

An Effective Way to Write an Abstract in English ---A Proposal of an Improved Abstract Producer---

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Abstract

Hirakawa (2008) tried to improve the abstracts written by students at Tokuyama College of Technology, so that they became better to some extent. However, they are not good enough to understand easily. This paper aims to (a) enumerate common errors found in the abstracts written with the Abstract Producer, (b) clarify the cause of the errors, and (c) propose some clues to reduce the number of common errors caused by the students' lack of English knowledge and skills. First, we examined abstracts written with the Abstract Producer and found typical errors in the abstracts. Then, we considered the reason why the students made the errors. As a result, we found two keys to prevent students from making mistakes. The results imply that the Abstract Producer has room to improve and the improvement can reduce the mistakes.

Key Words : abstract, the Abstract Producer, errors, tense, voice, clues

1. Introduction

At Tokuyama College of Technology, the students do not place a great emphasis on learning English skills. When they write their graduation thesis, however, they must write the abstract in English. For that reason, the abstract written by the students are extremely poor. Therefore, Kunishige and Hirakawa (2008) proposed and Hirakawa (2008) made the Abstract Producer as a solution strategy for dealing with this tough situation. It explains how to write six structural elements necessary in an abstract with examples: the background, the purpose, the procedures, the results, the discussions, and the conclusion. But it has a disadvantage of having only two or three examples for each structural element. This disadvantage makes it fairly difficult for the users without proper English proficiency to write a good abstract. This means that it could be much harder for the students to complete a desirable abstract even if they use the producer.

In order to solve this problem, this paper aims to (a) enumerate common errors found in the abstracts written with the Abstract Producer, (b) clarify the cause of the errors, and (c) propose some clues to reduce the number of common errors caused by the students' lack of English knowledge

and skills.

2. Common errors found in the abstracts

We examined 44 abstracts written with the Abstract Producer to find typical errors made by the students.

As mentioned in Hirakawa (2008), there were a lot of mistakes in 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 structure¹, which should be the past tense. However, the present tense is used. Example (2) 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

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it is not compatible with the present tense.

The use of the passive voice in a sentence, which makes it difficult to understand, was also common as shown in the following examples:

- (4) As a result, the model of the system which could arrive at the destination if I advanced to the direction to order of the indicator was completed.
- (5) As a result, the validity of the theoretical analysis on the coil with an arbitrary shape using the form function could be confirmed.

Sentences (4) and (5) are difficult to read and understand, because the verb in each sentence is apart from the subject.

Inadequate use of verbs, especially the confusion between intransitive and transitive verbs, was of frequent occurrence:

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

In (6), the verb *consider* is mistakenly considered to be intransitive. The verb *become* in (7) is an intransitive verb. However, the author mistook it for a transitive verb.

Also, many writers of the abstract had difficulty in choosing either a present participle or a past participle. The following are the examples:

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

In (8), the author should have chosen a present participle *occurring* instead of past participle *occurred* to modify the preceding noun *noise*. Since the meaning of (9) is that thanks to the Moving Target, the hunting game was more exciting, the author should have used a present participle *exciting* here.

Confusion between a preposition *to* and *to*-infinitive was common, too:

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

In both (10) and (11), *to*-infinitive was mistaken for a preposition *to*.

We also found other mistakes like the following:

- (12) As a result, the validity of the theoretical analysis on the coil with an arbitrary shape using the form function could be confirmed.
- (13) As a result, Madake is possible to be used as the reinforcing member by having the large section.
- (14) In resent years, the development of ultrasonic devices is remarkable and this study is related to it.

The auxiliary verb *could* in (12) expresses either a present possibility in a modest way or an ability in the past. However, this sentence should show a past fact. So, the last part of the sentence has to be *was confirmed* instead of *could be confirmed*. In (13), 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 (13)’:

- (13)’ As a result, it is possible for Madake to be used as the reinforcing member by having the large section.

The sentence (13)’ is grammatically acceptable. But since (13) is supposed to argue that *Madake* has a potential or a characteristic suitable for a reinforcing member, (13)’ needs modifying as (13)’’ below:

- (13)’’ As a result, Madake can be used as the reinforcing member by having the large section.

We found several obvious spelling errors as in (14).

In (14), *resent* should have been *recent*.

The following are some other examples found in the students’ abstracts that are preferable to avoid:

- (15) And dsPIC is provided as the dual-in-line package.
 (16) It became clear that the danger that a landslide would happen rose.

Sentence (15) begins with a conjunction *and*, which should be avoided in a formal writing. In (16), a formal subject *it* is used. To make the sentence more concise, however, it should be changed into (16)’ below:

- (16)’ The danger that a landslide would happen clearly rose.

3. Reasons for the common errors

In this section, let us consider why the students

made such mistakes when writing their abstract.

