

# Measuring Japanese Internationalization: A Survey of English Education and Attitudes

— Design and Pretest of Questionnaire —

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## Summary

This preliminary study reports on the development and pretesting of a questionnaire to investigate the attitudes of Japanese professionals who have done research abroad regarding their English studies. The results are found to be statistically significant and in general agreement with the research predictions. Although the design of the questionnaire is found to be, in general, internally valid for measuring these attitudes, further refinements in sequencing, elimination of inappropriate questions and expansion of the questionnaire as a whole are required.

## Introduction

Internationalization has become a household word in Japan. Wherever one turns, he can find this word being used by the Japanese government, the mass media, in company bulletins and directives, in higher education, and even among neighbors, relatives and families. As the trade problems between Japan and the rest of the world have intensified and been highly publicized, the necessity for Japanese and people from other countries to understand each other's point of view has pervaded every facet of Japanese life, and now one of the main problems facing the future of this island country will be whether or not it has the ability to become truly integrated into the world community.

One way in which the progress of Japan's internationalization process can be investigated is to look at how well professional people have worked, done research, or studied overseas, or how well they have attended and participated in international conferences, seminars or events. The professional ranks include doctors, dentists, lawyers, educators, economists, scientists, planners, engineers, and so on. When these professionals gather together to exchange knowledge or information, the lingua franca, for the most part, is English. Also, those who study or do research in the English-speaking world need to have a good foundation in the English language.

The authors plan to investigate how well the Japanese professional person has prepared himself for participation in this international English speaking environment, how much support the Japanese government has supplied in providing access to gaining the necessary knowledge and preparation required to successfully participate, and their own attitudes on whether or not this preparation was adequate for working or participating at the international level.

To obtain our objectives, we have decided to use a mail questionnaire survey method rather than doing interviews for the following reasons: The number of informants from the various fields needed in this survey precludes interviews and there would be a strong chance of bias if the authors, who are both foreigners, conducted the interviews themselves. In addition, a self administered questionnaire takes less time to complete than an interview and the type of information being sought can be adequately collected via this method.

The first step in this survey will involve developing, pretesting and adjusting the questionnaire using small population groups until an adequate instrument having as little bias as possible is designed to measure responses from all the various target professions.

The next step will be to determine whether the questionnaire can be applied successfully to all the various types of professional occupations we have targeted for investigation. Again, as in the first step, the testing will be performed on relatively small population pools.

Finally, once a questionnaire having the maximum amount of measurable data in the shortest possible length has been fine tuned to where it can be validly utilized, the authors will send the questionnaire to various professional associations throughout Japan to gain large-scale, significant insight into the efficacy of English education and the feelings of professionals who work and study at the international level in an English-speaking environment.

We have designed this questionnaire to elicit certain objectives or issues we have seen based on our cumulative total of more than 25 years experience teaching and living in Japan. Some of the major issues we hope to investigate, include:

- 1) A lack of self-confidence among Japanese for speaking English. Even though most university-educated professionals have had at least eight years of English, we have found their English conversational skills to be rather weak. We predict that, overall, Japanese who go overseas for research feel unprepared for it when considering their English ability.

- 2) In order to gain the self-confidence and skills necessary to speak English, we have noted that many university-educated Japanese have studied outside of the regular school curriculum. We are not positive that this issue applies to all age groups or professions, but we have seen an increase in the number of students studying outside the normal school curriculum among junior and senior high school and university students during the past ten years. It is our belief that most Japanese who have done overseas research have also done outside English studies to some extent before leaving Japan.

- 3) In connection with No. 2 above, it is thought that doing such outside studies has profound effects on attitudes towards fluency of one's English, satisfaction of English classes one takes, and prepared feelings for the overseas research itself. More specifically, those who have done such studies, should feel they are more

fluent, more satisfied with English classes and more prepared to do overseas research.

This paper reports the results from pretesting the questionnaire, discusses its merits and demerits and suggests improvements for revision.

## **Methods**

### **Sample**

The individuals who participated in this pretest were 30 medical doctors employed at a national university hospital in Gifu Prefecture. They were selected for the following reasons: 1) It was judged that a high percentage of doctors in medical universities have experienced overseas research making acquisition of a small pilot sample from one source possible. 2) In addition, many students attempting to enter medical schools also study outside the regular school curriculum. The comparison of professionals who have learned English with and without outside studies is an important point in this survey. 3) Finally, most of these doctors were readily accessible to one of the authors allowing for follow-up interviews if any points on the survey needed clarification.

### **Questionnaire**

The pretest questionnaire (see last page of report) which was designed at the beginning of May consisted of six Xeroxed pages of 29 main questions and nine sub-questions. Of the 29 main questions, three were fill-in with the remaining being multiple choice. Except for two yes/no questions and two check lists (10 choices each, multiple checking allowed), these were made of four or five-point, multiple choice type scales. All sub-questions were multiple choice. The six main attitude scales are given in Table 1.

Table 1: The Six Main Attitude Scales

Attitude	Scales	Attitude	Scales
1. Speaking Ability	A. Fluently	4. Satisfaction of Speaking Ability	A. Extremely Satis.
	B. Better Than Average		B. Very Satisfied
	C. Average		C. Satisfied
	D. Less Than Average		D. Very Dissatisfied
	E. Poorly		E. Extremely Dissat.
2. Satisfaction of Classes	A. Extremely Satis.	5. Sufficiency of Preparation	A. Completely Suff.
	B. Very Satisfied		B. Very Sufficient
	C. Satisfied		C. Sufficient
	D. Very Dissatisfied		D. Slightly Suff.
	E. Extremely Dissat.		E. Not Sufficient
3. Preparation Feeling	A. Completely Prepared	6. Importance of English	A. Extremely Import
	B. Well Prepared		B. Very important
	C. Prepared		C. Important
	D. Slightly Prepared		D. Of Little Import
	E. Didn't Prepare		E. Not Important

At the top of the first page was a short explanation as to the purpose of the survey and an instruction section which eliminated the need for including a cover letter. It was stated that all information given by the informants would be kept confidential.

The first part of the survey dealt with personal information, including decade Ph. D. obtained and length of English education. The second area asked questions covering English studies outside of high school and college and was followed by a section concerning the professionals' feelings toward their English education. Questions asked how well they felt their English classes prepared them for overseas research and required them to choose specific types of instruction both inside and outside of school which helped them prepare for it. Finally, they were asked how satisfied they were with their English speaking ability at the beginning and end of their overseas research and how important college level English courses are. A free comment section was included on the last page.

## Procedure

The questionnaire was distributed personally by one of the authors to the participants in the middle of May. This was done to ensure a high level of return. A stamped, self-addressed envelop was included to expedite return and by the deadline in the middle of June, well over half of the questionnaires had been returned.

Analysis commenced for a two week period after this.

## Results

### Analysis of Sample as a Whole

Owing to the distribution method, the return rate was high, 76.7% (30 distributed, 23 returned).

