Interim Report of the English Facilitators' Activities

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Abstract

With the continuing progress of globalization, it is necessary that Japanese students be able to communicate with people all over the world in English. In order to cultivate students' broad senses of communication in English at the National Institute of Technology (NIT), Tokuyama College, the authors formed a group named the "English Facilitators' Group (EFG)." The purposes of the EFG are to enable the group members to improve not only their English proficiency level, but also the way of teaching their classes in English. Furthermore, EFG increases opportunities for the students to use English in their daily life. This second year interim report describes what the EFG members have been doing so far both as a whole and respectively, to achieve their established goals.

Key Words: globalized world, facilitators, English proficiency, professional development

1. Introduction

Recently, in response to increasing momentum towards globalization, not only in the real world but also in the classroom, we higher education teachers are required to give our lectures in English. For example, since the beginning of the 2013 academic year, English classes are already being taught completely in English at high schools throughout Japan. Furthermore, more and more various academic subjects are being taught in English at universities.

On the other hand, we feel that National Institute of Technology (NIT) colleges are far behind in this regard. Generally speaking, students at NIT colleges have a reputation for being poor at using English. Particularly, their psychological barrier to communicate in English is a big problem.

In order to get rid of this bad reputation and the psychological barriers of the students at NIT, Tokuyama College regarding English proficiency, we started up a group named "English Facilitators' Group (henceforth referred to as EFG) in April 2013. Under the slogan of "Share the world in English," we EFG members have been voluntarily engaging in professional development training on a regular basis, so as to brush up both our English and the way we teach our classes in English as mentioned in the previous report[1)]. Similarly, we have been trying to augment students' opportunities for using English in and out of class.

The ultimate purposes of the EFG activities are to raise the rate of classes taught in English and to increase the number of colleagues participating in our activities at NIT, Tokuyama College. The following sections will explicate what EFG as a whole has been carrying out, what each EFG member has been doing, and what we plan to do to attain the above purposes.

2. Activities as a whole group

Currently there are four members of EFG, one from each department of NIT, Tokuyama College. This group was originally formed in April 2013 in response to Prof. Ogawa and Prof. Kunishige's call

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to improve the English-speaking environment for students. They wanted to provide the students with more opportunities to use English at school. In order to achieve this, they thought it would be necessary for teachers to polish their English ability first and then use English more both in and out of the classroom. Thus EFG was formed.

The primary missions of EFG are to make the members' English better, and to make an all-out effort to talk to and communicate with students in English. In order to improve our English and the way we teach our classes in English, we get together regularly once a week during the academic year. The meeting is called a "powwow" and naturally we conduct it all in English so that we can boost our second-language communications skills. In each powwow, we discuss the best methods to increase the students' English proficiency, as well as exchange information obtained through the activities mentioned in the following section.

3. Each member's activities

3. 1 Professor Ogawa: The second step to globalize the whole campus

Collaboration with a Native Teacher: I continued to teach all of my subjects in English in the second semester of the first year of EFG. I also started to collaborate with a native teacher, Benjamin Johnson. I asked him to observe my classes and instruct me in how to best teach in English. There were some good points to method. First, I could master proper expressions through practice and repetition. Second, I could gather materials from him for a handbook designed to aid in teaching any subject in English. Third, he sometimes joined our discussion, and the students were inspired by his participation. I also invited other English speakers as guests, so that students could realize the necessity of English.

In the following section, let me introduce some unique aspects of each subject I teach. In Ethics, I often used English-based video clips[2]. Video clips related to the topic were effective because students could understand what I taught from a different perspective. In Law, authentic materials written in English were used. For example, when I taught business law, I used a real contract. Students could feel the reality of a globalized world thanks to this material. In Philosophy, I let the students give a presentation in English. As it was the first time that most of the students gave a presentation in any language, this experience was valuable on multiple levels.

ToPiC: Tokuyama Kosen Presentation Conference: We held another English presentation event this year. This event was named ToPiC: **To**kuyama Kosen **P**resentat**i**on **C**onference. We held this on August 7th. This year we called for presenters not only from the faculty, but also from students. As a result, eight students and two faculty members were presenters. As this event was also a part of the satellite committee of our school, which is in charge of collaborating with community members, we invited local citizens to join the audience. The main purpose of this event was to inform anyone who was interested about the progress of our globalization education project.

Fig. 1. Scene of ToPiC.