The use of passive voice is ascribed to the lack of instruction in the Abstract Producer that passive voice should be avoided. Also, the students conventionally believe that sentences with passive voice are objective.

The errors in tense result from the fact that the Abstract Producer does not have detailed instructions with regard to tense. Also, all the instructions are written in English in the Abstract Producer, which makes the students bothered. The following is a part of the description in the Abstract Producer:

- (17) Tense to use:

To show the present circumstances that motivated you to begin your research → present

To show the long-term circumstances that motivated you to begin your research → present perfect

In (17), the lack of example sentences makes it difficult for the students to differentiate the present circumstances and the long-term circumstances.

Because the students make an abstract in Japanese first and after that they translate it into English, they tend to write the English abstract in a Japanese word order, where the predicate part is normally put at the end of the sentence. So they make such a mistake as (4) and (5).

Inadequate use of verbs is attributed to education of English in Tokuyama College of Technology. The students learn the difference between transitive and intransitive verbs in the first grade and do not review it, so that most of them forget the difference when writing an abstract in the fifth grade. Even if they remember it, as they do not have a habit of checking the type of verbs when

looking up a word in a dictionary, they cannot use it appropriately

The confusion between transitive and intransitive is also a reason for students to make a sentence with unsuitable use of participle. The fact that the students do not consider the relationship between the preceding noun and the participle also results in an erroneous choice of the type of participle.

The main reason that *to*-infinitive was mistaken for a preposition *to* is that they are identical in form and that the students regarded them as the same.

The mistake in (12) was caused by the student's wrong knowledge that auxiliary verb *could* can express a fact in the past, whereas it can only either a present possibility in a modest way or an ability in the past.

A restriction in constructing a Japanese sentence misled the student into writing (13). In Japanese, it is necessary to put either a thing or a human instead of a formal subject in the subject position.

Due to lack of spell check, the spelling errors in the abstracts such as the one in (14) occurred.

As for (15) and (16), we can say that the students are not used to writing English concisely in a proper manner.

The following section shows some clues to reduce the number of common errors observed above.

4. Some clues to prevent the errors

In order to prevent the students from making the mistakes such as the ones above, the Abstract Producer needs revising.

Let us make a suggestion on how we should change it in some respects.

There are two main ideas on how to improve the Abstract Producer. One is to write the explanations and instructions in Japanese. This

revision makes it easier for students to understand the explanations and instructions, which were hard to comprehend since they were all written in English. The use of Japanese in the revised Abstract Producer will make it possible for us to give more detailed explanations and instructions than the old ones. That way, we will be able to reduce mistakes in tense such as the ones shown above.

The other idea is to add more examples. The old Abstract Producer does not have enough examples. Take a look at the following examples given in the old Abstract Producer:

(18) This paper aims to...

(19) We ascribe the ideal experimental results to...

The examples (18) and (19) have *to*-infinitive and a preposition respectively. It is tough for students to distinguish them since the sentences are not complete. Thus, they easily write such sentences as (10) and (11).

Adding complete examples will help students choose either a base form or a gerundive form correctly.

The above mentioned revisions will also contribute toward minimizing the confusion between intransitive and transitive verbs and preventing misuse of participles and auxiliary verbs.

Concerning the voice, we will instruct the students that they should basically use the active voice apart from some exceptions in order to make their abstract concise. Let us show a few exceptional cases.

When you do not have to be too concerned with the subject and when you do not know it you should use the passive voice.

Let us consider (20) and (21) below:

- (20) Because the temperature was precisely controlled, the device remained undamaged.
- (21) Because one of my assistants precisely controlled the temperature, the device remained undamaged.

Sentence (21) uses the active voice, so that the readers may think that the person who controlled the temperature had to be the assistant. However, the point is not who controlled the temperature but that the device remained undamaged. Therefore, you should use the passive voice here, as in (20).

Also, consider (22) and (23):

- (22) The lab's computer was stolen.
- (23) Someone stole the lab's computer.

The sentence (23) uses an active voice. Because you do not know who stole the computer, however, you should use the passive voice in this case as in (22), too.

5. As a conclusion

Even with the Abstract Producer proposed by Hirakawa (2008), a lot of mistakes were found in the abstracts written by the students.

In order to prevent the errors, we examined the cause of the mistakes and proposed the two main points to improve regarding the Abstract Producer.

If we have revised it, the students will be able to reduce their mistakes.

A note

1. In terms of the structure, an abstract consists of the following four elements: the introduction, the procedures, the results, and the conclusion.

References

- 1) Kunishige, T. and Hirakawa, Y. : A Good Solution to the Problems of Writing an Abstract in English!---Useful Tips on Writing an Attractive Abstract for Engineering Students and Researchers---, Research Reports of the Tokuyama College of Technology, No. 31, PP.43-49, (2008)
- 2) Hirakawa, Y. : A Good Solution to the Problems of Writing an Abstract in English!, Graduation Thesis, (2008)

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