Of the 23 questionnaires, six were incomplete- four informants didn't include their age; another two studied English outside regular classes but didn't complete the sub-questions dealing with this topic (21a, 21b, 21c); question #7 (Years of English-Junior High School) was not answered by a respondent who also didn't fill in his age; and question #10 (Years of English-Graduate School) went unanswered by one of the respondents who didn't complete the sub-questions. Raw data for these four questions have been adjusted (A) by excluding the No Answer (NA) respondents in their analysis. Finally, one respondent who declared having done no English studies outside of high school (#11) or college (#13) still filled in the sub-questions dealing with it. These responses were ignored.

This analysis of raw and adjusted data will consist of simple percentage breakdowns and correlations. The significant relations between the variables were assessed using correlation analysis. Pearson  $r \geq 0.660$  ( $\alpha \leq .001$ ) was considered a very strong correlation (designated- VS), and from 0.440 to 0.660 ( $\alpha \leq .05$ ) determined to be strong (S). Statistical significance was calculated using the t test ( $df = N - 2, \rho = 0$ ).

Data with adjusted values (Age, Years of English-Junior High

School, and Years of English-Graduate School) were omitted from correlation testing. Also the variables University, Department, and Years of English-Elementary School and Years of English-High School were omitted from correlation testing.

*Age:*

Mean age in years was 40.1 (A), SD = 6.07 (A), NA = 4.

The youngest age was 31 and the oldest, 60.

This variable was not tested for correlations.

*Decade Born (# 1):*

50-59 56.5%, 40-49 34.8%, 30-39 4.35%, before the 30's 4.35%

The percentage breakdown mainly falls into the 40 to 59 decade group (ages- 31 to 50). Only two doctors participating in the survey were over 50.

A very strong correlation was, as expected, found between this variable and Decade Ph. D. Received ( $0.824, \alpha \leq .001$ ).

This variable and Satisfaction-Start of Research ( $0.651, \alpha \leq .001$ ) were strongly correlated. In other words, the younger respondents tended towards selecting the dissatisfied choices while the older doctors marked the satisfied choices for their feelings concerning their English speaking ability at the beginning of research overseas.

Preparation for Research-All Schools had a strong correlation with Decade Born ( $0.629, \alpha \leq .01$ ). This signifies that the younger doctors felt their schooling (excluding outside studies) prepared them less for studies overseas than their older counterparts who picked the more prepared choices.

Finally, this and Preparation for Foreign Life & Study-All Studies were strongly correlated ( $0.425, \alpha \leq .05$ ). The younger the respondent, the less sufficient English studies (both in and outside school) were felt to be to live and study in a foreign country.

*Decade Ph.D. Received (# 2):*

80-89 69.6%, 70-79 17.4%, 60-69 8.69%, the 90's 4.35%

Almost 70% of the doctors obtained their Ph. D.s in the 1980-89 decade. One received it in 1990, the year of this survey. No doctor had a Ph. D. before the 1960's.

See Decade Born for a (VS) with this variable.

This variable and English Studies-Outside High School had a strong correlation ( $0.464, \alpha \leq .05$ ). More recently obtained Ph. Ds. related significantly with a negative response for having done English studies outside regular high school curriculum. However, see Note 3 for a caution concerning English Studies-Outside High School.

*University & Department Ph.D. Received (# 3):*

University (NA = 1)	Gifu	81.8%	(A)
	Kyoto	13.6%	(A)
	Hokkaido	4.55%	(A)

Department	Biochemistry	17.4%	Pharmacology	8.7%
	Medicine	13.0%	Physiology	8.7%
	Pathology	13.0%	Biophysics	4.4%
	Inter. Med.	8.7%	Dermatology	4.4%
	Microbiology	8.7%	Psychiatry	4.4%
	Neurology	8.7%		

By far, the greatest number of respondents in this survey are now occupied at the same university they obtained their Ph. D. from. The number of departments show a wide range of specialties.

These variables were not tested for correlations.

*Years Spent Overseas (# 4):*

2 yrs. 43.5%, 1 yr. 34.8%, less than 1 yr. 8.69%,  
3 yrs. 8.69%, more than 3 yrs. 4.35%,

More than three quarters of the informants stayed overseas for a one or two year period. One doctor reported staying more than three years.

There were no variables found that significantly related with this variable.



*Years of English Studied-Total (# 5):*

7-9yrs. 65.2%, more than 10 yrs. 26.1%, 4-6yrs. 8.69%

Six doctors had over 10 years of total English study through graduate school while two others had only four to six.

Years of English-Undergraduate School and Years of English-Graduate School were both strongly correlated with the total number of years of English studied ( $0.590, \alpha \leq .0$  and  $0.607, \alpha \leq .01$ , respectively). This shows that these two variables, rather than the number of years that were studied before college, created the difference in the total number of years English was studied by the respondents.

The other variable that correlated strongly was Preparation for Research-All Schools ( $-0.447, \alpha \leq .05$ ). Here longer education is significantly related to a more prepared feeling for research overseas from English classes in high school, medical (undergraduate) and graduate schools.

*Years of English-Elementary School (# 6):*

None 100%

This variable was not tested for correlations.

*Years of English-Junior High School (# 7):*

More than 2 yrs. 100%(A), NA = 1

This variable was not tested for correlations.

*Years of English-High School (# 8):*

More than 2 yrs. 95.7%, 2 yrs. 4.35%

This variable was not tested for correlations.

*Years of English-Undergraduate School (# 9):*

2 yrs. 65.2%, more than 2 yrs. 17.4%, 1 yr. 13%, none 4.35%

Although over half had the normal two years of English studies in medical (undergraduate) school, four had more than two and one doctor even reported having no English classes whatsoever.

See Years of English Studied-Total for (S) correlation.

A strong correlation with English Studies-Outside High School was

noted ( $-0.469, \alpha \leq .05$ ). Respondents who had English studies outside of regular high school classes had more years of English study in medical (undergraduate) school, see Note 3.

*Years of English-Graduate School (# 10):*

None 81.8% (A), more than 2 yrs. 9.1% (A), less than 1 yr. 4.55% (A), 2 yrs. 4.55% (A), NA = 1

See Years of English Studied-Total for (S) correlation.

*English Studies-Outside High School (# 11):*

No 82.6%, Yes 17.4%

Only four respondents stated they had done other English studies besides what is regularly taught in high school and college<sup>3</sup>.

*Type of Study (# 12a):*

Private Lessons 50%, Cram School 25%, Self-study 25%

*Years Studied (# 12b):*

3 yrs. 50%, 1 yr. 25%, 2 yrs. 25%

*Cost (# 12c):*

Less than 200,000/yr. 100%

See Decade Ph. D. Received and Years of English-Undergraduate School for (S) correlations.

A very strong relation with Satisfaction-College English Classes ( $0.736, \alpha \leq .001$ ) was found. This shows that respondents who did English studies outside of high school were more satisfied with their college classes.

