Comparing Teacher-Student Interactions in Content Classrooms in a Japanese University

Saki Inoue

I. Introduction

The recent impact of globalization has promoted reformation in the Japanese English education. Instead of focusing on receptive skills, productive skills including speaking, pragmatic, and strategic competences have been promoted. The Japanese educational institutions are currently trying to improve the communicative competence of students, and universities started to offer departmental-academic classes in English. The purposes of the classes are to improve the communicative abilities of students and to attract international students. According to the survey by the government, one third of Japanese universities conduct some types of content classes in English (MEXT, 2010). As a result, not only Native English Speaking Content Specialists (NESCS) who are engaged in teaching content and possess degree related to the field, but also Japanese Content Specialists (JCS) and Native English Speaking Teachers (NEST) who are language teachers have been involved in teaching academic content classes in English. The responsibility of JCSs and NESTs for teaching content classes in English will increase since human resources are limited. The characteristics of the teacher-student interactions are different between regular English classrooms and content classes in English (Allen et al., 1990; Huang, 2011; Musumeci, 1996; Shah, 2003). The usefulness of teaching subjects in English is that the class can improve motivation of the students, include more authentic language, and positively influence the outcome of English abilities of students. Nonetheless, offering this type of classes contains a number of challenges such as lack of training for the teachers and selection of materials. Thus, there is a claim which says the content approach is not well-implemented in EFL settings. However, not enough research has been done in relation to teacher-student interactions in Japanese content classrooms. Moreover, little research has targeted JCS who teach content classes in English.

1. English Education in Japan

In Japanese universities, some academic subjects are taught in English due to the needs of
globalization (Warrington, 2008; Nagata, 2013). The purposes of teaching content classes in English are not only for improving the English skills of Japanese students, but also for international students. Japanese universities attempt to attract international students due to the decreasing number of Japanese students (Ertl, 2010). Other than attracting international students, content courses are created for Japanese students who are planning to study abroad, or whose career visions need academic English proficiency such as enrolling in overseas graduate schools (Ertl, 2010). Japanese EFL learners usually do not have access to sufficient genuine English, but content courses often incorporate authentic materials and use of language, so students are provided with more opportunities to read or listen to authentic language (Butler, 2005; Larsen-Freeman & Anderson, 2011). Therefore, more and more departmental classes are taught in English in the Japanese university context, and the Japanese government promotes the trend.

2. Recent Reform of Japanese Higher Education

CBI is defined by Brinton, Snow and Wesche (2003) as “Teaching that integrates particular content with language-teaching aims, with a goal to develop use-oriented second or foreign language skills; concurrent teaching of academic subject matter with a content-driven curriculum” (p. 265). CBI is currently implemented not only in ESL, but also in EFL contexts. The interest toward CBI has been increasing in Asia-Pacific regions such as China, Hong Kong, Taiwan, and Korea (Davies, 2003; Warrington, 2008). In these countries, mainstream subjects such as science and mathematics are taught in English from lower grades of elementary and secondary schools to university education. Although CBI has been broadly incorporated in EFL contexts, employment faces various challenges (Butler, 2005; Nunan, 2003; Warrington, 2008). Teachers need to spend much time to search for appropriate materials for learners (Stryker & Leaver, 1997). Such materials, however, are often not developed for pedagogical purposes, and the materials might not be comprehensible for learners (Brinton, Snow, & Wesche, 2003; Warrington, 2008). Moreover, for novice or intermediate learners of English, understanding the subject matter in English could be so difficult that partial use of the first language of the students be suggested (Kim, 2011). In order to successfully participate in content classes, students need to be competent enough in terms of language and cognitive ability (Stryker & Leaver, 1997). Moreover, little research has revealed the evidence of effectiveness on language acquisition in content instruction in the Japanese educational context (Miyazato, 2001; Takagaki & Tanabe, 2007). However, more and more Japanese universities are now interested in employing some types of content classes taught in English (Nagata, 2013).
3. Teacher-Student Interactions

Researchers started to focus on how teachers and learners interact in a classroom to respond to the criticism which claims that researchers tend to ignore immediate concerns of teachers and learners in a classroom (Brown & Rodgers, 2002). The major focus of classroom interactions is on practices of teachers in a class including questions, error corrections, quantity of teacher speech, teacher explanations and teacher wait-time for student responses (Brown & Rodgers, 2002). In addition to these components, teacher talk and metalinguistic feedback are also crucial part of teacher-student interactions (Nunan & Bailey, 2009).

