Levels of Various Affective Learning Factors in a Computer Assisted Language Learning Classroom

CALL環境における日本人の大学生の英語学習意欲予備調査 II

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Abstract

Levels of various affective learning factors (Extrinsic Motivation, Intrinsic Motivation, Anxiety, and Personal Differences) related to learning English in a Computer Assisted Language Learning (CALL) classroom were examined. All the participants were university freshmen in a liberal arts department at a small private university in Japan. Some of the students were just beginning a CALL study program, and the rest of the students were scheduled to take the same program later in the year. All the affective learning factors examined were found to be significantly correlated, with the exception of Anxiety and Personal Differences, with showed no significant correlation. In an attempt to better understand the underlying causes of the affective

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learning factors examined, a number of questions related to the participants' backgrounds were asked as part of the survey. The effect of previous experiences on affective learning factors is mixed. Some of the categories that are traditionally expected to give significant results, such as gender and achievement, were not, of themselves, good indicators, although they played an important role when combined with other variables. Conversely, questions related to positive educational experiences in junior high and high school, such as travel abroad, interaction with English teachers, or self-perceived study habits, had an effect on the level of affective learning factors exhibited by students in a CALL environment. A better understanding of the presence and origins of affective language learning factors could help teachers in considering students' needs when designing curriculum or writing a classroom syllabus, and could also facilitate better classroom placement testing.

要旨

この論文では、昨年から引き続き英語を学習する大学生に焦点をあて，コンピュータを使用した言語学習(CALL)環境における4つの異なる視点（外的動機，内的動機，不安，個人的なアイデンティティー）間の関係を調査した。昨年の調査結果では，コンピュータを使用した言語学習(CALL)環境において，生徒は外的・内的両方の動機を持ち，内的動機が外的動機をやや上回る事がわかった。外的動機・内的動機と不安に関しては，多くの場合に有意な相関関係が認められた。しかし，個人的なアイデンティティーに関しては，上記の3つの視点と相関関係がほとんど認められなかった。

今回の調査では、感情的な学習動機の根本をより良く知るために、被験者の背景に関連した選択問題をいくつか設定した。前回の調査から、学習動機にはいくつかの要因が関連していることがわかっている。性別や学力など大きな要因であろうと予想されたものは、統計学的に有意義ではなかったが、他の要因と組み合わせて考えることができた。

学生の学習動機要因やその背景をより良く知る事が、カリキュラムやシラバスの作成、クラス分け等に役立つと考えられる。

Keywords: language learning motivation, affective learning factors, CALL, student needs, placement testing

キーワード：コンピュータ (CALL)，学習動機要因，ニーズの分析，学生調査

Introduction

Why are some college freshmen in Japan arriving at school and displaying a myriad of problems related to the six-year secondary language-learning program dictated by the Ministry of Education? Why, after all that time, are the outcomes so low, and why do so many students display what seems to be a state of despondence when it comes to participating in English classes at the college level? As an English teacher, I have had to deal with the fallout of this problem for many years. However, this research project is not aimed at directly addressing the question of what is wrong with junior high and high school English education in Japan. Rather, given the well known shortcomings of the secondary education system, when it comes to English the aim of this research project is to better define some of the problematic outcomes and propose possible solutions.

Assumptions

Briefly, some of the core assumptions for doing this research are:

1) Levels of motivation and anxiety have an effect on a student's language learning outcomes.

2) Levels of motivation and anxiety have an affect on a student's classroom performance.

3) Levels of motivation and anxiety can be given consideration by the teacher in order to present the student with a more optimized learning environment.

4) Learning situations that fail to take into account levels of motivation and anxiety are especially problematic when students are put in situations that are not a good match for their affective learning mindset.

5) Problems related to motivation and anxiety often have predictable causes that are related to previous experiences in the secondary education system.

6) Problems related to motivation and anxiety are often related to expectations held by the students, and if addressed, can usually be worked out (improvement can be made).

7) The focus on affective learning factors is important for both students who are succeeding in their pursuit of language, and students who are experiencing learning difficulties related to motivation and anxiety.

This list is not intended to be exhaustive, simply indicative of both where I am a coming from and where I hope to go with this research.

