

Learning Motivation and English Language Ability: An Empirical Study of Japanese University Students 学習動機と英語学力との相関に関する実証的研究

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〈要 旨〉

本稿は、2004 - 2005 年度に実施した学習動機と英語学力との相関に関する調査結果に基づいている。この調査は、本学学生の英語力、学習動機、学習方法の3点の相関を調べることによって、学生の英語学習に対する意識の実態を把握し、授業改善に役立てることを目的とした。実用英語検定試験（英検）をプレイスメントテストとして使用し、それとは別に語彙・文法テストを3回（4月、7月、1月）行うことによって年間の学力の変化を観察した。また、市川伸一（2001）が開発した学習動機テストと学習方法の自己評定も語彙・文法テストと平行して行った。その結果、本学学生の場合には意欲的であるが、今後、英語に関する知識を断片的でなく、基本的な文法力を高める必要があることが判明した。また、学習方法が身につけていけば学力は高いという一般的な認識を裏付ける結果も得られた。これらの結果は、学習方法や失敗から学ぶ方法の指導を授業に取り入れることの必要性を示唆するものである。学習方法を改善させれば、それと相関関係にある学習内容に関する動機が高まり、さらに英語学力も向上するものと考えられる。

I Introduction

This paper reports on the findings of a study on English foreign language ability and learning motivation conducted in 2004/5 under the Ministry of Education, Culture, Sports, Science and Technology's Special Research Grant Project for Private Universities. The purpose of the study was to analyze the English ability of the students in Den-en Chofu Gakuen University and better understand the relationship between their English ability, learning motivations and their views about approaches to learning. Moreover, we wanted to test the common assumption that English ability is positively correlated with stronger 'content-attached'

¹ Sections of this paper were previously published in: Foreign Language Ability and Learning Motivation Research for Pedagogical Development, Ministry of Education, Culture, Sports, Science and Technology Special Research Grant Project for Private Universities

motivations and more positive approaches towards study. This was done using an Eiken (STEP: Society for Testing English Proficiency) placement test, a grammar-vocabulary test, and an adapted learning motivation survey. The research was carried out to help guide future curriculum and syllabus design and teaching methodology as part of overall pedagogical development of the college's English language programme.

II Background

This study ensued from a pilot survey on learning motivation (Hisamura, 2004) carried out in 2003. That survey applied a questionnaire based on a "dual-factor learning motivation model" (36 questions) and a "self-assessment of learning methods" (24 questions) developed by Ichikawa (2001), with an adapted focus on English learning. It also used a STEP placement test to assess English ability.

In the pilot survey, several issues arose that were addressed in this latter research. First, we revised the learning motivation test by reviewing questions which came out with extremely low values and/or which sounded inconsistent with Ichikawa's contents (See Appendix 1 for a list of questions used in this survey). Second, we used the Likert five-grade scale method for multiple-choice questions, as recommended by Ichikawa; whereas a three-grade scale was used in the pilot survey. Third, the validity and reliability of the survey results in the pilot were low because of the survey's timing, the small sample number, and the bias from sampling only students enrolled in English classes. To avoid these problems, this time we used a larger and broader sample of students from the social-welfare department. We also placed primary focus on the analysis of the whole sample and secondary focus on the analysis by individual class. Finally, since the pilot survey could not determine the relationship between learning proficiency and learning motivation as the STEP placement test given in April was the only measurement of students' language ability, we employed a vocabulary and grammar test styled after the 'Mochizuki test' (Mochizuki et al., 2003), which was given three times over the course of the academic year.

III Survey and Tests

A: Motivation Survey

As in the pilot study, Ichikawa's learning motivation test played a key role in this research. Below we can see diagrammatic representation of his model.

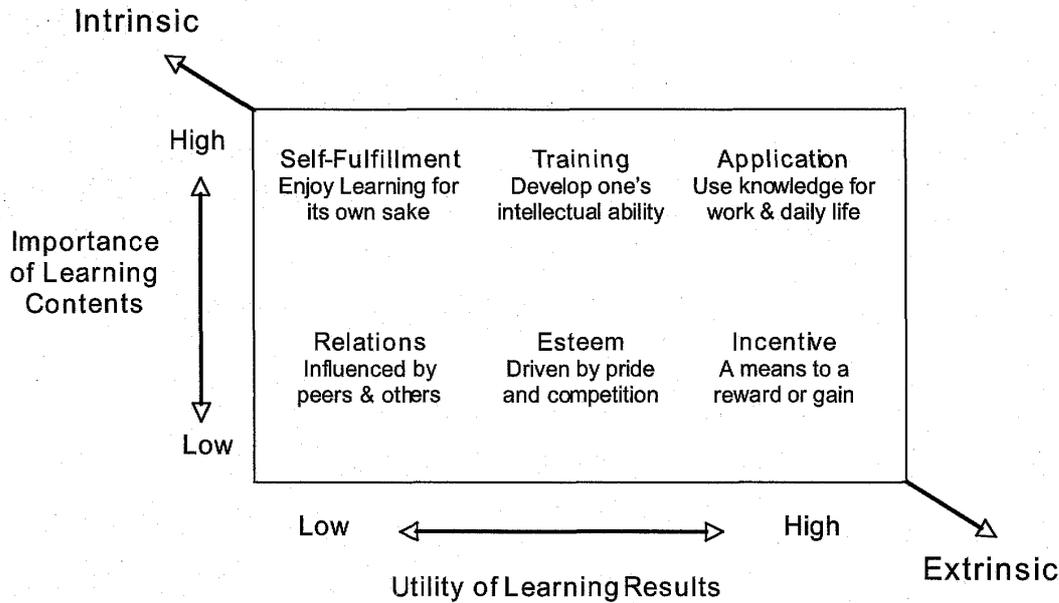


Diagram 1: Dual-factor Learning Motivation Model (Translated from source: Ichikawa 2001:48)

Learning motives have, conventionally, either been considered within the framework of the traditional extrinsic-intrinsic classification or from a management psychology perspective, which highlights economic, achievement, and amity motives among others. Contrary to these more deductive approaches to learning motivation, derived from theories in psychology, Ichikawa (1995, 2001) took an inductive approach in which he sorted out data collected from a long questionnaire given to learners. He realized from his survey that the actual range of human learning motivations could not be accommodated within the traditional psychology framework or the taxonomies from management psychology. Instead, using a multi-dimensional classification approach derived from basic scientific theorization methods, he came up with a dual-factor model in which one factor is the degree to which learners view learning in utilitarian terms, and the other is how much learners are concerned with the contents they learn. By applying these two factors into a two dimensional display, he proposed the dual-factor model with which learning motivations are classified into six orientations (see Diagram 1).