*English Studies-Outside College (# 13):*

Yes 56.5%, No 43.5%

Slightly over half the respondents (13) stated they studied some type of English outside of what was given in medical (undergraduate) or graduate school.

*Type of Study (# 14a):*

English Language School 41.7% (A), Self-study 33.3% (A),  
Private Lessons 25% (A), NA = 1

*Years Studied (# 14b):*

More than 2 yrs. 46.2%, less than 1 yr. 30.8%, 1 yr. 15.4%,  
2 yrs. 7.7%

*Cost (# 14c):*

Less than 200,000/yr. 91.7% (A), 200,000-399,000, 8.3% (A),  
NA = 1

This variable and Speaking Fluency-High School were strongly correlated ( $0.520, \alpha \leq .05$ ). Doctors who stated they were more fluent after finishing high school tended to do English studies outside of regular college courses.

A very strong correlation with Speaking Fluency-College existed ( $0.736, \alpha \leq .001$ ). An increased fluency feeling for speaking English upon finishing college and doing outside English studies in college were significantly related.

Finally, this and Preparation for Foreign Life & Study-All Studies were strongly correlated ( $0.504, \alpha \leq .05$ ). Those doing outside English studies in college had stronger feelings after returning from overseas towards their classes (in and outside of school) preparing them for living and studying in a foreign country.

*Speaking Fluency-High School (# 15):*

Poorly 43.5%, better than average 30.4%, average 13%,  
less than average 8.7%, fluently 4.35%

Results here (see Fig. 1a) show that half the respondents considered themselves to be less than average or poor at speaking English when they finished high school. One person stated he was a fluent speaker after high school.

See English Studies-Outside College for (VS) correlation.

Speaking Fluency-College and this variable were related very

strongly ( $0.680, \alpha \leq .001$ ).

The other significant correlation was with Importance of English-College which was strong ( $0.488, \alpha \leq .05$ ). A feeling of more fluency in speaking English after high school related to the feeling of importance for increasing English courses in medical (undergraduate) and graduate schools.

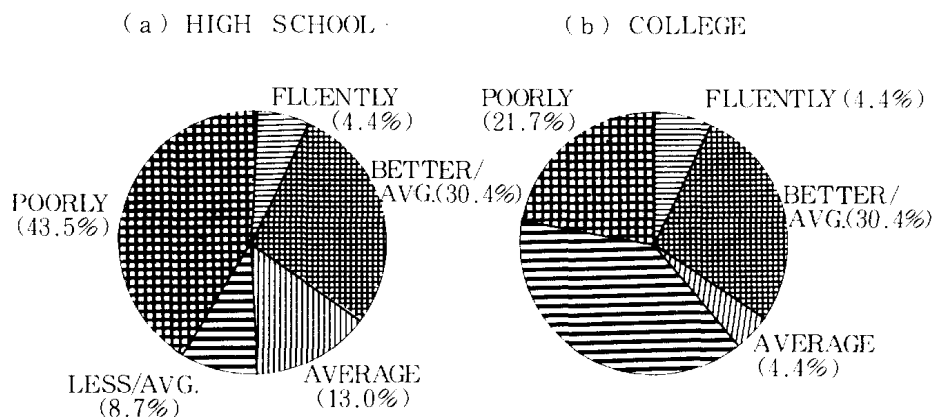


Fig. 1: Speaking Fluency - High School vs College

#### *Satisfaction-High School English Classes (# 16):*

Very dissatisfied 60.9%, satisfied 30.4%, extremely dissatisfied 8.7%

Almost 70% of the respondents were very or extremely dissatisfied with their high school English classes. No doctor marked he was very or extremely satisfied with the classes, Fig. 2a.

The only significant relation with this variable was Preparation for Research-All Schools which was strong ( $0.500, \alpha \leq .05$ ). More satisfaction with high school English courses and more preparedness for overseas research from all schools (excluding outside studies) were significantly related.

#### *Speaking Fluency-College (# 17):*

Less than average 39.1%, better than average 30.4%, poorly 21.7%, fluently 4.35%, average 4.35%

The percent of doctors feeling their English speaking ability was less than average or poor at the finish of medical and graduate schools increased 10% to that of over 60% as compared to the same feelings at

the end of high school, Fig. 1b. However, fluent and better than average categories showed no change.

See English Studies-Outside College and Speaking Fluency-High School for (VS) correlations.

There was a strong correlation with Satisfaction-End of Research (0.510,  $\alpha \leq .05$ ). Fluency feelings after college and satisfaction with English speaking ability at the end of overseas research were positively related.

Also, this variable and Preparation for Foreign Life & Study-All Studies were strongly correlated (0.604,  $\alpha \leq .01$ ).

*Satisfaction-College English Classes (# 18):*

Very dissatisfied 52.2%, extremely dissatisfied 26.1%, satisfied 17.4%, extremely satisfied 4.35%

Over three quarters of the respondents were either very or extremely dissatisfied with the medical (undergraduate) and graduate English courses they took, Fig 2b.

See English Studies-Outside High School for (VS) relation.

The other variable that correlated significantly with this was Importance of English-College (0.449,  $\alpha \leq .05$ ). Respondents who were satisfied with their English classes in college also thought that it was important to increase courses in this subject in medical (undergraduate) and graduate schools.

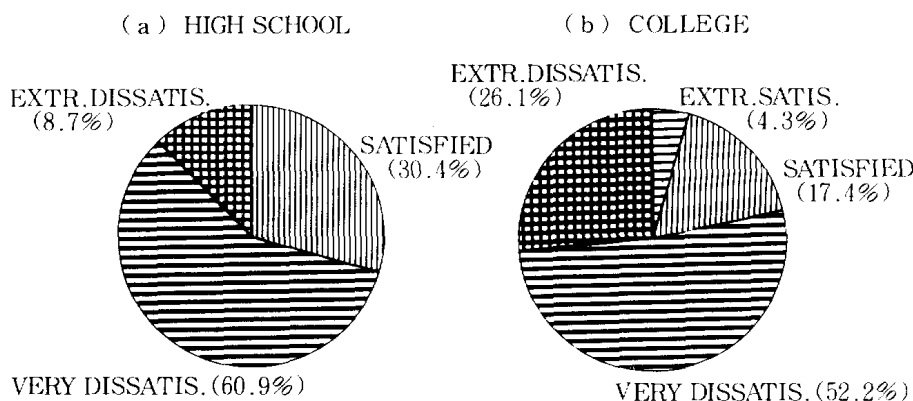


Fig. 2: Satisfaction of Eng. Classes -High Sch. vs College

*Preparation for Research-All Schools (# 19):*

Slightly prepared 43.5%, didn't prepare 30.4%, well prepared 13%, prepared 13%

Almost 75% stated that their English courses in high school, medical (undergraduate) and graduate schools slightly or didn't prepare them for overseas research.