Research Questions and Hypotheses

This study addresses four specific Research Questions as follows:

1) Is it possible to define and measure levels of affective learning factors using a survey?

2) If, in fact, differences in affective learning factors can be shown to exist and can be measured in a reliable and valid way, then the second Research Question is, 'Is there a relationship among the various factors?'

3) The third Research Question is, 'What is the origin of affective learning factors? Are there certain background conditions or situations that can give rise to the presence of affective learning factors?'

4) Finally, this study investigates the role of Achievement in on levels of affective learning factors. The fourth Research Question to be explored is how levels of Achievement might influence corresponding levels of affective learning factors.

Purpose and Direction of the Research

Teaching English as a foreign language in Japan presents teachers with many challenges. Some are related to cultural differences, some have direct ties to Japan's history (Kibler, 2012), and some are related to the act of learning a foreign language. Traditionally, the role of establishing linguistic skills, such as the understanding of vocabulary and grammar have been emphasized (Taber, J. 2008). Starting in the 1950's, the audio-lingual method gained popularity. This happened against the backdrop of a major shift in language teaching away from more behavioral based notions of language learning to more complicated, cognitive concepts of language learning

being an innate skill based on things such as Chomsky's Language Acquisition Device and Universal Grammar.

In the midst of a growing movement aimed at paying attention to the natural, communicative aspects of language learning, as well as a focus on the innateness of language learning the Communicative Approach, which addresses the role of affective versus the more subjective aspects of learning and teaching, became of growing interest. Against this backdrop were the studies of Robert C. Gardner on the role of motivation and emotion in language learning. In 1985 Gardner introduced the Attitude/Motivational Test Battery (AMTB) and his well-known model of Socio-Educational Model, which have been the standards for many motivational studies.

Participants

On April 15, 2013 the survey items were completed by 113 university freshmen in two different fields of study at a liberal arts department at a small private university in Japan. See Table 1. The students were asked to fill out the survey at the end of one of their required English classes. The survey (Informed consent form and 23 survey items) takes between 10 to15 minutes to complete. See Appendix A. Participation was voluntary, and a completion rate of 87% was attained. Some of the students were just beginning a CALL study program, and the rest of the students were scheduled to take the same program later in the year

Table 1

*Gender * Department Crosstabulation*

		Department		Total
		Communication	Design	
Male	Count	**31**	**21**	**52**
	% within Department	**47.7%**	**46.7%**	**47.3%**
Female	Count	**34**	**24**	**58**
	% within Department	**52.3%**	**53.3%**	**52.7%**
Total	Count	**65**	**45**	**110**
	% within Department	**100.0%**	**100.0 %**	**100.0 %**

*3missing values

General Design Classification and Identification of Variables

The proper design classification for this study would be a quasi-experimental, between groups design. The dependent variable is limited to the four constructs (Extrinsic Motivation, Intrinsic Motivation, Anxiety, and Personal Differences). The first Research Question is really a general question that could apply to any of the tests run during the study. If any of the tests gives a statistically significant result with reasonable internal and external reliability and validity, then it can be said that if affective language learning factors are present, they can be measured. The second Research Question is an associational question about the relationships among the constructs as measured by correlation. The third, and fourth Research Questions are difference questions. For question three the Independent Variable is a set of attribute variables, information

related to a participants' past school experiences or future expectations involving language-using situations. As the independent variables were all dichotomous an extensive series of independent sample t-tests was used to check for statistical significance. Some dichotomous background variables were also selected to run a 2x2 factorial ANOVA. For question four the Independent Variable is Achievement, and is defined as being either high or low based on the participants' test scores. The variable has four levels and can be tested with a one-way ANOVA.

Materials and Procedure

The survey consisted of two parts. The first part asked 13 questions related to the participants' backgrounds. The first two items asked for the participant to identify their gender and department. Six of the remaining items asked about experiences and situations related to the participants' junior high school and high school days. The five other items asked about non-academic topics related to language and culture, such as travel. The second part of the survey consisted of 19 items related to four separate constructs connected with affective language learning factors. Five of the items addressed Extrinsic Motivation, four addressed Intrinsic Motivation, four addressed Anxiety, and six addressed Personal Differences. Participants were asked to read statements related to an idea represented by the construct item, and then answer using a 5 point Likert scale of Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree. All the answers for both parts of the survey were entered into SPSS and analyzed.