In terms of the typical intrinsic-extrinsic framework, in Ichikawa's model

Intrinsic motivation can be translated as ‘self-fulfillment oriented’ and extrinsic motivation as ‘incentive oriented’. The diagonal line running from ‘self-fulfillment’ to ‘incentive’ in Diagram 1 represents the intrinsic-extrinsic divide.

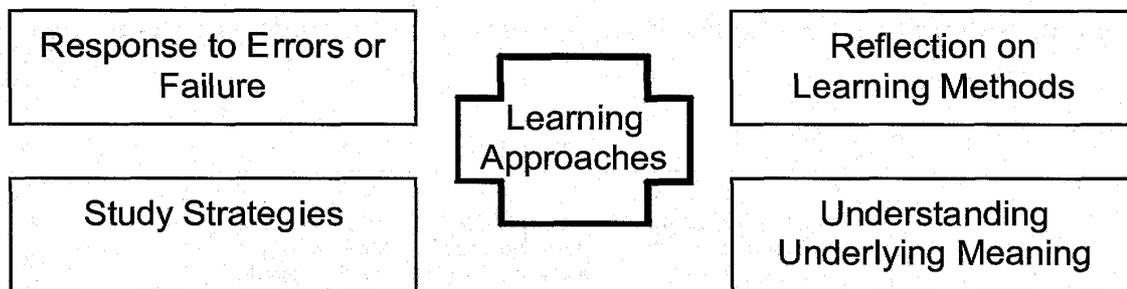


Diagram 2: Learning Approaches (Adapted from source: Ichikawa 2001:48)

For each of the six motivational categories, he developed six questions to measure the strength in degree of orientation and to find within each sample the correlation between these motives. When the questionnaire was administered to high-school students or college students, the correlations between the upper three orientations were stable at around 0.5 to 0.6, and the lower three orientations showed similar results; however, no correlations between the upper three and lower three orientations were found.

From the results of the correlation analyses, Ichikawa classified the upper orientations as ‘content-attached’ motives and the lower ones as ‘content-detached’ motives. Ichikawa further developed ‘learning self-assessment’ questions, assuming ‘content-attached motives’ relate to personal approaches to learning. The survey results showed a constant correlation of 0.4 to 0.5 between ‘content-attached’ motives and approaches to learning but often no correlation between ‘content-detached’ motives and approaches to learning. Diagram 2 shows the four areas of self-assessment for approaches to learning.

As mentioned, in this survey, Ichikawa’s questionnaire was adapted for our focus on English learning (see Appendix 1). For example, the question [I have a desire to learn something new.] in Ichikawa’s survey was expressed as [I want to learn English words and expressions I don’t know.] in our survey.

The Learning Motivation survey was administered three times (April, July and January) over the 2004-5 college year, the questions were given in random order and data was compiled and processed by Prof. Shinobu Sakai of Chiba University

of Commerce.

B: Eiken (STEP) Test

The STEP placement test C was given to all first year college students in April to determine students' class level for required English and English Conversation courses. This test consists of 80 grade pre-2, grade 3 and grade 4 level questions. Test components include knowledge of vocabulary, idioms and grammar, reading comprehension and listening.² Grade 2 and pre-2 of the STEP test are considered suitable levels for high school graduates, grade 3 for junior-high school graduates, grade 4 for students who have completed the second year of junior-high and grade 5 for those who have completed the first year of junior-high. Data processing was outsourced to the STEP test association.

C: Vocabulary and Grammar Tests

The vocabulary and grammar tests were administered three times (April, July and January) over the 2004-5 academic year. The tests, developed and processed by Prof. Shinobu Sakai of Chiba University of Commerce, each consisted of 40 grammar and 120 vocabulary questions. The three vocabulary tests (the so-called Mochizuki test) were created utilizing the Hokkaido University 7,000 Word Vocabulary Chart revised version, which has 7 frequency bands of 1000 words. For our purposes, the test utilized the bottom 4,000 words. Appendix 2 lists the areas examined in the grammar test.

Though these tests did not assess productive and comprehensive English language ability, they provided a standardized basis of assessment similar to the STEP Test, as discussed below, which aligns with the grammar-translation focus of junior and senior high school English education in Japan. Vocabulary questions, for example, only required students to choose an English word that best matched a Japanese equivalent. Grammar questions were of a gap variety that required the student to choose the appropriate usage or form of a word or phrase. There were no questions that required students to display their applied knowledge of English.

² For more on this test, see: <http://www.eiken.or.jp/placement/test/index.htmls>

IV. Survey Results

A. STEP Test

1) Grade Level Percentages

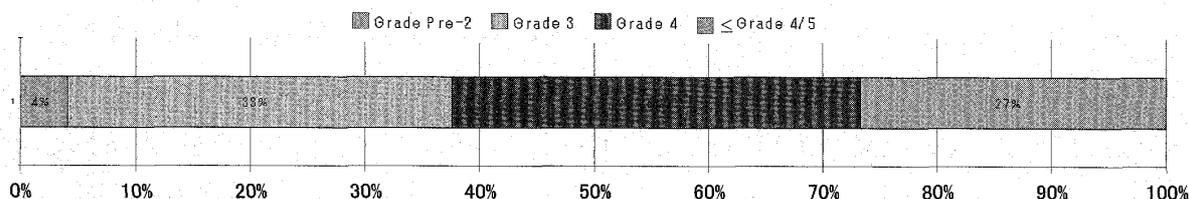


Figure 1. STEP Placement Test Student Grade Level Equivalency: N=222

The bar in Figure 1. shows the equivalent grade level percentages from the sample of 222 students. Each color corresponds to the percentage of students with that particular grade equivalency, based on the STEP association assessment. It should be noted that some students in the ≤ Grade 4/5 range did not achieve equivalency but potentially could if they sat for a regular STEP test.

“The Action Plan to Bring up English competent Japanese” announced in 2004 by the Ministry of Education and Science aims as a teaching guideline at raising all students’ English competency to grade 2 or pre-2 levels by the time of graduation from high school. From these results, it is clear that roughly 95% of students in the social-welfare department of our college have not acquired the expected high school graduate level English competency. Moreover, more than 60% have not even acquired the expected junior-high school graduate level competency.