See Decade Born, Years of English Studied-Total and Satisfaction-High School English Classes for (S) correlations.

This and Satisfaction-Start of Research were also strongly related (0.651,  $\alpha \leq .01$ ). Feelings of preparedness were positively related to satisfaction of English speaking ability at the start of overseas research.

*Preparation for Research-School Instruction Type (# 20):*

TYPE	TOTAL	TYPE	TOTAL
grammar	15	reading	8
writing	14	conversation	5
calligraphy	12	pronunciation	5
vocabulary	12	recitation	1
translation	10		

These are the types of instruction given in high school, medical (undergraduate) and graduate schools checked off by the respondents that were considered to be the most help in preparing for research overseas. TOTAL are the number of checks marked. More than one answer was permitted in this question.

*Preparation for Research-Outside Studies (# 21a):*

Slightly prepared 58.3% (A), prepared 25% (A), completely prepared. 8.3% (A), well prepared 8.3% (A), NA = 2

Over half of the respondents who took outside English studies stated that outside English studies during high school, medical (undergraduate) and graduate schools only slightly helped them in preparing for their research overseas.

*Preparation for Research-School & Outside Studies (# 21b):*

Didn't prepare 33.3% (A), prepared 25% (A), slightly prepared 25% (A), completely prepared 8.3% (A), NA = 2

Almost 60% of the doctors who did outside English studies indicated that the combination of those studies and classes in high school and college didn't prepare or slightly prepared them for overseas research.

*Preparation for Research-Outside Instruction Type (# 21c):*

TYPE	TOTAL	TYPE	TOTAL
conversation	11	reading	1
pronunciation	6	recitation	1
calligraphy	3	writing	1
grammar	3	other	1
vocabulary	2		

These are the types of instruction given outside of high school, medical (undergraduate) and graduate schools checked off by the respondents who did such studies that were considered to be the most help in preparing for research overseas. TOTAL are the number of checks marked. More than one answer was permitted in this question.

*Satisfaction-Start of Research (# 22):*

Very dissatisfied 52.2%, satisfied 26.1%, extremely dissatisfied 17.4%, extremely satisfied 4.35%

Seventy percent were extremely or very dissatisfied with their speaking ability at the beginning of their research overseas. One was extremely satisfied, Fig. 3a.

See Decade Born for (VS) and Preparation for Research-All Schools for (S) correlations.

Satisfaction-End of Research and Preparation for Foreign Life & Study-All Studies were both very strongly correlated to this variable (0.703,  $\alpha \leq .001$  and 0.667,  $\alpha \leq .001$ ). The doctors' satisfaction with their speaking ability at the beginning of research overseas was

positively related to the same satisfaction at the end of that research and to the feelings they had for their English education preparing them for living and studying overseas.

*Satisfaction-End of Research (# 23):*

Satisfied 47.8%, very satisfied 26.1%, very dissatisfied 17.4%, extremely satisfied 4.35%, extremely dissatisfied 4.35%

The number of doctors extremely or very dissatisfied with their speaking ability dropped to a little over 20% by the end of their research overseas, Fig. 3b. Very satisfied jumped to 26% from zero. Extremely satisfied showed no change.

See Speaking Fluency-College for (S) and Satisfaction-Start of Research for (VS) correlations.

This variable and Preparation for Foreign Life & Study-All Studies were very strongly related ( $0.758, \alpha \leq .001$ ).

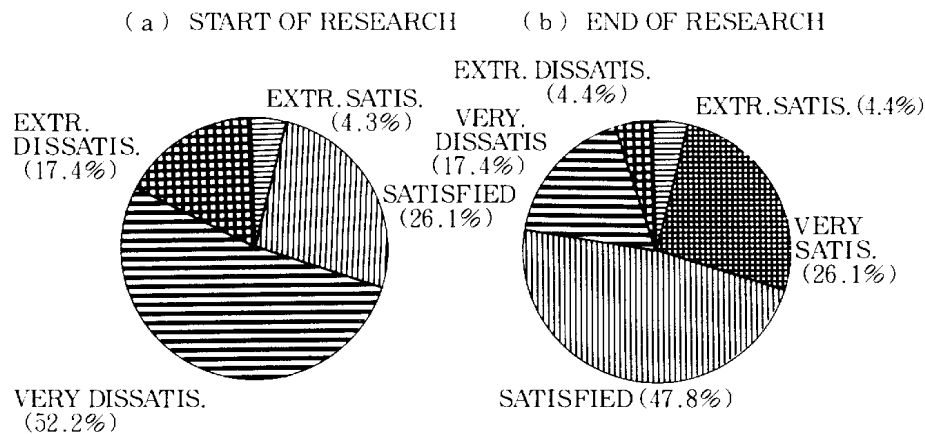


Fig. 3: Satisfaction of Speaking Ability  
Start of Research vs End of Research

*Preparation for Foreign Life & Study-All Studies (# 24):*

Slightly sufficient 34.8%, not sufficient 26.1%, sufficient 21.7%, very sufficient 13%, completely sufficient 4.35%

Sixty percent of the respondents felt that after returning overseas their English studies (both in and outside of school) were not sufficient



to prepare them for living and studying in a foreign country.

See Decade Born, Satisfaction-Start of Research and Satisfaction-End of Research for (VS) and English Studies-Outside College and Speaking Fluency-College for (S) correlations.

This was also strongly related to Importance of English-College (0.447,  $\alpha \leq .05$ ). The feelings the respondents had concerning their English education preparing them for living and studying overseas was positively related to how important they felt for medical (undergraduate) and graduate schools to offer more English courses.

*Importance of English-College ( # 25):*

Important 39.1 %, extremely important 30.4 %, very important 17.4 %, of little importance 8.7 %, not important 4.35 %

Almost half of the informants claimed that it is extremely or very important to offer more English classes in medical (undergraduate) and graduate schools.

As noted above this variable was strongly correlated to Satisfaction-High School English Classes, Satisfaction-College English Classes and Preparation for Foreign Life & Study-All Studies.

*Importance of English-English Instruction Type Increase ( # 26):*

<u>TYPE</u>	<u>TOTAL</u>	<u>TYPE</u>	<u>TOTAL</u>
conversation	17	vocabulary	2
pronunciation	5	reading	2
hearing	4	presentation	1
speech	2	drama	1
debate	2	calligraphy	1
writing	2	scientific- thinking	1

The respondents who chose extremely important, very important or important in question # 25 above were asked to write down the types of instruction they felt should be included in medical (undergraduate)

or graduate schools. Total is the number of times that type of instruction was cited.

### **Analysis of Groups With and Without English Studies Outside Regular School**

The respondents were divided up into two groups based on the criteria of having done other English studies besides what is regularly taught in high school and college, questions # 11 and # 13. Those without outside study experience are designated as WITHOUT, those having done such studies as WITH. Of the 23 doctors, 14 (60.9%) had done such studies—one (7.1%) studied outside only in high school, three (21.4%) studied outside in both high school and college, and 10 (71.4%) studied outside only in college. The main attitude variables were analyzed using percentage breakdowns to find similarities and differences between the groups.

