Creation of a Grammar-based English Workbook Suitable for Students at Tokuyama College of Technology

Toru KUNISHIGE*1 and Megumi OOMURA*2

Abstract

Kunishige and Hashimoto (2008) and Hashimoto (2009) proposed a revised Abstract Producer to try to improve the abstracts written by students at Tokuyama College of Technology. As a result, they became better than ones written with the Abstract Producer made by Kunishige and Hirakawa (2007) and Hirakawa (2008). However, there were still mistakes in the abstracts caused by the students' wrong grammatical knowledge. This paper aims to (a) enumerate the students' weak points in English grammar according to the common errors found in their abstracts, (b) present how we have made a workbook to overcome their weak points, and (c) show a part of the workbook.

Key Words: abstract, revised Abstract Producer, grammatical knowledge, workbook

1. Introduction

It is often said that students at Tokuyama College of Technology are poor at English, especially at English Grammar. We are afraid that it is true.

In order to help solve this problem, this paper first clarifies the students' weak points in English grammar. Also, it describes how we have made a workbook to overcome their weak points and shows a part of it.

As a first step, we analyzed the errors found in the abstracts written with the revised abstract producer¹ made by Kunishige and Hashimoto (2008) and Hashimoto (2009).

Based on the analysis, we extracted grammatical items in English the students had not acquired well.

Also, we examined a lot of questions in a variety of drill books focusing on English grammar and selected questions that those whose TOEIC score is about 400 are unlikely to answer correctly.

Then, we arranged the questions according to their level so that we could compile a workbook for the students to overcome their grammatical weak points on a step-by-step basis.

This paper presents the above-mentioned

process and shows a part of the workbook as an effective tool to improve the students' English.

2. Weak points extracted from the errors found in the abstracts

Typical errors made by the students were enumerated in Kunishige and Hashimoto (2008) and Hashimoto (2009). Among them were 5 kinds of grammatical errors which the students should correct.

The first error is the use of tenses. The following are the examples:

- (1) Real strains of each measuring points are calculated by body forced method.
- (2) As a result, the strength of calcium-based mortar mixed chips of bamboo had been stronger than the strength of calcium-based mortar without bamboo materials.
- (3) Recently, the eddy current is used for various usages such as the speed detection and the induction heat.

Example (1) falls into a procedure in terms of the structure², which should be the past tense. However, the present tense is used. Example (2)

^{*1} General Education (English)

^{*2} Department of Computer Science and Electronic Engineering

uses the past perfect tense, which you should avoid using in a main clause in an abstract. In (3), the adverb *Recently* is used together with the present tense verb *is*, which is not correct because normally it is not compatible with the present tense but compatible with the past or present perfect tense.

Secondly, we chose the errors related to verbs, especially the confusion between intransitive and transitive verbs, which was of frequent occurrence:

- (4) In this research, I considered about the use of a self-organization map.
- (5) The purpose of the present study is to become clear the characteristics of magnesium-based mortal material.

In (4), the verb *consider* is mistakenly considered to be intransitive. The verb *become* in (5) is an intransitive verb. However, the author mistook it for a transitive verb.

The third one we selected is the difficulty in choosing either a present participle or a past participle. The following are the examples:

- (6) This paper aims to reduce a noise occurred from a fan used computers.
- (7) The Moving Target made the hunting game more interesting and more excited.

In (6), the author should have chosen a present participle *occurring* instead of past participle *occurred* to modify the preceding noun *noise*. Since the meaning of (7) is that thanks to the Moving Target, the hunting game was more exciting, the author should have used a present participle *exciting* here.

Fourthly, the confusion between a preposition *to* and *to*-infinitive was common, too:

- (8) This study aims to the establishment of abnormal detection technique of structure using Impedance Measuring Technique.
- (9) The dsPIC is able to high-speed signal-processing.

In both (8) and (9), to-infinitive was mistaken for a preposition to.

Finally, we chose the error regarding formal subject.

- (10) As a result, Madake is possible to be used as the reinforcing member by having the large section.
- In (10), the adjective *possible* is used with *Madake* as the subject. When used with a *to*-infinitive, however, *possible* can only take *it* as the subject as shown in (10)':
 - (10)' As a result, it is possible for Madake to be used as the reinforcing member by having the large section.