2) Question Format Accuracy Rate

To get a clearer picture of why students had better or worse test results, we can look at the accuracy rate for each question format, as shown in Figure 2. Since only ten students or 4% of sample achieved a grade pre-2 equivalency, for data compilation purposes we have grouped them with grade 3 equivalency students. ‘Vocabulary’ refers to a question format where one is asked to choose the correct word or word form to complete a short sentence. Questions testing grammatical knowledge are included in this format. ‘Sentence’ refers to questions where one must put words for

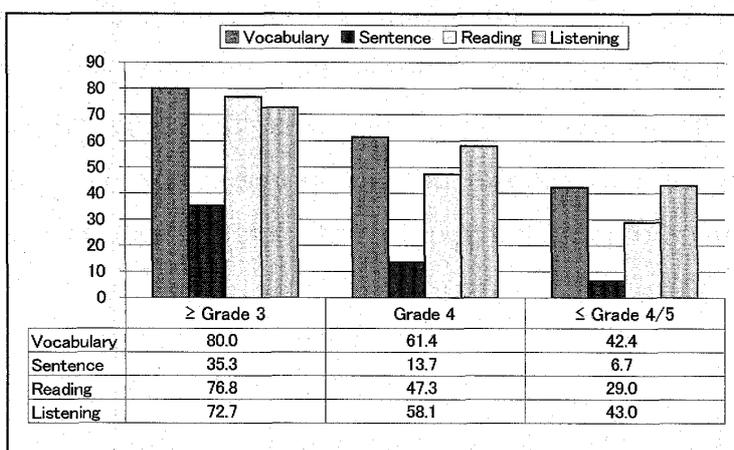


Figure 2. STEP Placement Test Accuracy for Specific Question Formats:

an entire sentence or a phrase in the correct order to make the sentence or the phrase semantically accurate.

'Reading' refers to multiple-choice questions, where one must comprehend the contents of a rather long passage to answer correctly. Finally, 'Listening' refers to multiple-choice listening comprehension questions for short passages and conversations.

As the grade level drops, naturally the accuracy of each question format also declines. Most noticeable is the low accuracy rate for 'sentence' questions across grade levels. The results suggest that students have a much harder time with questions that require they understand the fundamentals of English to answer correctly, such as word order and sentence structure, than with question that require only fragmental knowledge of English.

One likely reason why students have trouble with 'sentence' type questions is that they did not spend enough time at the junior-high school stage reproducing basic English sentences in oral and/or written form.

As we might have expect, the data also showed that once standardized, as the grade level declines the 'sentence' questions' accuracy decreases at a relatively higher rate than that for other question formats. This confirms that the lower the students' overall English competency level, the harder it is to construct sentences. Basically, a majority of students do not understand English word order, which is significant since word order plays a semantically definitive role in English. Most of the students are at a stage where they have only fragmental grammatical knowledge, understand basic word meanings and comprehend easy reading or listening sentences. Such students most likely failed to master the fundamentals or remembered those incorrectly at the initial stages of junior-high school English learning.

B. Vocabulary Test

The overall results are represented in Figure 1. Here we see that over 80% of students scored an accuracy of between 80-100% for the 1000 word level, but recorded much lower

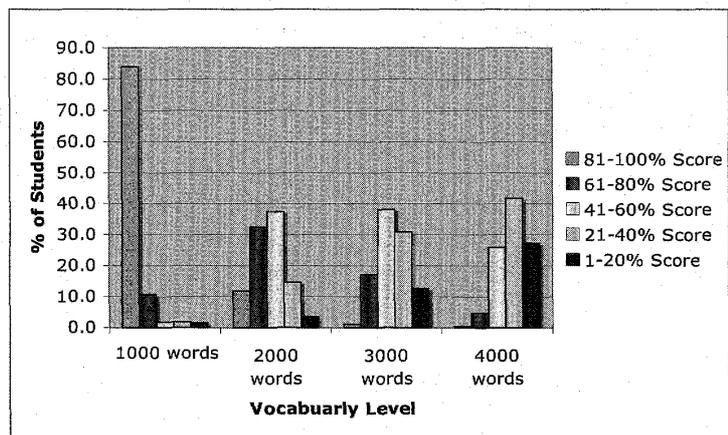


Figure 3. College Cumulative Vocabulary Test Results

accuracy rates for all other levels. These results match with the STEP placement test results, which showed that about 40% of the 4-year college students have a STEP Grade 3 equivalency.³

An examination of upper, middle and lower percentile groupings shows more clearly word band variations.

If we compare Figures 4-6, we find that the drop in accuracy at the 2000 word band was significantly less for the upper percentile group. Here the loss of accuracy was 22%, whereas the middle percentile group's accuracy dropped by 34% and the lower group's, by 37%. The drop in accuracy for the 3000 and 4000 word bands across all percentile groups was more regular, indicating at this difficulty range the upper percentile group too had exceeded its foundational lexical knowledge.

Though no statistically significant increases in percentile group results were recorded over the course of the study, it is interesting to note that when April and January results are compared, students in the upper percentile group showed a greater tendency towards advancement than students in the middle or lower percentile groups. On the other hand, students in the lower percentile group were more likely to see their scores decrease. This aligns with the learning motivation

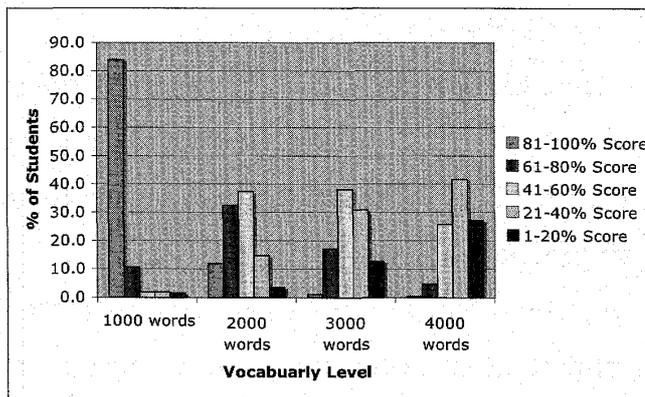


Figure 4. College Vocabulary Test Results (Upper Percentile)

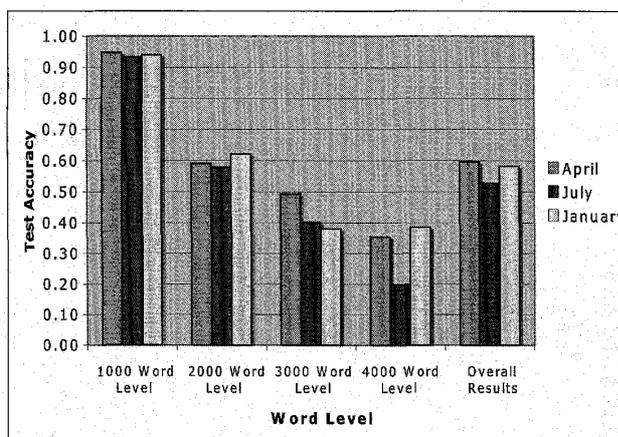


Figure 5. College Vocabulary Test Results (Middle Percentile)

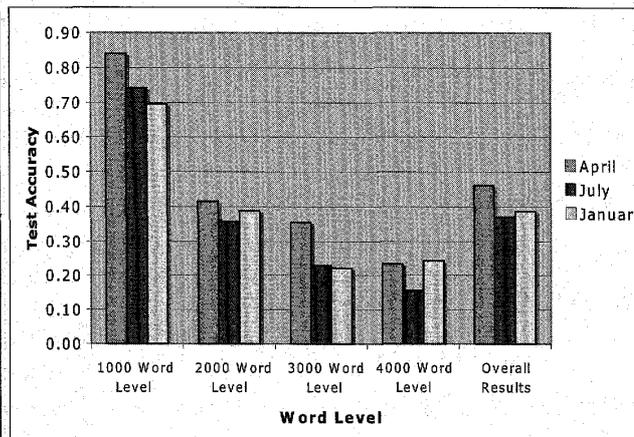


Figure 6. College Vocabulary Test Results (Lower Percentile)

³ The STEP Grade 3 test requires about a 2000 word English vocabulary and 60% or higher is a passing score. On our vocabulary test, about 40% of students were able to score 60% or higher for the 2000 word range.

study results, (see below) where we find that the upper percentile group placed greater importance on the four 'learning approaches' than the other two groups.