Average age for the group who did such outside studies was slightly higher, 41 (A) years as compared to 38.9 (A) years (three members of the outside studies group and one member of the other group did not report their ages). Over half of the members for both groups were born in the 1950–59 decade. The majority of both also obtained their Ph. Ds. in the same decade, 1980–89.

#### *Total Years Spent Overseas (# 4):*

	< 1 year	1 year	2 years	3 years	> 3 years
WITHOUT	11.1%	44.4%	22.2%	11.1%	11.1%
WITH	7.1%	28.6%	57.1%	7.1%	0.0%

The majority who did outside studies did research for two years, one year more than the majority without studies other than regular classes.

*Speaking Fluency-College (# 17):*

	Fluently	Better/ Average	Average	Less/ Average	Poorly
WITHOUT	0.0%	0.0%	0.0%	55.6%	44.4%
WITH	7.1%	50.0%	7.1%	28.6%	7.1%

While 100% of the without outside English studies group felt less than average or poor in English speaking ability, only 35% of the group who did outside studies had the same feelings. See Fig. 4.

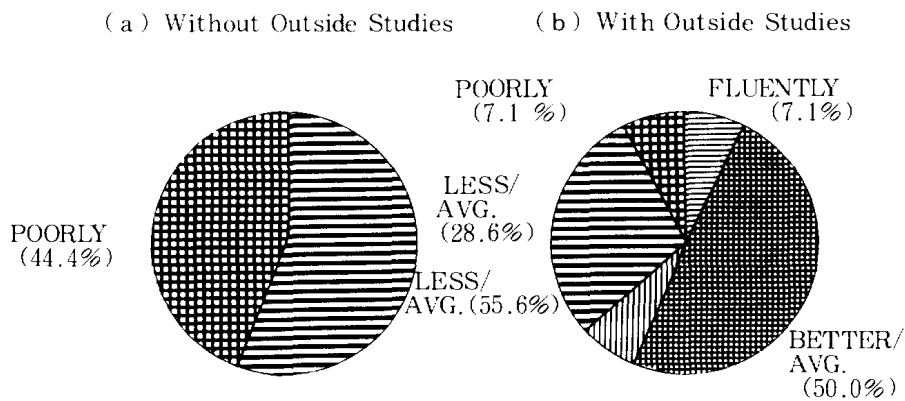


Fig. 4: Speaking Fluency - Without Outside Studies vs With Outside Studies

*Satisfaction-College English Classes (# 18):*

	Extremely Sat.	Very Sat.	Satisfied	Very Dissat.	Extremely Dissat.
WITHOUT	0.0%	0.0%	0.0%	66.7%	33.3%
WITH	7.1%	0.0%	28.6%	42.9%	21.4%

With this variable, also, 100% of the without group was very or extremely dissatisfied with their college classes. The group with outside studies tended to have the same dissatisfied attitudes, but almost 30% stated they were satisfied with their classes in school, Fig. 5.

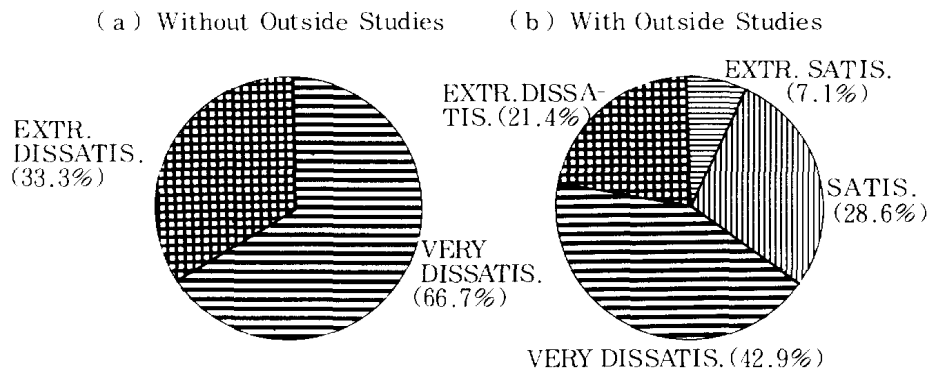


Fig. 5: Satisfaction of College English Classes  
Without Outside Studies vs With Outside Studies

*Preparation for Research-All Schools (# 19):*

	Com. Prepar.	Very Prepar.	Prepared	Slightly Prepar.	Didn't Prepare
WITHOUT	0.0%	11.1%	11.1%	33.1%	44.4%
WITH	0.0%	14.3%	14.3%	50.0%	21.4%

The two groups were in general agreement for this variable. Over 70% of both groups felt that their English classes (excluding outside studies) only slightly or didn't prepare them for research overseas. The percentage of respondents without outside studies who chose the Didn't Prepare category was twice that of the other group, Fig.6.

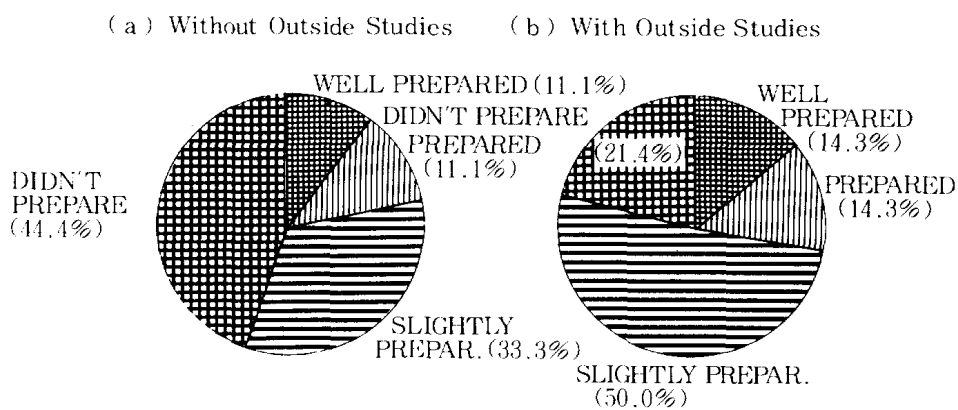


Fig. 6: Preparation for Research Overseas  
Without Outside Studies vs With Outside Studies

*Satisfaction-Start of Research (# 22):*

	Extremely Sat.	Very Sat.	Satisfied	Very Dissat.	Extremely Dissat.
WITHOUT	0.0%	0.0%	33.3%	44.4%	22.2%
WITH	7.1%	0.0%	21.4%	57.1%	14.3%

Results here were also in general agreement between the groups, Fig.7.