Results, Exploratory Data Analysis

Before beginning any of the tests for inferential statistics an Exploratory Data Analysis was conducted to check all the survey items for any outliers, non-normal distributions, problems with coding, incorrect or missing values and errors inputting the data.

Reliability Statistics

The first part of the analysis focused on evaluating the strength and relationships of the four main constructs after the construct specific items had been used to create four summated scales (Extrinsic Motivation scale, Intrinsic Motivation scale, Anxiety scale, and Personal Differences scale.) The four main construct scales were found to have strong, positive linear relationships. They also had a strong reliability statistic, a Cronbach's alpha of 0.686, very near the desired figure of 0.70, which indicates totally satisfactory reliability. The deletion of any item, other than personal differences would cause the alpha level to fall. The removal of Personal Differences, on the other hand, would cause a rise in the alpha level to 0.823. See Table 2.

A Cronbach's alpha was then run for each of the items that made up each scale. For the Extrinsic Motivation scale items the reliability statistic was very high .81, and the removal of any item would only serve to lower the overall alpha level. For Intrinsic Motivation scale items the reliability statistic was also very high at .81, and the removal of any item, other than item 4, would only serve to lower the overall alpha level. The removal of item 4 would, in fact, raise the

Table 2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Extrinsic Motivation Scale	**41.4000**	**37.233**	**.765**	**.696**	**.403**
Intrinsic Motivation Scale	**43.7545**	**44.169**	**.643**	**.586**	**.513**
Anxiety Scale	**44.0545**	**55.685**	**.409**	**.405**	**.660**
New Personal Differences	**38.0000**	**53.505**	**.191**	**.142**	**.823**

alpha by .01. For Anxiety scale items the reliability statistic was high at .65, but below the desired alpha level of .70. The removal of any item would only serve to lower the overall alpha level. In computing the Cronbach's alpha for Personal Differences, it was seen that the reliability statistic was a low, .471. However, the removal of the first item (Personal Difference 1) would cause the scale's reliability figure to rise to .702, and based on that information, a new scale was calculated with Personal Difference 1 deleted.

Correlating the Constructs

After the data were checked and found to meet the four assumptions that justify the use of parametric correlation tests (linearity of the relationships, independence, homoscedasticity and

normality of distribution) a correlation matrix was used to investigate the relationships between four affective language learning variables (Extrinsic Motivation, Intrinsic Motivation, Anxiety, and Personal Differences). Five statistically significant relationships were found to exist amount the four constructs. A strong correlation was found between the affective learning variables of Extrinsic Motivation, Intrinsic Motivation, and Anxiety. In all cases *p* was less than 0.005.

Table 3 **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Correlation Matrix for Extrinsic Motivation, Intrinsic Motivation, Anxiety, and Personal Identity

		Extrinsic Motivation	Intrinsic Motivation	Anxiety	Personal Identity
Extrinsic motivation	Pearson Correlation	**1**			
	Sig. (2-tailed)				
Intrinsic motivation	Pearson Correlation	**.765****	**1**		
	Sig. (2-tailed)	**.000**			
Anxiety	Pearson Correlation	**.600****	**.436****	**1**	
	Sig. (2-tailed)	**.000**	**.000**		
New Personal Identity	Pearson Correlation	**.280****	**.195***	**-.023**	**1**
	Sig. (2-tailed)	**.003**	**.040**	**.811**	

Although not as strong, the construct of Personal Differences correlated with both Extrinsic and Intrinsic Motivation. There was no statistically significant correlation between Personal Differences and Anxiety. See Table 3. The coefficients of determination for those relations that were statistically significant are shown in Table 4.