While a study of word classes was beyond the scope of this research, it could provide valuable information on students' strengths and weaknesses and would facilitate instruction. Furthermore, the results also indicate that the vocabulary test itself needs refinement. For example, the July test results for the 4000 word level are from 10-30% lower across all groups. A closer examination of the questions shows a significant disparity in the syllabic length, the technical complexity and the mix of possible answers. Greater consistency among questions would surely benefit assessment.

C. Grammar Test

With the emphasis in secondary school English on grammar, we might predict that the grammar test results for the college students would be higher than vocabulary results, especially at the level 1 and level 2 difficulty ranges. This did not bear out. Cumulative college grammar scores (see Figure 7.) show that the upper percentile group scored an average of 65% on the three tests, compared with 72% on the vocabulary tests. The middle percentile group scored 9% less, registering 48%, and the lower percentile group results were 5% lower than those of the vocabulary test, at an averaged 36%.

We also found that there was less discrepancy between groups on the grammar test than the vocabulary test.

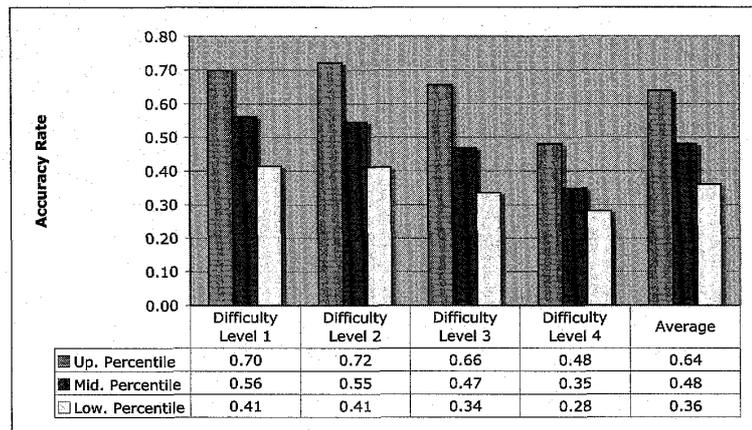


Figure 7. Percentile Group College Grammar Scores By Difficulty Range

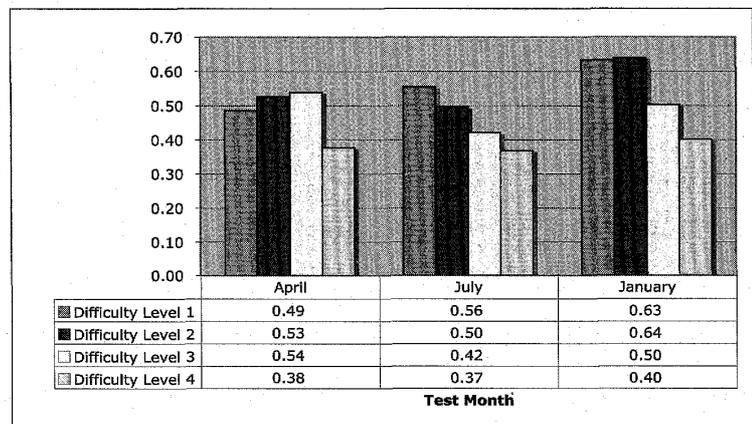


Figure 8. College Grammar Scores By Difficulty Range For Each Test Period

In addition, the results indicated that for all percentile groups, grammar ability is very inconsistent across difficulty levels. That is, scores did not decrease evenly in accordance with increased grammar complexity, in contrast to what we would have expected. For example, Figure 8 shows that scores for difficulty level 3 questions were actually higher than those of level 1 in April and level 2 questions were higher than level 1 questions in January. As the STEP Test revealed, students have not established a knowledge of the most basic English grammar patterns taught in the first two years of junior high school, such as the use of simple present tense for describing facts. This contrasts with the vocabulary test results, where close to 84% of college students scored over 80% at the 1000 word range and the top 33% scored close to 80% at the 2000 word range. This said, individually there was a strong correlation of 0.72 between grammar and vocabulary results, as would be expected.

Students who did well on the vocabulary questions scored relatively well on grammar questions, indicating a greater overall English ability and the mutually

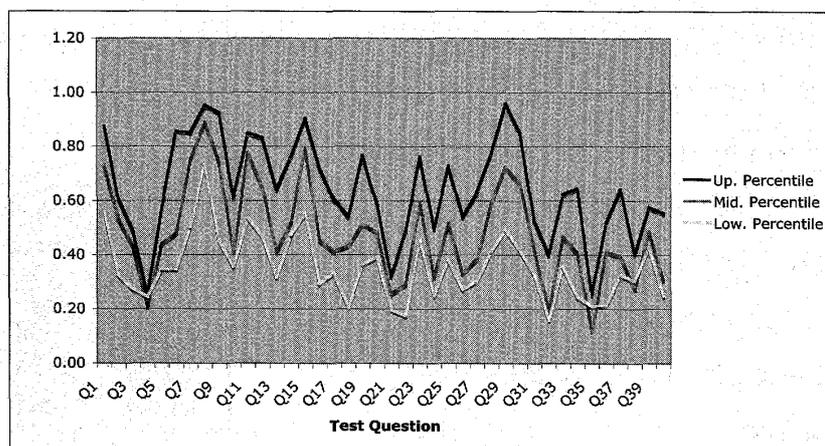


Figure 9. Per Question Averaged Grammar Test Results For Percentile Groups

supporting link between the two skill sets. Still, the variation between questions was significant, as Figure 9. illustrates. The upper percentile group scored over 80% on just 9 of 40 questions and the middle percentile group registered over 80% accuracy on just two patterns, one of which is commonly found in secondary school conversation texts—making suggestions using “shall we” with the base form of verbs.⁴

The relationship between averaged group results also showed a strong correlation of 0.88, highlighting the fact students scored relatively higher or lower accuracy on the same types of questions. The parallel undulation of Figure 9. represents this clearly. A uniformed secondary school EFL education may explain such a result. When the 3 test results of a single percentile group were analyzed

⁴ This pattern may also be more familiar because of a popular movie, titled *Shall We Dance?*

though, a weak correlation of under 0.4 was registered. Again, this shows that even for the same type of question, on respective tests students may have had markedly different results.