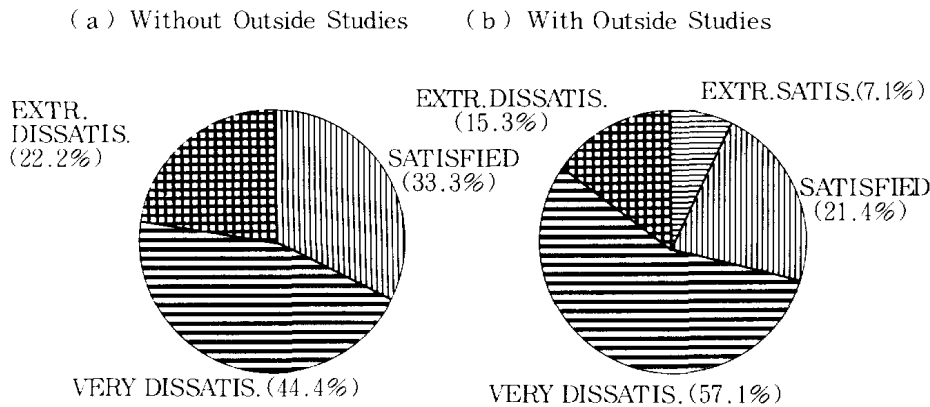


Fig. 7: Satisfaction of Research Overseas at Start - Without Outside Studies vs With Outside Studies

*Satisfaction-End of Research (# 23):*

	Extremely Sat.	Very Sat.	Satisfied	Very Dissat.	Extremely Dissat.
WITHOUT	0.0%	22.2%	44.4%	33.3%	0.0%
WITH	7.1%	28.5%	50.0%	7.1%	7.1%

The differences in results for this variable seem to show that although members of both groups had approximately the same feelings about their English speaking ability at the start of research, the group that studied English both in regular classes in school and outside too, tended to be more satisfied with their English speaking ability and only two members remained in the dissatisfied block as compared with over 30% of the other group in the same block, Fig.8.

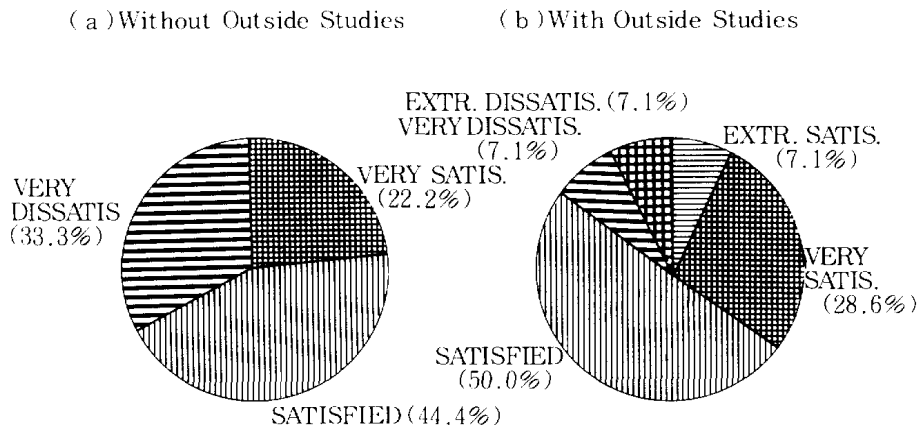


Fig. 8: Satisfaction of Research Overseas at End - Without Outside Studies vs With Outside Studies

*Preparation for Life and Study-All Studies (# 24):*

	Completely Suff.	Very Suff.	Sufficient	Slightly Suff.	Not Suff.
WITHOUT	0.0%	0.0%	11.1%	55.6%	33.3%
WITH	7.1%	21.4%	28.5%	21.4%	21.4%

Here, differences between the groups are clearly seen. Almost 90% of the group without outside studies felt that their English education was only slightly sufficient or completely insufficient to prepare them for living and study overseas. The group with outside studies, however, only shows 43% for the same block, Fig.9.

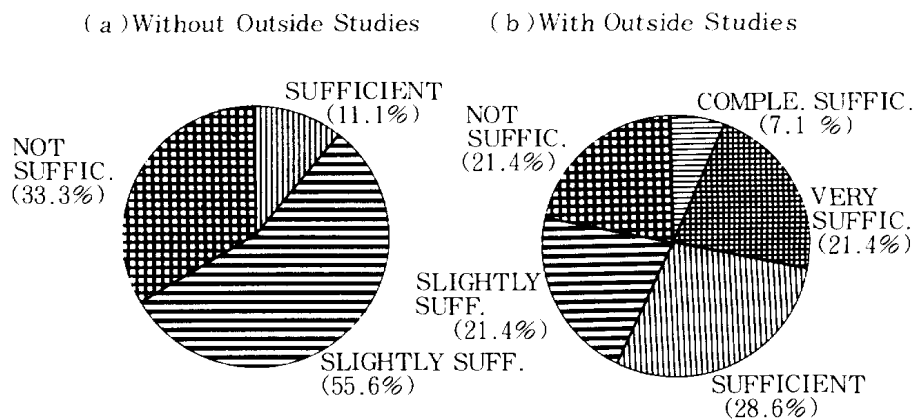


Fig. 9: Preparation for Life & Study Overseas - Without Outside Studies vs With Outside Studies

*Importance of English-College (# 25):*

	Ex. Import.	Very Import.	Important	Of Little Import.	Not Import.
WITHOUT	11.1%	33.3%	55.5%	0.0%	0.0%
WITH	42.9%	7.1%	28.5%	14.3%	7.1%

Finally, the group without outside studies showed a higher concern for colleges to increase English courses at both the undergraduate and graduate levels. Three members of the group with outside studies even thought this was of little or no importance, Fig.10.

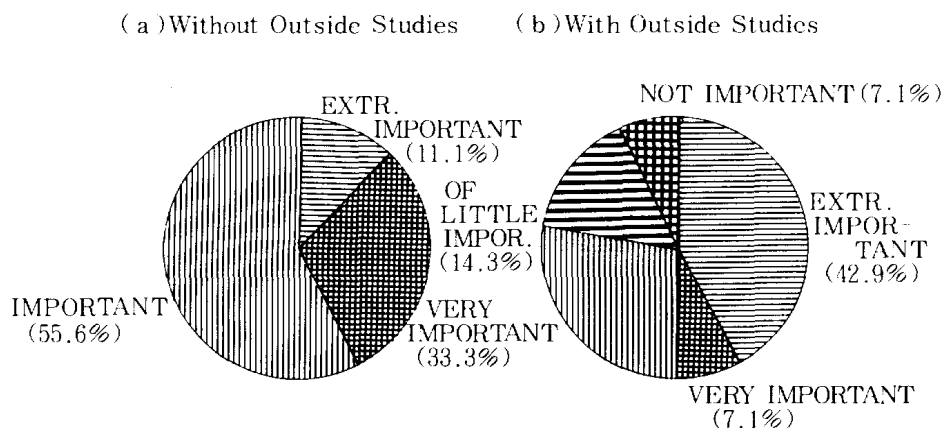


Fig. 10: Importane of English in College - Without Outside Studies vs With Outdies

**Discussion**

**Questionnaire**

Lemon<sup>4</sup> described how the interview and the self-administered questionnaire could be classified as “direct” methods of attitude measurement, because the content and format design was intended to gather information about a respondent’s beliefs, feelings and intentions with respect to the attitude object. Since the purpose of our study was to investigate how long professionals had studied English and what their attitude towards that education was, we felt that either the interview or self-administered questionnaire would be a suitable method for collecting this type of information. As mentioned in the **Introduction**, we finally selected the self-administered questionnaire

as the most appropriate investigative tool.