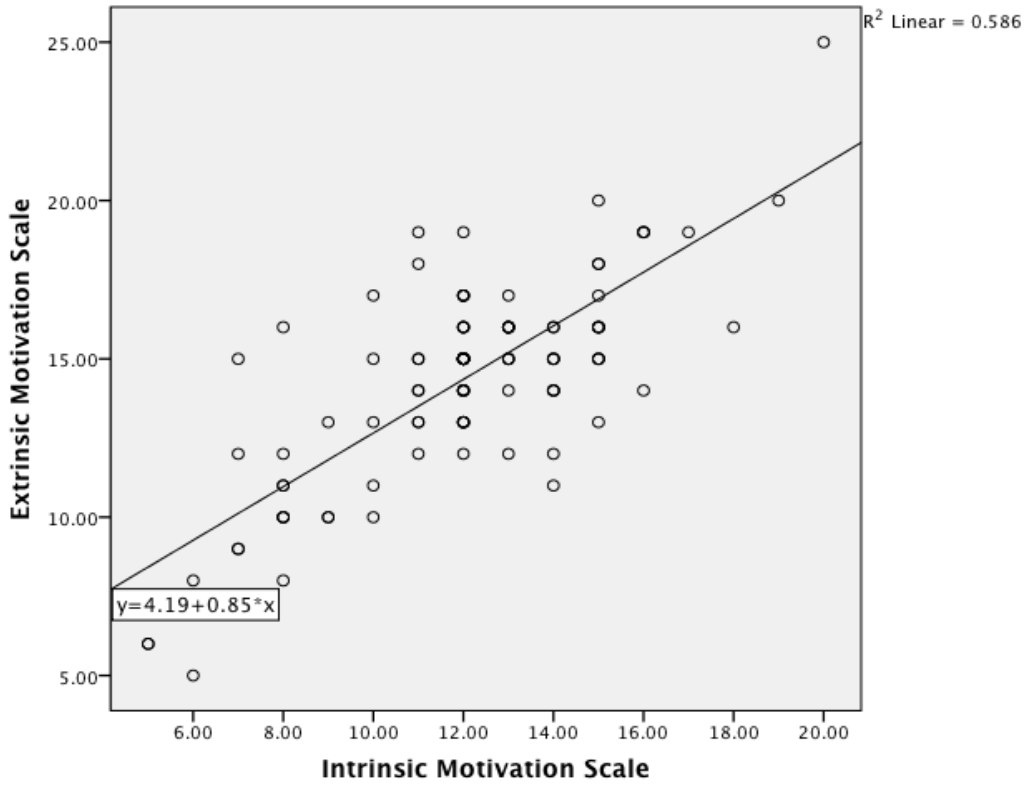
Table 4

Coefficients of Determination

	Extrinsic Motivation	Intrinsic Motivation	Anxiety	Personal Differences
Extrinsic Motivation		r^2= .59	r^2= .36	r^2= .09
Intrinsic Motivation			r^2= .19	r^2= .04

Table 5

Extrinsic Motivation – Intrinsic Motivation



To get a better visual understanding of the strength and direction of the relationship between Extrinsic Motivation and Intrinsic Motivation a scatter plot was produced. It clearly demonstrated that a strong positive linear relationship exists between the two variables. See Table 5.

Comparing the Means of Background Information and Constructs with Independent t-tests

The means of each of the 13 items related to the participants' backgrounds were compared to the means of each of the four constructs. When the data met the assumptions of normal distribution and homogeneity of variance the independent t-test was used. In several cases the data did satisfy the assumption of homogeneity of variance, and in those cases a Mann-Whitney U test was performed to compare the means. The total number of tests made were 52 (13 factors x 4 constructs). A total of 14 statistically significant outcomes were observed. See Table 6.

To see if a combination of background factors might have a significant effect on the dependent variable of Extrinsic Motivation, a 2X2 ANOVA was run. Two dichotomous items (yes-no) related to enjoying school were used as the independent variables (*Enjoyed Junior High School English* and *Have Always Enjoyed Going to School*). See Table 6. The same information is

presented in plot form. See Table 7. The findings are statistically significant, and we reject the null hypothesis.