D. Correlation Between STEP and Grammar-vocabulary Tests

We have observed so far the results of the STEP test and the grammar & vocabulary tests separately. In reality giving such aptitude tests four times during an academic year is rather unfeasible and unnecessary. It should be sufficient to give assessment tests once at the beginning and once at the very end of the year using test questions of the same format and contents base. In this way, the results may be easily compared and less testing would lift the burden off of students' shoulders. To determine the feasibility of such an assessment procedure, we examined the correlation between the STEP test and the grammar and vocabulary tests.

As mentioned, there were differences in question formats between these tests. Thus we examined the relationship between the sum of accuracy for 'vocabulary' and 'sentence' in the STEP test (total of 200%) and the total score of the grammar & vocabulary test (total score of 200 points). We determined this was a reasonable approach because 'vocabulary' and 'sentence' questions on the STEP test require grammatical understanding and vocabulary knowledge to answer. We examined the correlation between the STEP test results and the vocabulary & grammar test

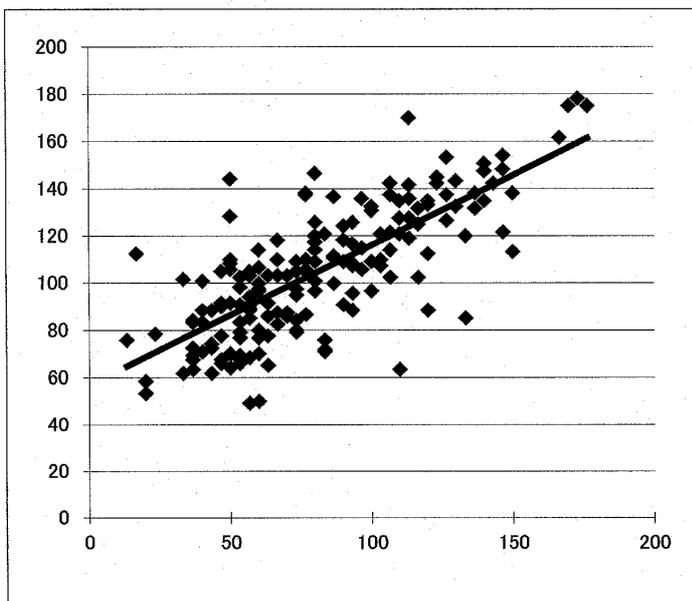


Figure 10. Correlation between Step test and Vocabulary / Grammar Tests

results of 177 first year college students who took the vocabulary & grammar test in January. The correlation coefficient 0.7544 is derived from the two test results and the distribution of data shown in Figure 10. reveals a strong positive correlation between the two tests.

While it is necessary to give consideration to that fact that the STEP placement test also consist of 'reading' and 'listening'

questions, the result above indicates it is indeed possible to use the grammar & vocabulary test once revised for consistency as both a beginning-of-the-year placement test and a scholastic achievement test given at the end of academic year. The advantages of doing so are: i) as already developed, it is easy to alter and adjust the questions, ii) it is less costly than the STEP test, and iii) with OCR equipment, marking and compilation of data is instantaneous.

V. Learning Motivation Survey Results

A. Learning Motivation

The learning motivation survey discussed in this chapter deals with the “dual-factor model outlined at the beginning of the paper. Figure 11. shows the summarized results of the questionnaire given in April, July and January. Students were asked 36 questions (six for each factor) on ‘learning motivation’ and 24 questions (six for each factor) on ‘learning approaches’ in random order using the Likert five-grade scale. The motivational orientations are listed left to right

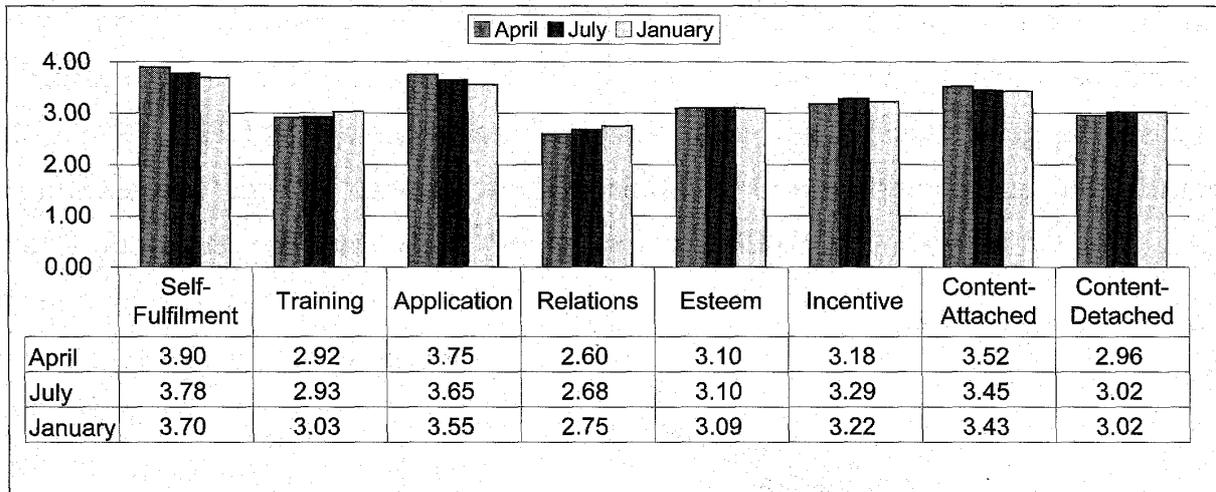


Figure 11. Correlation between Step test and Vocabulary/Grammar Tests N= Apr. 228, Jul. 226, Jan.182

from self-fulfillment to incentive. ‘Content-attached’ motivations are the combined results of self-fulfillment, training and application and ‘content detached’ motivations are those of relations, esteem and incentive for the three test periods.

On the whole ‘content-attached’ motives showed slightly higher values than ‘content-detached’ motives; however, ‘content-attached’ motives declined from April to January. This trend might have resulted from the decrease observed in self-fulfillment and application over the course of the study. On the contrary, ‘content-detached’ motives showed in July and January a very slight rise from

April.