The authors selected the rating scale method of attitude measurement in our questionnaire because Lemon also states that rating scales can be used to measure strength of agreement with a series of opinion statements which together make up a scale, or they can be used to rate a single attitude object directly<sup>5</sup>. As stated in the **Methods**, there were six attitudes which are shown in Table 1.

### **Bias**

The authors feel that the basic design of this questionnaire proved to be effective in eliciting valid and statistically significant responses to our questions from this small pretest sample of medical doctors employed at a national university hospital who had done research overseas. However, we have discerned some weak points in design that need attention.

In this pilot questionnaire we grouped the questions into three basic series. The first covered vital statistics such as age, years of English education, years spent doing research overseas, etc. The second asked about the respondents' attitudes towards English in high school, college, outside of normal school, etc. And the third concerned feelings relating English education and speaking ability to the actual overseas research. The order in which some of these questions were arranged, however, appeared to influence or bias the respondents' answers to a series of questions in the survey. For example, when the correlations were analyzed for questions # 15 to # 18 (2nd series), a large bias was seen in the respondents attitudes towards how well they felt they could speak English after high school (# 15) because the respondents were asked to consider this attitude just after they had been asked questions on English studies outside regular school curriculum in college (1st series). This reversal in proper order was no doubt confusing and appeared to strongly influence their responses towards their feelings of fluency in high school, i.e., causing possible biases and creating stronger correlations than would appear if the



order were changed.

It was decided to rearrange the order in which these questions would be asked in the next questionnaire by ordering all vital and affective questions related to high school as one series and all questions related to college as a separate series and then arrange these series in a natural time frame sequence.

Overall responses to some of the questions gave clues for making a more concise questionnaire. Since no respondents had studied English in elementary school (# 6) and all had studied exactly three years in junior high school (# 7), we felt that this could be extrapolated to a larger population and decided to simplify the two questions into one asking how many years English was studied before high school. In addition, we decided to eliminate those questions regarding English education costs outside regular school curriculum because there were too many extraneous variables that could confound the response (i.e., inflation rates changing the value of money over time, parents paying the cost directly so the respondent doesn't know or remember, etc.).

In the series of questions regarding respondents' junior and senior high school English education, it was discovered that we needed to include another question, i. e., what type of school they had attended (public, private, etc.). Many private and international schools emphasize English studies more than public schools directly under control of the Ministry of Education and may require more English classes than advocated by government guidelines. Also, these schools may utilize foreign teachers because they are affiliated with western religious organizations, are founded by foreigners, or have as their goal the education of the foreign community within Japan. Whatever the case, Japanese also attend these schools and in fact, in many instances, these types of schools are considered to be elite and prestigious among Japanese, and many parents hope to have their children attend them.

## Predictions and Results

Our first major concern in this study is that Japanese lack self-confidence in speaking English and that this attitude is strongly influenced by the type of English education they receive. All survey questions that dealt with this problem confirmed this. Both Speaking Fluency-High School and Speaking Fluency-College showed that at least half and as much as 60% had such feelings, Fig. 1. Even stronger feelings came out in the question concerning satisfaction at the start of research overseas, Satisfaction-Start of Research. Seventy percent were either extremely or very dissatisfied with their speaking ability at that time. This dissatisfaction dropped to just over 20% by the end of their research, Satisfaction-End of Research showing an 'in country' attitude shift probably caused by increases in speaking ability, Fig.3. However, these two variables were very strongly related meaning the shift towards a more satisfied attitude was linear within the group.

Closely related to satisfaction of ability is satisfaction of the respondents' English education, especially feelings for the courses they took. Feelings of dissatisfaction here also were strong. In Preparation for Research-All Schools, 30% of the group stated that the sum of their English courses didn't prepare them at all and over 40% said that the courses only prepared them slightly for research overseas. Sixty percent also felt that all their English studies were not sufficient or at best only slightly sufficient to prepare them for life and study overseas, Preparation for Foreign Life and Study-All Studies. All of these results are particularly shocking when it is considered that doctors are, overall, high achievers in school and, thus, should be able to make sound judgments concerning instruction methodology, course content, etc. from a student's standpoint.

Our 2nd issue was the extent of English studies done in addition to regular classes in school. Here, we were surprised to note the low figures for outside English study done during high school, see English Studies-Outside High School. Perhaps the high average age of re-

spondents in this sample (40 years), meaning that many of the respondents were in high school over 20 years ago when going to cram schools, taking private lessons, etc. weren't as popular as now, accounts for this. However, the data for college (English Studies-Outside College) confirm our beliefs stated in **Introduction**. Over half did outside English studies. Combining the two groups together we note that 61% had such experiences.

There were big differences in attitudes between the groups of doctors who had outside studies and who didn't. Concerning fluency feelings in college, we found that the respondents with no outside studies were far less self-confident in their English ability (Fig.4). A similar result is seen in satisfaction feelings they had for their college classes (Fig.5). All respondents without outside study experience had either very or extremely dissatisfied feelings while the responses of the doctors with outside study experience included satisfied responses and were more mixed. Feelings as to whether all their school classes helped prepare them to live and study overseas showed similar trends, Fig. 9.

### **Conclusion**

This preliminary study was carried out to design and pretest a questionnaire that could be used to measure attitudes towards English education of Japanese professionals who had experienced research overseas. Also objectives for the research project as a whole were established and are being used as a framework for further studies. The questionnaire was found to be internally valid and, after some modifications in sequencing and inclusion of additional questions, a suitable instrument was developed. The authors are now ready to institute the next survey using the revised questionnaire on a much larger and more diverse sample.

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**Notes**

1. Both authors share equal credit and responsibility for the contents of this article.  
Chukyo University, Dept. of Liberal Arts
2. Shotoku Women's Junior College, Part-time Lecturer
3. Correlation with this variable must be viewed cautiously since only 17.4% of the sample, four respondents, reported doing English studies outside of high school.
4. *Attitudes and Their Measurement*, p. 55
5. *Ibid.*, page 85–86

### Questionnaire

We are conducting this survey to discern how Japanese medical professionals who have done postdoctoral studies in foreign countries view their English education. If you have done such studies overseas, it would be very much appreciated if you would take the time to fill out this questionnaire and send it back to us in the self-addressed, return envelope, as soon as possible.

Please include your name and other personal data. All information will be kept strictly confidential.