Symposium: We invited professor Toru Kunishige from National Institute of Fitness and Sports in Kanoya to be a guest speaker at a symposium on September 18th. The purpose of this event was to enlighten the faculty on the importance of teaching subjects in English. Since he had taught at our school until last summer, he knew much about our school's situation. Moreover, he has initiated an attempt to increase English proficiency at his current campus. During the symposium, we asked him to talk about some tips for teaching subjects in English. After that, we held a panel discussion regarding EFG's struggle.

Fig. 2. Panel discussion in symposium.

Next Step: The third year is the last one for our project. We want to complete our mission by the end of the academic year. Concretely, we want to increase the number of the faculty members who can teach their subjects in English to twenty. This is one-third of the faculty members. We also want to increase the percentage of classes taught in English to 30%. In the long run, we believe 50% of all NIT classes should be taught in English. In order to attain this goal, we plan to enhance the training of other faculty members in the 2015 academic year.

3. 2 Professor Kitamura: Engineering seminar in English

In the Department of Electrical and Mechanical Engineering, an engineering seminar was conducted during the second semester for fourth-year students. The objective of the seminar was to prepare them for graduate work, which starts when the students enter their fifth year.

In the engineering seminar, a specific project for each student is assigned according to the subject of his or her graduate study. As for my laboratory, Space Environment Lab, three fourth-year students were designated to start graduate work from their fifth year at NIT, Tokuyama College. When the engineering seminar started, their specialized subjects of graduate work had not yet been decided. Therefore, I assigned them certain topics related to their graduate work, which included some academic articles written in English. In the 2013 academic year, I tried to conduct the engineering seminar in English with a different group of three, fifth-year students and two advanced-course students.

In our engineering seminar, two or three students present the progress of their research. The example of the PowerPoint slide used in the presentation about FMCW (Frequency Modulated Continuous Wave) radar[3] is shown in Fig 3. In this seminar I required all the participants to ask at least one question. As a consequence, I was able to measure the students' English ability in a real world situation. In the lectures where a native speaker was present, issues surrounding English proficiency and presentations were discussed.

The students sometimes had a difficult time discussing sophisticated technical issues. In this case the advanced-course students often contributed more comments in order to rectify communication problems. Furthermore, the advanced students took on the role of discussion leaders.

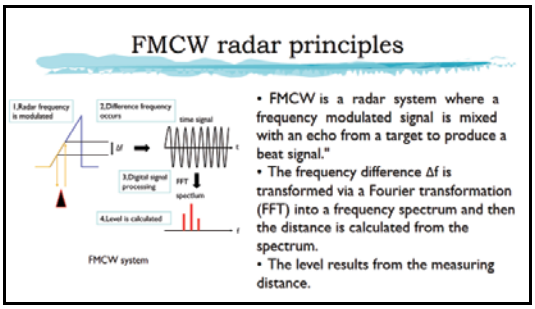

Fig. 3. An example of a Power Point slide by an advanced course student.

As indicated by the above incident surrounding difficulty with technical issues, it became clear that a primary factor towards achieving an engineering class in English is careful consideration of students' varied English ability. In the class with a small number of students, I could keep a lookout on the students who could not keep up with the discussion. In contrast, in a class with a much larger number of students, a good solution may be to assign an upperclassman to the role of facilitator. Furthermore, dividing the class initially into smaller discussion groups, and then reuniting for a final group discussion at the end of each class may be advisable. In the fall semester of the 2014 academic year I will indeed assign one upperclassmen as facilitator.

3. 3 Professor Koga: Teaching in English for reviewing and practice

In the last academic year, I attended an intensive training course designed to educate teachers about

using English in classroom education. It was held by the KOSEN headquarters. The purpose of the training was to realize classroom education of specialized subjects in English in the near future. For that purpose, representatives from all the KOSEN campuses attended.

The training course consisted of three parts. In part one and part two, all the participants studied fundamental concepts of education and gave brief lectures using those concepts in Japanese. After those first two parts, in order to verify actual teacher competence in a classroom situation, each participant took a computer-based test and a performance-based test with video recording in order to gain certification of CompTIA Certified Technical Trainer (CTT+)[4]. CompTIA is an abbreviation of the Computing Technology Industry Association and is a non-profit trade association. CTT+ is an international certification that covers core instructor skills, including preparation, presentation, communication, facilitation, and evaluation. In the third and final part, after standardization of the participants' instruction skills using CTT+ was established, the participants attempted to give their same brief lecture from part two, but this time in English. Then all participants exchanged information and opinions about the way to realize classroom education in English.