There is a rather strong correlation with a coefficient of 0.4 to 0.7 between the 'content-attached' motives of self-fulfillment, training and application. Though among these, training is noticeably lower. It remains speculation, but the reason why only a limited number of students consider English learning as part of intellectual training might be that they are still at the rudimentary stages of language learning and have not reached the cognitive stage where they mentally interact with the content matter. It is considered useful to enhance training orientation by reading logical sentences and literature, or through speech-making, debate and/or discussion practice to learn and practice the logical structure in English. Most students at our college though have not reached that level yet. It is one of our instructional goals to make the students understand that mastering English requires commitment and constant efforts and we encourage them to meet such a challenge. The increase in January compared to April can be considered a sign of such recognition.

Self-fulfillment and application on the other hand gradually declined over the year. According to Ichikawa (2001) self-fulfillment is equivalent to conventional intrinsic motivation. Since learning English is more satisfying if one understands the language or can speak it, the results could be interpreted as a sign that students have actually not been able to fulfill their intrinsic desire regarding English learning. The same could be said regarding the application motive, where the decline may indicate students have grown to feel there is less need for English in their daily life or future careers. Or it might indicate that students are disappointed they have not acquired English as quickly as hoped.

The three 'content-detached' motivations also correlated with each other. The relationship-oriented motivation had the lowest value yet it increased slightly from April to January. This orientation expresses the wish to do something when others do it or to be with friends. The increase could be attributed to the deepening focus on relations rather than English learning. Esteem, in which one is concerned with how they appear to others, showed consistency. Incentive orientation, which is the wish for prizes or praise and matches the traditional 'extrinsic' motivation, showed some variation over the study period and was the strongest of the 'content-detached' motivations. This reinforces the need for instructors to praise students when they make good efforts.

B. Learning Approaches

The results for the questions on learning are shown in Figure 12. Of note is the generally low self-assessment, where no value is above 3.3. Learning approaches are said to correlate positively with 'content-attached' motivations. As values for 'content-attached' motivations were also relatively low, the results here were not unexpected. The rather low English proficiency of the student sample also bears on these results as the data explained below on the relationship between English

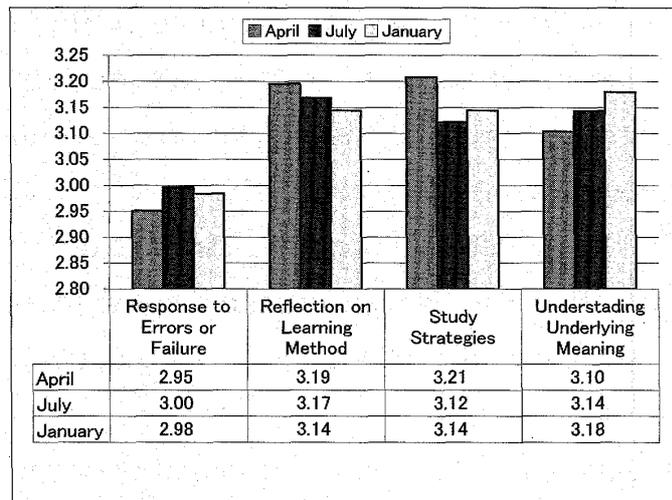


Figure 12. Changes in Self-assessment of Learning Approaches

ability and learning approaches shows.

Another result that stands out is the relatively lower valuation for response to errors or failures. This measures whether students are inclined to overcome their mistakes or find reasons for not succeeding. The result indicates a tendency among students to give

up right away when they cannot figure something out. This result resembles that of the intellectual training orientation of learning motivations, though only a weak correlation of 0.2 was found between the two.

The changing values for the other three areas are slight and cannot be considered significant.

VI. Learning Motivation Survey and Grammar-vocabulary Test Results Correlation

As mentioned, it is generally thought that students who demonstrate higher academic performance tend to hold stronger motivation towards learning and to have attained more effective study habits. One of the purposes of this study was to examine this hypothesis to see if it also holds true with our students. Below, we look at the comparative results based on three English ability levels determined by ranking scores on the grammar and vocabulary tests and identifying an upper, middle and lower percentile group. We only reviewed the results from the January testing period since there was a high degree of consistency throughout the course of the study.

A. Relationship between English Ability and 'Content- attached' Motives

Table 1. shows the average values for the three orientations which make up 'content-attached' motivation for the three ability levels. Figures in brackets are values standardized by assigning the largest value for each orientation as 1.00. The total on the right is the sum of the averages of the three orientations.

LEVEL	Self-Fulfillment	Training	Application	Total
Upper Percentile	4.02 (1.00)	3.00 (0.97)	3.78 (1.00)	10.81
Middle Percentile	3.75 (0.93)	3.06 (0.99)	3.54 (0.93)	10.35
Lower Percentile	3.50 (0.87)	3.10 (1.00)	3.56 (0.94)	10.16

Table 1. Content-attached motivation: by English ability (standardized values) N: 210

The sums of the averages found on the right in Table 1. are notable. Since there are medium to strong correlations between the three 'content-attached' motives, any difference in the total value reflects differences between ability levels. The results here thus suggest that indeed students with higher English ability place more importance on 'content-attached' motives. This said, the correlation between these motives and the upper percentile group's test results was positive but weak (0.2).

When we look at each specific motivation, we find, somewhat surprisingly, that the scores for training were actually higher for the lower group, Figure 13. shows this graphically. This suggests that our upper-level students have not reached the stage where they are able to use English for more academic purposes. Otherwise, as expected, self-fulfillment, which is equivalent to intrinsic motivation, protrudes

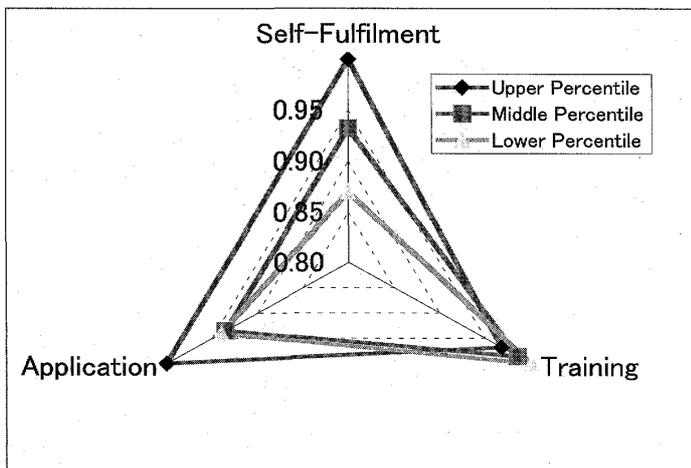


Figure 13. Content-attached motivation: by English Ability

most clearly on the graph for the upper group. The clear difference demonstrated here convinces us, at least based on our research, that stronger intrinsic motivation is positively related to academic performance level (correlation coefficient 0.31), though we did not identify the nature of this

synergy.