3. Selected questions suitable for students whose TOEIC score is about 400

We selected 12 questions from a drill book.³ We judged that they are difficult for students with the TOEIC score 400 or lower to answer correctly. Then, we asked the 42 freshmen in the advanced course to solve them. The following are the examples:

- (11) I (1. am living 2. have been 3. have lived 4. lived) in Kyoto for three years when I was a child.
- (12) If you come at seven o'clock tomorrow night, we (1. will already 2. have already 3. will already have 4. had) finished out dinner.

- (13) If you ask nicely, she will probably (1. allow you having 2. allow you have 3. allow that you have 4. allow you to have) a piece of cake.
- (14) Miss Imai, (1. said 2.talked 3. spoke 4. told) her eldest son to look after his brothers.
- (15) Mr. Jones found that he (1. had been leaving 2. was leaving 3. has left 4. had left) his notes at home, and he didn't know what to do.

These questions are related to verbs and tenses.

The following are the ones with regard to the passive voice:

- (16) I was made (1. wait 2. to wait 3. waiting 4. waited) for a long time.
- (17) She was seen (1. go 2.gone 3. to go 4. having gone) out of the hall.

Below are auxiliary-related questions:

- (18) You have a high fever, so you (1. had not better to 2. had not better 3. had better not 4. had better not to) go to school today.
- (19) Yoshiko (1. mustn't 2. may not 3. isn't able to 4. can't) be in Osaka, because I saw her at Tokyo Station only a few minutes ago.
- (20) This movie extremely interesting. You (1. should 2. would 3. must 4. will) have come with us.

Questions (21) and (22) are related to to-infinitives:

(21) It's cold outside. Be careful (1. not catch 2.

- not to catch 3. not catching 4. of not catching) a cold.
- (22) Will you give me (1. hot something to 2. something to hot 3. something hot to 4. something hot) drink?

4. The tendency of the students' errors

There were 7 questions which more than half the students could not answer correctly: (11), (13), (15), (18), (19), (21), and (22). Let us explain how they made mistakes in these questions below.

The questions (11) and (15) are related to the tense. The question (13) requires the knowledge of a sentence structure that a verb has.

In (11), the correct answer is 4, but about seventy percent of the students opted for 3. In order to answer a question which requires the knowledge of tense, it is important to see where the base point in time is located. In this sentence, the base point in time is a past time because "when I was a child" is attached. So, the answer is 4.

In the choices in (13), the verb *allow* is used with various verb forms. However, *allow* is used only with a *to*-infinitive. So, the answer is 4.

Only half the students answered (15) correctly. About thirty percent of the students opted for 1. In case of expressing a particular kind of action performed before the past, we use a past perfect form. So, the answer is 4.

We can infer from such errors as shown in (11) and (15) that it is difficult for the students to choose a tense in the chronologically right order.

Also, the students tend to make a lot of mistakes in solving the questions related to auxiliary verbs.

In (18), only seven percent of the students opted correctly for 3. Most students chose 1. The phrase *had better* is treated as an auxiliary verb. So, the students should have opted for 3.

In (19), the fact is that Yoshiko isn't in Osaka

because *I* saw her at Tokyo Station only a few minutes ago. Since the sentence should mean "It is impossible to...", the answer is 4.

In (21), about forty percent of the students chose 3. In this sentence, you have to make a negative form of a *to*-infinitive. You have to put *not* or *never* just before *to*. So, the answer is 2.

In (22), you have to put the adjective *hot* just after a noun which ends with *-thing*. So, in this question, you need to choose 3.

Errors in examples (21) and (22) show that when the students solve the questions which require the knowledge of *to*-infinitives, they don't have a clear understanding of where to put an adjective and a negative form such as *not* and *never*.

These results show that the first-year advanced course students, whose TOEIC score is around 400, tend to make mistakes in the questions regarding the tense, auxiliary verbs, and *to*-infinitives.

5. The creation of the workbook

In the previous sections, we have seen the students' weak points in English grammar. As a tool to overcome their weak points, we created a workbook.