Table 6

Background Information and Constructs

	Extrinsic Motivation	Intrinsic Motivation	Anxiety	Personal Differences
Department 0=Communication 1=Design	N/A	N/A	N/A	p<.001
HS English Achievement 0=Did well 1=Did not do well	N/A	N/A	N/A	p<.001
Enjoyed JH English more than HS English 0=yes, 1=no	t=2.11 df=108 p<.037	N/A	N/A	p<.05
Studied English Hard in JH&HS 0=yes, 1=no	N/A	N/A	N/A	p<.001
Negative experience w/ English teachers in past 0=yes, 1=no	t=-2.27 df=108 p<.05	N/A	N/A	N/A
Have traveled abroad 0=yes 1=no	N/A	N/A	N/A	p<.026
Has parent who traveled abroad 0=yes, 1=no	N/A	t=2.19 df=110 p<.031	N/A	N/A
Think English is important for job hunting 0=yes, 1=no	N/A	N/A	N/A	t=3.86 df=109 p<.001
Desire to travel	N/A	N/A	N/A	t=3.55

0=yes 1=no				df=109 p<.001
Have plans to travel 0=yes 1=No	T2.34 df=107 p<.021	N/A	N/A	t=7.60 df=108 p<.001
Have always enjoyed going to school 0=yes, 1=no	t=2.41 df=107 p<.018	t=3.71 df=110 p<.001	N/A	N/A

*Figures in red are the result of Mann Whitney U **Figures in blue are independent t-tests.

Table 7

Tests of Between-Subjects Effects

Dependent Variable: Extrinsic Motivation Scale

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	**152.523**[a]	**3**	**50.841**	**5.834**	**.001**	**.143**
Intercept	**10951.332**	**1**	**10951.332**	**1256.635**	**.000**	**.923**
jhsch	**94.259**	**1**	**94.259**	**10.816**	**.001**	**.093**
enjoysch	**67.375**	**1**	**67.375**	**7.731**	**.006**	**.069**
jhsch * enjoysch	**60.971**	**1**	**60.971**	**6.996**	**.009**	**.062**
Error	**915.055**	**105**	**8.715**			
Total	**23595.000**	**109**				
Corrected Total	**1067.578**	**108**				

a. R Squared = .143 (Adjusted R Squared = .118)

Comparing the Means of Achievement and Constructs with a One-way NOVA

Achievement was defined by the students' scores on a standardized English placement test. The scores were ranked so that there were four categories, Low=3, Below Middle=2, Above Middle=1, and High=0. The Extrinsic Motivation scale was the summated scores of all the survey items related to the construct. The results were

not statistically significant. See Table 8. The same output is represented visually in a plot. See Table 9.

Table 8

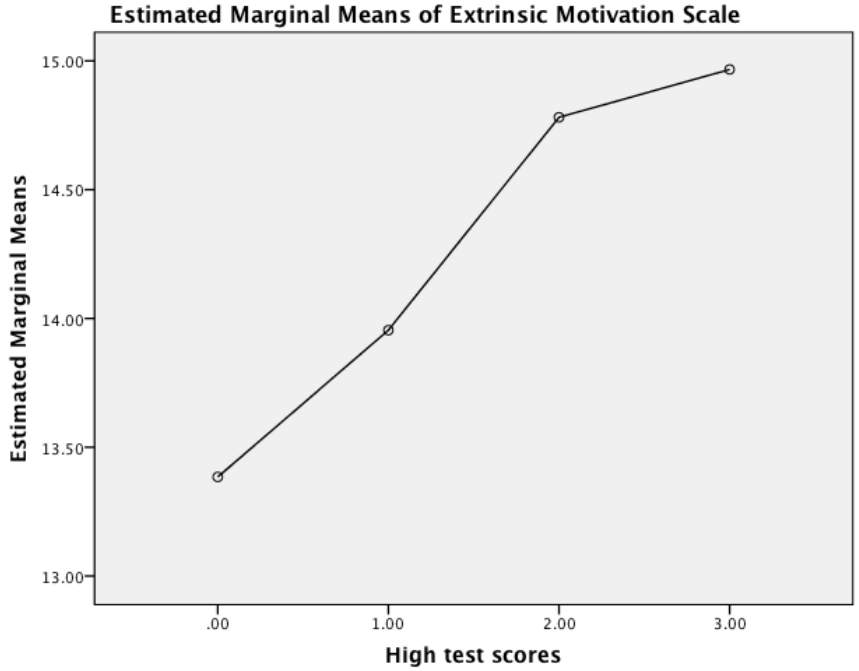
Tests of Between-Subjects Effects

Dependent Variable: Extrinsic Motivation Scale

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	**45.011**[a]	**3**	**15.004**	**1.527**	**.212**
Intercept	**21945.772**	**1**	**21945.772**	**2233.465**	**.000**
You don't have to report intercept and corrected model, see text.hiclass	**45.011**	**3**	**15.004**	**1.527**	**.212**
Error	**1041.544**	**106**	**9.826**		
Total	**23695.000**	**110**			
Corrected Total	**1086.555**	**109**			

a. R Squared = .041 (Adjusted R Squared = .014)