B. Relationship between English Ability ‘Content-detached’ motives

Level	Incentive	Esteem	Relations	Total
Upper Percentile	3.28 (0.99)	3.16 (1.00)	2.51 (0.86)	8.95
Middle Percentile	3.30 (1.00)	3.17 (1.00)	2.65 (0.91)	9.12
Lower Percentile	3.25 (0.98)	3.06 (0.97)	2.93 (1.00)	9.24

Table 2. Content-attached motivation by English ability (standardized values) N: 210

Table 2. shows the average values for the three orientations which make up ‘content-detached’ motivation for the three ability levels. The overall averages are low, and the summed values show an inverted ranking based on ability to those from ‘content-attached’ motivation. This is not extraordinary as ‘content-detached’ and ‘content-attached’ motivation are not positively correlated.

Figure 14. shows the standardized averages of each orientation. While we find little difference for incentives and esteem among the ability levels, the lower and middle groups place greater importance on relations. This said, we can not conclude that relations-oriented students will necessarily have a low English ability, since the motivational value is less than 3. Only in relative terms, we find that this is a factor distinguishing greater or lesser ability.

‘Content-detached’ motivations tend to be considered less desirable as they are not related to study contents or enthusiasm for study; however, these motivations can be significant for students who have habituated to conditions maladjusted for study or for

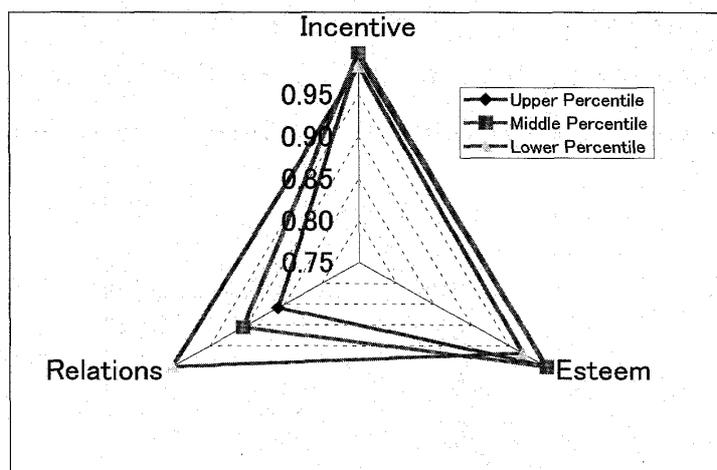


Figure 14. Content-detached motivation: by English Ability

children of a young age, according to Ichikawa (2001: 61). Among students in the lower percentile group, in particular, there presumably are many who have come through a less conducive English learning environment. For those students, their

‘content-detached’ orientation can be used to improve lessons, by giving prizes and praise and avoiding criticisms that might dampen enthusiasm for study. For students who are always in the same group of friends, by motivating one of them other group members may become more motivated towards English learning.

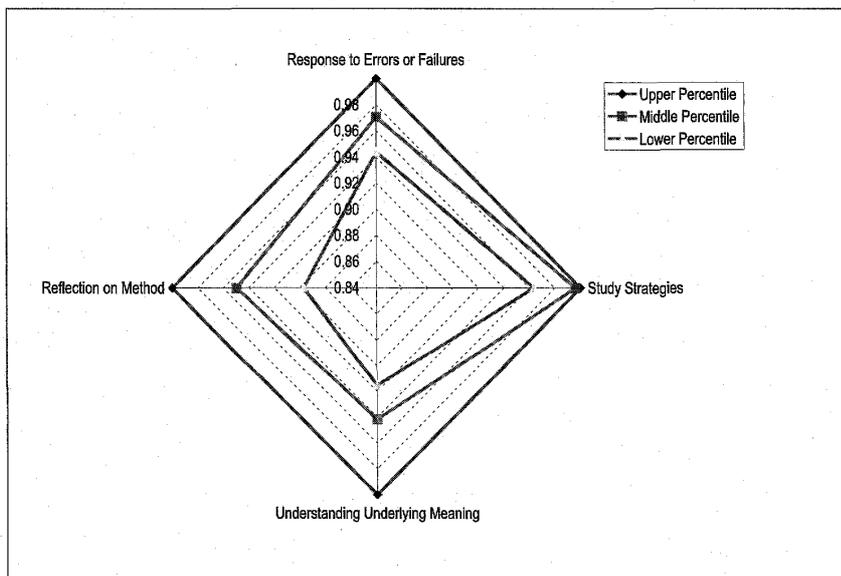
C. Relationship between English Ability and Learning Approaches

Level	Response to Errors or Failures	Study Strategies	Understanding Underlying Meaning	Reflection on Method
Upper Percentile	3.09 (1.00)	3.22 (1.00)	3.32 (1.00)	3.38 (1.00)
Middle Percentile	3.00 (0.97)	3.21 (1.00)	3.12 (0.94)	3.21 (0.95)
Lower Percentile	2.92 (0.94)	3.11 (0.96)	3.04 (0.92)	3.03 (0.90)

Table 3. Content-attached motivation by Academic aptitude level (standardized values) N: 210

Learning approaches are positively correlated to ‘content-attached’ motivations, with a correlation coefficient of 0.45. Though as Table 3. shows, even the upper percentile group does not have a strong orientation towards learning approaches. This attests to the fact that the English competency of the upper percentile group is only about junior-high school graduate level and the sample as a whole is not strong academically. Even though learning approaches are low in values, when you look at Figure 15., which represents standardized values, we can still see the differences between the ability levels.

Only for study strategies is there some convergence, which may be attributed



to the small sample size or small range of ability levels. Otherwise, we see clear differences between percentile groups.

We can presume from the above results that even in a sample group without a high academic orientation, differences in the attitude towards

Figure 15. Self-assessment of Learning Approaches: by Academic aptitude levels

learning approaches contributes to discrepancies in English ability. In this regard, the correlation coefficient for the test results and learning approaches resulted in a “somewhat correlated” figure of 0.3. If the upper percentile group contained students with high school graduate level English, then it is likely a greater range of results would have occurred. Still, at least from the results here, we can say the study has confirmed the common supposition that there is a close relationship between higher achievement and more active approaches to learning.

VII Conclusion

There are many factors that affect foreign language learning. In this study we have examined the relationship between students' English ability, learning motivation and learning approaches. From this study, we have confirmed that the majority of our college students still have a very limited and patchy English ability. They know some words but not others that one would expect them to comprehend; they know some grammatical patterns yet do not have any real grounding. Bits and pieces resonate, but with no underlying rhythm or melody. Indeed, the majority have a junior high school level.