Since the training, I have become convinced that I can conduct classroom education in English with only simple English phrases, and by employing the fundamental concepts of CTT+. In this academic year, I did just that. This was done in addition to the continuation of the previous activities from the last academic year[1].

I would now like to explain my activities in the class, which covers applications of digital circuits for fourth-year students in the Department of Computer Science and Electronic Engineering. This class consists of two sections: a lecture section and a practice section. In the lecture section, students study fundamental elements of digital circuits such as transistors, memory chips, their characteristics, etc. In the practice part, students perform computer simulation with computer-aided design (CAD) software in order to confirm pseudo-behaviors of various kinds of electric circuits. Before starting this class, I had decided to use English for the first ten or fifteen minutes while reviewing the last lecture. I chose this method because the most important thing in the lecture is not only to get the students to understand English words and expression, but also the contents of the lecture. Figures 4 and 5 are examples of the slides used for reviewing previous lectures. I asked the students to answer easy but important questions via pair-work. After all the lectures, I was able to confirm that almost all the students understood the contents through questioning them. In the practice part, I gave instructions on the computer simulation in English. Also in this part, I was able to confirm that almost all the students understood the instructions and were able to accomplish the simulation successfully.

The aforementioned activities are just the beginning. In the future, I will start both lecture and practice sections in English in my other classes as well. Furthermore, I will continually strive to realize beneficial educational techniques for the students by employing the concept of the Content and Language Integrated Learning (CLIL)[5].

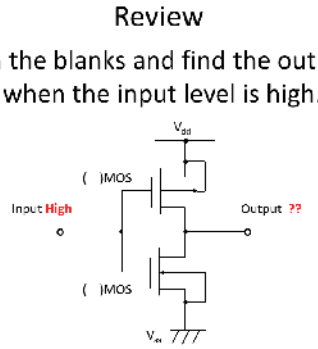

Fig. 4. An example of a review sheet used in the lecture section.

Comparison between SRAM and DRAM

	SRAM	DRAM
Structure	Complicated (Flip-flop circuit)	Simple (Capacitor circuit)
Integration Degree	Low	High
Speed	Fast	Slow
Production Cost (/bit)	High	Low
Refresh operation	Unnecessary	Necessary
Power Consumption	Low	High
Application	・Register ・Cache memory	・Main memory

Fig. 5. An example of a review sheet used in the lecture section.

3. 4. Professor Furuta: Using English in the class and so on

Using English, I changed my teaching methods in the class titled Architectural Design and Planning. This class is taught to the second-year students in the advanced course.

The aim of the alteration was to improve the English listening and presentation skills of the students. In the class, I have shown the students the TED (Technology, Entertainment, Design)[2] presentations of some famous architects. And last year I even changed all of the handouts, lectures, and final test from Japanese to English (see Fig. 6).

Fig. 6. An example of slides used in the lecture.

At times, it has been difficult to prepare the English contents every week. I also have got a lot of support from Benjamin Johnson, a professional EFL (English as a Foreign Language) teacher. He checked my pronunciation, vocabulary, and expressions used in both the lectures and handouts.

I have sometimes questioned students to confirm if they had understood what I said in English. When I have given some easy questions about the points of the lecture in English, they have always tried their best to answer in English. At the end of the series of fifteen, weekly lectures, a final test was given in English. It had ten, multiple-choice questions. Making questions and four unique multiple-choice answers for each question was the most difficult part of the class for me. However, in the comments after the test, the students wrote that they were able to learn about architectural design and planning, and the English I had used was easy enough for them to understand.

In addition to the work towards globalization in my classroom, I made the opening comments for the "graduation research presentation meeting for standard-course and advanced-course students." I also asked questions to the students who gave a presentation in English at that time. And at the beginning of this school year I gave a formal greeting in English in front of the students of civil engineering and architecture (see Fig. 7).

Fig. 7. Professor Furuta's greeting to civil engineering and architecture students in English.

4. Conclusion

In this interim report for the second year of EFG, we have talked about what we have been carrying out, what each of member has been doing, and what we are going to do from now in order to train and to motivate our students to be future global engineers with a good command of English. However, what we have been doing and what we are going to do are not only limited to increasing students English proficiency, but our work is also for the professional development of the faculty at NIT, Tokuyama College. In order to globalize our college, it is important to enhance our competitive edge as professional teachers and scholars. EFG and its activities and ideas can continually give us just such an edge. Furthermore, we believe it is of the upmost importance to share both our successes and set backs with our colleagues. With the future in mind, our intention is that our current activities contribute to the eventual, complete globalization of NIT, Tokuyama College.

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