toward English and English education on all but seven of the items. On these seven items, we see what might be described as a "tapering of enthusiasm" for English and its uses as students progressed beyond their first year.

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Appendix

English Class Survey

1. I do not think English classes are very necessary.
2. I want to become a better English speaker.
3. I really like the English language.
4. Difficult textbooks are better than easier ones for language learning.
5. Grammar is the most important (useful) component of English.
6. I think textbooks written entirely in English are better than those that use Japanese.
7. Grammatical knowledge is more important than English speaking ability for English teachers.
8. I want to read and write English most.
9. Japanese university English instructors are good at teaching the language. *
10. Grammar translation lessons are boring.
11. Generally speaking, it is important to learn English.
12. The use of tapes is important in the learning of English.
13. It is possible to learn English directly through English. *
14. Communicative ability is more important than grammatical ability.
15. Student pair work is a good way to practice English.
16. The most important thing for a Japanese English teacher is English language ability.
17. I feel that it is more important to get a good grade than to actually improve my English.
18. Having fun in class is not compatible with serious learning. *
19. Studying through translation is the best way to learn English.
20. It is rather strange for a Japanese national to actually speak English.
21. I only take English in university because I have to.
22. When speaking English, making mistakes are shameful.
23. It is better to study English with a Japanese instructor than with a foreign instructor.
24. Grammatical ability is more important than communicative ability.
25. Native-like ability in English is the most important thing in making a good English teacher.
26. I want to use English at work in the future.
27. English will be useful for travel.
28. Only Japanese professors can truly teach English to Japanese people.
29. I would like to communicate in English with non-Japanese people. *
30. English will be useful in my major subject.
31. The ability to read/translate English is not enough for me.
32. I would like to be able understand movies and music in the original language (English). *
33. English is necessary for my future.
34. I am interested in foreign culture. *
35. I prefer to speak to foreign teachers in Japanese (rather than English) outside of class. *

(* = difference statistically significant)