As we pointed out in section 2, there are a number of grammatical items in which the students at our college have difficulty when writing an abstract in English. In order for them to study these grammatical items effectively, we first put in the workbook questions that require the knowledge of the following grammatical items: the tense, intransitive and transitive verbs, the present participle and the past participle, *to*-infinitives, and the formal subject.

In addition, according to the analysis shown in section 4, we added more questions into the workbook. These questions are related to the following grammatical items which the students

whose TOEIC score is about 400 have not mastered completely: the passive voice, the comparative, gerunds, relatives, prepositions, conjunctions, subjunctive moods, idioms, and participial constructions.

Let us show a part of the workbook:

(Level 1)
1. Sorry I forgot him the message, Jack.
① give ② gives ③ gave ④ to give
2. Kimiko has no time her homework.
① do ② to do ③ did ④ doing
(Level 2)
1. It's cold outside. Be careful a cold.
① not catch ② not to catch ③ no
catching 4 of not catching
2. Will you give me drink?
① hot something to ② something to ho
3 something hot to 4 something hot
(Level 3)
1. She determined the offer.
① accepting ② to accept ③ accep
④ accepted
2. 彼は親切にも町中を案内してくれた。
He <u>1</u>
the city.
① show ② as ③ me ④ kind ⑤ was
6 so 7 around 8 to

The workbook is arranged according to grammatical items. The above questions are all related to *to*-infinitives. Also, the questions are divided by the level of difficulty. As you can see from the examples, the workbook has three levels of difficulty. The students can overcome their grammatical weak points on a step-by-step basis. When they have completed a level, they can step up to the next level to try more difficult questions. At

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the same time, they can go back to a lower level and review easier questions.

6. As a conclusion

We assume that the paper-based workbook is useful per se. However, we are planning to produce software based on this workbook as a better tool to improve the students' English grammar skills.

We will develop the software so that it has the following advantageous functions compared to the paper-based workbook.

First of all, it can show how you have acquired grammatical items. For example, after each session of your study with the software, it can automatically create and show a graph which tells you how much you have gained grammatical knowledge item by item.

Another strong point of the software is related to the prevention of repeating the same question.

You may solve the same questions again and again in the case of the paper-based workbook. As a result, you memorize the answers. Then you may end up answering the questions correctly by seeing only the beginning of each question without trying to explain the reason. You cannot consolidate the grammatical knowledge in this way.

In order to prevent the students from just memorizing the answers, the software will store several similar questions for the same grammatical items as shown below:

1. You had better	to the park alone.		
① not to go	2 not go	o 3 not	going
④ go not			
2. You have a hig	gh fever, so	you	go to
school today.			

- 1) had not better to 2 had not better
- (3) had better not (4) had better not to

この部屋ではそんなに騒がない方法	がいい
よ。	
You <u>1</u>	2
① noisy ② not ③ so ④ this	room
5 be 6 better 7 had 8 in	

All of the above questions require the knowledge of word order regarding the phrase *had better*. Though we have shown just a few examples now, the software will actually have much more similar questions.

To consolidate the students' grammatical knowledge about *had better* in this case, the software will give a question among the similar questions at random. The next time you study, a different question will be given so that you will not just memorize the answer to the same question. That way, the students will be able to learn how to construct a proper sentence that includes *had better*, which cannot be realized easily with a paper-based workbook.

We believe that the software will be a very effective and useful tool to improve the students' English.

Notes

1. The revised Abstract Producer is an improved Abstract Producer proposed by Kunishige and Hashimoto (2008) and Hashimoto (2009). The original Abstract Producer was proposed by Kunishige and Hirakawa (2007) and Hirakawa (2008). It is a tool to write an abstract in English effectively. It mainly consists of three components: the questions, the example expressions, and the usable verbs. In addition to these, the Producer contains guidelines on the number of sentences and tenses for each structural element in an abstract such as the

- background, the purpose and so on. You can automatically produce an adequate abstract by answering the questions in order, and reduce the hours of work on an abstract.
- 2. In terms of the structure, an abstract consists of the following four elements: the introduction, the procedures, the results, and the conclusion.
- 3. To choose the questions, we used a drill book titled *Eibunpou reberu betsu mondaisyu level 1* written by Tetsuya Yasukochi and published by Toshin Books.

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