Table9



Discussion

First I would like to address my research questions.

Research Question 1

1) *Is it possible to define and measure levels of affective learning factors using a survey?*

I think this study has shown that it is possible to get results that are reliable, valid, and have important implications for teachers and students. It can be frustrating when many of the statistics are either non-significant, or have small effect sizes. This study had two major limitations in measurement. One is the need a bigger N, for more power. Another is the need to drastically re-design the survey and using a mixed methods, three phase approach. This would probably produce a much more informed instrument.

2) *Is there a relationship among the various factors (constructs)?*

A relationship does exist among the constructs. Extrinsic and Intrinsic are almost perfectly linearly correlated. Anxiety comes in a close second, while Personal Differences fails to give impressive results. The correlations for these four constructs have been previously tested three times, and have given very similar results every time. Personal Difference had more items and thus a bigger score when summated. The need to strengthen all the measurements is obvious. Not just N. There is a need for more items that will yield wider, more diverse scores. The standard deviations of the means for all the constructs were too close, probably because the elicited answers are too similar! The 3-point Likert scales used were not effective. Many

participants chose the middle option, which is very different from a 'yes' or 'no' answer. This results in non-significant outcomes.

3) *What is the origin of affective learning factors? Are there certain background conditions or situations that can give rise to the presence of affective learning factors?*

The investigation of background conditions provided important insight into the origins of participants' individual affective learning factors. These results show that there are two important things that need to be made clear and communicated to both teachers and students alike.

1) Participants who reported positive school experiences tended to have stronger/higher levels of motivation. The same is true for participants who reported positive exposure or strong intent to travel (and thus, use language).

2) Conversely, participants who reported having bad experiences with teachers were very prone to having low levels of motivation.

So, what is the point for teachers? The effects of positive and negative classroom experiences are far reaching. In the end, a student's emotional perceptions of previous learning experiences may prove to be at least as important, if not more so, to what was actually learned. This seems to be especially true in terms of the effect these perceptions have on the motivations for future learning. Hopefully, further investigation will continue to provide results that will show, emotional outcomes and participating in meaningful activities matters. This would seem to be a good place to start if you are hoping to affect meaningful change in the classroom.

4) *How do levels of achievement influence corresponding levels of affective learning factors?*

The results here were not impressive. Further study is called for in order to cast light on the possible effects achievement has an effect on motivation. It may also be possible to show that the effect goes both ways, that motivation has an effect on achievement.

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Appendix

Appendix A

Informed Consent

このアンケートは、あなたの名前を口外することはありません。 結果は個人の成績や評価とは関係有りませんが、学会や論文の研究データとして使用してよければ、お名前をご記入ください。

Name _____Number _____Date_____

Part 1 - Background Information

1. 出身の高等学校は H.S - Public, Private
   公立高等学校 私立高等学校
2. 高等学校で英語は Level of English in H.S. - good, not good
   良く出来た 良く出来なかった
3. 中学校の英語の授業より高等学校の授業の方が Enjoyed JHS English - yes, no
   楽しかった 楽しくなかった
4. 中学校または高等学校時代に英語をよく勉強 Studied English hard - yes, no
   し た しなかった
5. 先生との関わりで英語の勉強が嫌いになった経験が
   had problems with an English teacher - yes, no
   あ る な い
6. 私は海外へ行ったことが Has traveled abroad - yes, no
   あ る な い
7. 父親、または母親が海外へ行ったことが Parents have traveled abroad - yes, no
   あ る な い
8. 就職のために英語は Thinks English is important for job hunting - yes, no.
   必 要 必要ない
9. 大学在学中に海外へWants to go abroand while in college - yes, no
   行ってみたい 行ってみたくない
10. 大学在学中に海外へ
    Will go abroad (has plans to go abroad) while in college - yes, no
    行くつもり 行かないつもり
11. 昔から学校へ行くことが
    Has always enjoyed going to school (found school enjoyable) - yes, no
    楽 し い 楽しくない