Thank you for your cooperation,  
Gary B. White, Shotoku Women's Jr. College  
Steve K. Clark, Chukyo University

Name: \_\_\_\_\_ Age: \_\_\_\_\_

*Please circle the appropriate letter.*

1. What decade were you born in?

- A. <1930 (<昭和 5)      D. 1950-59 (昭和 25 ~ 34)  
B. 1930-39 (昭和 5 ~ 14)      E. >1959 (>昭和 34)  
C. 1940-49 (昭和 15 ~ 24)

2. What decade did you receive your Ph. D. in?

- A. <1960 (<昭和 35)      D. 1980-89 (昭和 55 ~平成元年)  
B. 1960-69 (昭和 35 ~ 44)      E. >1989 (>平成元年)  
C. 1970-79 (昭和 45 ~ 54)

3. Department and University where Ph. D. was received.

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4. How many years did you spend overseas doing postdoctoral studies?

- A. <1 YEAR      D. 3 YEARS  
B. 1 YEAR      E. >3 YEARS  
C. 2 YEARS

5. How many years did you study English in your school years (from elementary school through graduate school)?

- A. <1 YEARS      D. 7-9 YEARS  
B. 1-3 YEARS      E. >10 YEARS  
C. 4-6 YEARS

6. How many years do you study English in elementary school?

- A. NONE      D. 2 YEARS  
B. <1 YEAR      E. >2 YEARS  
C. 1 YEAR



14. If you answered YES to question 13, please answer the following three sub-questions.

a) Where did you study English outside of medical (undergraduate) or graduate school?

- A. Overseas
- B. Cram School (塾)
- C. Private Lessons
- D. Self-study
- E. English Language School (英会話学校)

b) How many years did you study English outside of medical (undergraduate) or graduate school?

- A. < 1 YEAR
- B. 1 YEAR
- C. 2 YEARS
- D. > 2 YEARS

c) How much did your English study outside of medical (undergraduate) or graduate school cost (per year)?

- A. < 200,000/yr.
- B. 200,000-399,000/yr.
- C. 400,000-599,000/yr.
- D. 600,000-799,000/yr.
- E. > 800,000/yr.

15. How well could you speak English after finishing high school?

- A. FLUENTLY
- B. BETTER THAN AVERAGE
- C. AVERAGE
- D. LESS THAN AVERAGE
- E. POORLY

16. How satisfied were you with your English classes during high school?

- A. EXTREMELY
- B. VERY SATISFIED
- C. SATISFIED
- D. VERY DISSATISFIED
- E. EXTREMELY DISSATISFIED

17. How well could you speak English after finishing your medical (undergraduate) and graduate school?

- A. FLUENTLY
- B. BETTER THAN AVERAGE
- C. AVERAGE
- D. LESS THAN AVERAGE
- E. POORLY

18. How satisfied were you with your English classes during medical (undergraduate) and graduate school?

- A. EXTREMELY
- B. VERY SATISFIED
- C. SATISFIED
- D. VERY DISSATISFIED
- E. EXTREMELY DISSATISFIED

19. How well did your English classes in high school, medical school (undergraduate school) and graduate school prepare you for your postdoctoral studies overseas?

- A. COMPLETELY PREPARED      D. SLIGHTLY PREPARED  
 B. WELL PREPARED              E. DIDN'T PREPARE  
 C. PREPARED

20. What type of English instruction in high school, medical school (undergraduate school) and graduate school prepared you the most for studies overseas? Check ( ) as many as necessary.

- \_\_\_ Calligraphy Practice      (書き方の授業)  
 \_\_\_ Conversation Practice    (会話の授業)  
 \_\_\_ Grammar Instruction      (文法の授業)  
 \_\_\_ Pronunciation Practice    (発音の授業)  
 \_\_\_ Reading Practice          (読み方の授業)  
 \_\_\_ Recitation Practice        (復唱の授業)  
 \_\_\_ Translation Practice       (解釈の授業)  
 \_\_\_ Vocabulary Instruction    (語彙の授業)  
 \_\_\_ Writing Practice          (作文の授業)  
 \_\_\_ Other: \_\_\_\_\_

21. If you took English classes outside of high school, medical school (undergraduate school), or graduate school, please answer the following three sub-questions.

a) How well did your English classes prepare you for postdoctoral overseas?

- A. COMPLETELY PREPARED      D. SLIGHTLY PREPARED  
 B. WELL PREPARED              E. DIDN'T PREPARE  
 C. PREPARED

b) How well did the combination of English classes in and outside of high school, medical school (undergraduate school), and graduate school prepare you for postdoctoral studies overseas?

- A. COMPLETELY PREPARED      D. SLIGHTLY PREPARED  
 B. WELL PREPARED              E. DIDN'T PREPARE  
 C. PREPARED

c) What type of English instruction outside of high school, medical school (undergraduate school), and graduate school prepared you the most for studies overseas? Check ( ) as many as necessary.

- \_\_\_ Calligraphy Practice      (書き方の授業)  
 \_\_\_ Conversation Practice    (会話の授業)



- \_\_\_ Grammar Instruction (文法の授業)
- \_\_\_ Pronunciation Practice (発音の授業)
- \_\_\_ Reading Practice (読み方の授業)
- \_\_\_ Recitation Practice (復唱の授業)
- \_\_\_ Translation Practice (翻訳の授業)
- \_\_\_ Vocabulary Instruction (語彙の授業)
- \_\_\_ Writing Practice (作文の授業)
- \_\_\_ Other: \_\_\_\_\_

22. At the beginning of your postdoctoral studies overseas, how satisfied were you with your English speaking ability?
- A. EXTREMELY SATISFIED D. VERY DISSATISFIED
  - B. VERY SATISFIED E. EXTREMELY DISSATISFIED
  - C. SATISFIED
23. At the end of your postdoctoral studies overseas, how satisfied were you with your English speaking ability?
- A. EXTREMELY SATISFIED D. VERY DISSATISFIED
  - B. VERY SATISFIED E. EXTREMELY DISSATISFIED
  - C. SATISFIED
24. After returning from your postdoctoral studies overseas, how sufficient did you think your English studies (both in and outside of school) prepared you to live and study in a foreign country?
- A. COMPLETELY SUFFICIENT D. SLIGHTLY SUFFICIENT
  - B. VERY SUFFICIENT E. NOT SUFFICIENT
  - C. SUFFICIENT
25. How important is it for medical schools (undergraduate schools) and graduate schools to offer more English courses (both required and elective)?
- A. EXTREMELY IMPORTANT D. OF LITTLE IMPORTANCE
  - B. VERY IMPORTANT E. NOT IMPORTANT
  - C. IMPORTANT
26. If you chose A, B, or C in question 25, what type of English courses school be include (write as many as you wish)?

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Please comment freely on your English education and its relation to your studies overseas.

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Thank you very much for your cooperation in this survey. If you have any questions or comments about it, feel free to write them below or contact us directly.