Noticeable achievement will not come easily, especially for the middle and lower percentile groups, in part because they have not formed strong attitudes towards EFL learning and are not significantly motivated to improve their ability through concerted effort. Also, they have come through a schooling environment that was not suited to their aptitudes, interests or needs and has in some ways failed them. This said, the results of the motivation survey showed that students overall, and especially those in the upper percentile group, find the study of English relatively self-fulfilling and see that there is practical application in their daily life and future careers. If educators can draw on this motivation by continuing to provide enjoyable, easy to understand and practical lessons and materials suited to students' English ability, indeed advancement for a majority of the students is likely. In addition, students will be well served if instructors also provide guidance on study approaches and methods as the study showed many students lack a knowledge of how to best learn and improve. In particular, they need study strategies and a more positive approach towards errors. The motivation survey revealed that many students believe that another way of studying will not make

a difference. Yet if they are shown that alternative study habits will bring better results, they may be more willing to put in the necessary effort. This can lead to greater self-fulfillment and an increased English ability.

While the vocabulary and grammar test results could not provide an assessment of changes in students' English ability over the course of the study, they did provide a basis to better understand students' strengths and weaknesses. Throughout the period of their secondary school EFL education, what did they actually learn? By ascertaining this, we can now better assess just where pedagogical efforts should be concentrated and consider how best to increase students' English knowledge and ability.

If they are to bridge the gaps in their knowledge and actually form a foundation from which they can apply their English, to begin with they will need much greater exposure to graded listening and reading materials. The findings here should assist in choosing those of an appropriate level. Further, learning activities and lessons must be meaningful and yet recurring, so that what students learn becomes more ingrained and readily available for use. In addition, whenever possible EFL learning and practice should move from reception to production, so students learn to express themselves in English.

Though analysis of the data revealed the percentile group with higher ability tends to maintain stronger 'content-attached' motivations and a better attitude regarding approaches to learning, it remains a future task to examine further factors that lie behind these tendencies. Also, it would be beneficial to determine actual study habits in addition to one's perceptions.

Finally, we need note that the research approach here was an initial trial and would benefit from a thorough review. Clearly future application should be carried out over a longer period, which would allow a more accurate assessment of students' progress.

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Appendix 1: English Learning Motivation Survey Question by Category

Self-fulfillment

- I want to learn English words and expressions I don't know.
- I want to be able to use English effortlessly.
- I find it interesting just to understand English even if I cannot apply what I've learnt.
- I enjoy improving my English proficiency.
- When I study English I feel a sense of accomplishment.
- I'm not satisfied just disregarding English I don't know.

Training

- I can train myself through the study of English.
- I want to discover how to study through learning English.
- By studying English I will more fully understand various issues.
- If I study English I will be able to look at issues from many perspectives.
- I need to study English if I want to be able to think logically.
- If I don't study English my mental aptitude will decline.

Application

- I want to use the English I learn in college in my future career.
- The learning English will be useful for my daily life.
- If I continue to study English, somehow it will be come in handy in my work or daily life.
- I want to experience the enjoyment of actually communicating in English.
- If I don't study English, I will have difficulties at my future job.
- Since it is something I need for my future pursuits, I have to study now and not panic and try to acquire English later.

Social Relation

- I study English generally because everyone around me does.
- I mainly want to study English with my friends.
- I want my parents or teacher to confirm how my studies are progressing.
- Everyone around me is studying English so I feel I must, too.

- Since everyone around me is studying English, if I don't I feel uneasy.
- My parents and teacher will think badly of me if I don't study English.

Esteem

- If I can use English well, compared to other people I will have a feeling of superiority.
- If I know English, my colleagues will respect me.
- I want to get a higher grade in English than my friends or classmates.
- Others will look upon me with esteem if I can use English well.
- It is regrettable not to be as proficient as others in English.
- I lose confidence when my English is not on par with most people around me.

Incentive

- It will be financially beneficial to have a high English proficiency.
- Other people will praise me if I can use English well.
- A high English proficiency will in the future provide me with a better standard of living.
- It will be more beneficial when I enter the workplace if I can use English.
- My parents or teacher will scold me if I don't study English.
- Not studying English will be disadvantageous for my future education or career.

Response to Errors or Failure

- I'm the type who keeps trying somehow to improve my English even if I don't seem to be making progress.
- English is something you learn little by little as you make errors.
- I want to overcome that which is holding back my advancement in English.
- I feel embarrassed when I make mistakes while speaking or replying in English.
- I lose motivation when I feel my English studies are not progressing well.
- I feel disappointed when I make mistakes or have poor English results.

Reflection on Learning Methods

- Rather than just the answer, it's important to understand the explanation to a

question or problem.

- Even if I understand an English question or problem, from a different point of view I may change how I think about it.
- I want to know the answers and explanations for test questions I cannot do correctly.
- As long as my answer is correct, it's OK if I don't know why.
- I worry more about getting the right answer on a test than about why it is or isn't correct.
- On my own it is bothersome to find the explanation for the answer to an English question or problem.

Study Strategies

- I like to try out different study strategies.
- I'm interested in the study methods of people with a high English proficiency.
- When I have poor test results, I try to change the way I study rather than the amount.
- The results will not change even if I change my method of studying.
- It's bothersome to change my study habits.
- The only way to improve my results is to put in the effort and study harder.

Understanding Underlying Meaning

- I like to really understand what I am learning and not just memorize English.
- I gain understanding when I can associate what I have learnt with something.
- As I study English I try to sort out grammar and vocabulary usage.
- I think learning grammar is an important part of English studies.
- The more often I repeat a certain type of English test question, the more used to it I become.
- I usually just memorize English without really thinking too much about the meaning.

Appendix 2: Grammar Question Content

Past tense “be” verb

Selection of general verb over “be” verb in present tense

Pro-form/substitution “do” in the third person singular

Third person simple present tense verbs to describe facts

Past tense affirmative verbs to describe historical facts

Past tense negative form of general verbs

Simple future tense of the “be” verb

Use of “Shall we...?” “ to make suggestions

The past progressive of regular verbs

Present tense verbs indicating a state or condition

Simple past for affirmative and interrogative sentences

Present perfect form to indicate a continuation

Passive form of past tense or present tense verbs

Past Participles in O + V + PP patterns.

Subjective, objective or possessive pronoun

Personal pronouns

Indefinite pronouns “one(s)” or “another”

Indefinite pronouns “one(s)” or “another”

Adjectives with sense verbs

Choice of quantity adjective

Choice of quantity adjective “few” or “little”

Accurate use of adverbs

Choice of preposition

Choice of preposition

Relative pronoun (who, whose, which)

Relative pronoun (who, whose, which)

Relative pronoun (what, who)

Relative pronoun (when)

Relative pronoun (where)

Comparative adverbs

Superlative form with adjectives

Past tense “be” verb in contrary conditional statements

Past perfect “had + p.p. where expressing regret

Present tense verb to express habit or routine

Bare infinitive following “had better”

Choice of p.p. in S + V + O + (p.p.) C sentences.

Gerunds after phrasal verbs

Gerunds after “was looking forward to” or “was used to”

Infinitives

Choice of p.p. in passive causative S + V (had) + O + (p.p.) C sentences