以下の各文について、「1.全くそう思わない」「2.あまりそう思わない」「３．どちらでもない」「4.ややそう思う」「５．非常にそう思う」のうち、該当する番号を1つ選び○で囲んでください。 ラボ ＝（コンピュータ ラボ）

Part 2 Constructs

1) The value of learning English in a Computer is that I will be able to do well on tests.

コンピュータで英語を学ぶことは試験のときに良い点が取れることである。

1　2　3　4　5

全くそう思わない　非常にそう思う
Strongly Disagree　Strongly Agree

2) One reason to study in the computer lab is so that I will be able to enjoy using my language skills much more outside of the classroom.

教室外でもっともっと語学の能力を使う楽しみがあることが、ラボで学ぶ理由の一つである。

1　2　3　4　5

全くそう思わない　非常にそう思う
Strongly Disagree　Strongly Agree

3) Studying in the Computer lab is a good way to prepare for making friends in a foreign language.

ラボでの学習は、外国語を話す友達を作るのには大変良い方法だ。

1　2　3　4　5

全くそう思わない　非常にそう思う
Strongly Disagree　Strongly Agree

4) I want to study in the computer lab so that I can get the language skills I need in order to better understand other cultures.

他国の文化をより理解するために必要なスキルを得ることができるので、私はラボで勉強したい。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

5) I feel good about studying in the Computer Lab because it will help me get better results in the classroom.

ラボで学習は、クラスで良い成績をとることができるので、私にとっては良い学習法である。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

6) By studying English in the Computer lab I can broaden my understanding of the world (broaden my horizons).

ラボで英語を学ぶことによって、他の国を理解する視野を広げることができる。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

7) I feel more relaxed when I study in the Computer Lab than when I study in a classroom with a teacher.

教室で先生から教えて貰うより、ラボで学ぶ方がよりリラックスする。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

8) Ten years from now I will probably be very active in my use of English.

今から１０年後にも、私は積極的に英語を使っているだろう。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

9) One nice thing about studying in the computer lab is that I do not have to talk in front of other people.

ラボで学ぶことの素晴らしいことは、人前で話をしなくともよいことだ。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

10) Studying in the Computer Lab is a very good way for me to prepare for entering the work force after I graduate.

ラボで学ぶことは、卒業してから仕事をするにあたって、有効な学習法である。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

11) I want to spend more time studying in the Computer Lab because it is the best way for me to learn English as a school subject.
ラボ（コンピュータ ラボ）での学習に多くの時間を使うことは英語の学習に一番いい方法である。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

12) I feel more in control when I study in the Computer Lab than when I study in a classroom with a teacher.
教室で先生から教えて貰うより、ラボでの学習はより管理されていると感じる。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

13) English is an important part of my identity.
英語は私の個性の重要な部分である。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

14) College English is very competitive but studying the Computer Lab can give you an advantage.
大学での英語の授業で良い成績を取ることは厳しいが、ラボでの学習はアドバンテージをあなたに与える。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

15) English is one of my favorite School subjects.
英語は学校の授業の中で好きな教科の一つである。

1 2 3 4 5
|_____|_____|_____|_____|
全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

16) When I study in the computer I feel comfortable because I do not need to worry about having a dictionary.
コンピュータで学ぶことは、辞書を持っていく心配をしなくともよいので、気楽な気分になる。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

17) English study is not as fun as using English to communicate.

英語を勉強する時は、英語でやりとりする時より楽しくない。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

18)) I always enjoy learning English regardless of the setting.

私はいつも身の回りの雰囲気を気にすることもなく、英語の勉強。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree

19) I would rather spend time with other people who are very interested in English.

英語に興味をもっている人とより多くの時間を共有したい。

1 2 3 4 5

全くそう思わない 非常にそう思う
Strongly Disagree Strongly Agree