Teacher-student interactions in content classes are often different from the interactions in regular English classes. Huang (2011) compared a CBI class and a regular English class and found that genuine language is used more often in the CBI class than in the language class. Moreover, students in the CBI class initiated the class more frequently than the students in the English class. In the CBI class, the student could express their opinions and uttered more complex sentences rather than just a single word. However, in general, students in a CBI class possibly face a difficulty such as less understanding of the content (Kim, 2011). Moreover, another issue is power relationship between a teacher and students. In content classes, power of teachers tends to be higher than that in a regular English classroom, because teachers are more competent than students for both language and content (Musumeci, 1996). Grammatical errors are often left uncorrected in content classes (Musumeci, 1996; Shah, 2003). Since the focus of content classes is on contents more than language aspects, linguistic errors tend to be ignored by teachers. In the research by Allen, Swain, Harley, and Cummins (1990), only 19% of the total errors were corrected.

4. Input and Interaction Hypothesis

One of the most important theories in Second Language Acquisition (SLA) is called the input hypothesis (Krashen, 1985), and this theory has been influencing current SLA theories. The input hypothesis supports the importance of input from more advanced speakers or native speakers of the target language for acquiring the second language. The input is known as comprehensible input, and this input has to be a little above the current level of learners but should not be too difficult to comprehend. Krashen (1985) calls this input as “i+1”, and this is the center of the theory. In addition to the input hypothesis, Long (1983) introduces the interaction hypothesis which emphasizes the importance of conversation. The target language learning can occur through the process of interactions with interlocutors rather than just receiving comprehensible input. Interactions in a classroom have been the core of second language learning (Gass, Mackey,
& Pica, 1998). The three main pillars of interactions hypothesis are negotiated interactions, comprehensible input, and language acquisition (Long, 1983).

Negotiated interactions happen when native speakers or advanced learners of the target language talk to lower proficiency level learners of the language (Allwright & Bailey, 2004). Since lower proficiency learners may not fully understand an utterance produced by native speakers or advanced speakers of the language, the lower-level learners need to negotiate the meaning of the utterance. Through negotiation for meaning, learners are able to receive more comprehensible input. Therefore, negotiation will affect second language acquisition. Negotiated interactions may occur from advanced speakers through three processes: comprehension checks such as “Do you understand?” confirmation checks “So are you saying that you lived in London?”, and clarification checks such as “I don’t understand exactly, what do you mean?” (Long, 1983).

5. Teacher Beliefs and Teaching Practices

Above all, teacher beliefs play a significant role to decide what to do in the classroom (Graves, 2000; Gutierrez, 2004). Teacher beliefs about teaching language are related to previous experiences (Graves, 2000). How each teacher learned the language influences their teaching styles. Teacher beliefs are influenced by the work experience and the discourse of the workplace (Graves, 2000). In classrooms, teacher beliefs are reflected in the strategies they use to interact with students. Research done by Johnson (1992) revealed that ESL teachers reflect their beliefs in their teaching approach. For example, the teacher who believes that students need repeated practice to acquire the English pronunciation implements the audio-lingual method. However, professors of universities usually have not prepared to be an educator, and they often teach classes how they have been taught as students (Beegle & Coffee, 1991; Willcoxson, 1998). Other influential factors are feedback from students, demands, and results of examination (Willcoxson, 1998). Therefore, the beliefs of the university professors are not fully incorporated in their teaching (Kane, Sandretto, & Heath, 2002). What they claim as beliefs is not the same as what they do in their classrooms (as cited Kane, et al., 2002).

6. Research Questions

In order to respond to the problems pointed out in literature review, the following research questions were formulated. The characteristics of teacher-student interactions, teacher beliefs and background in the three different groups of teachers were investigated.

1. What are the characteristics of teacher verbal interactions with students in content classrooms taught by three different groups of teachers?

2. What are the characteristics of student verbal interactions with teachers in content
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classrooms taught by three different groups of teachers?

3. How do personal beliefs and past experiences influence teaching practices in content classrooms of a Japanese university?

7. Purpose of the Research

The purpose of this research was to identify patterns and characteristics of teacher-student interactions in academic content classes taught through English by three different types of teachers at a Japanese university which are Native English Speaking Content Specialists (NESCS), Japanese Content Specialists (JCS), and Native English Speaking Teachers (NEST) in order to fill in the gap about content teachers in previous literature. Furthermore, this research aimed to reveal why the teachers decided to use particular methods to interact with students in their classes. The decisions of teachers are mostly related to their teacher beliefs (Gutierrez, 2004; Johnson, 1992; Shi-ying, 2011), and teacher beliefs of the participants were explored by semi-structured interviews and reflective journals written by the participants. Finally, the study attempted to provide an effective model of CBI in Japanese context, and to advise teachers and institutions that are engaged in the content classrooms in English in the Japanese context based on the result of the present study.

8. Significance of the Study

More and more Japanese universities will start to employ some types of content classes taught in English due to the needs of globalization, needs of students and attracting international students as evidenced in the projects encouraged by the government. Teachers who teach departmental courses often struggle with the balance between language and content instruction. Along with the recent trend, more and more JCSs will teach content classes in English due to the insufficient human resources, but they have not been focused in the previous studies. This present study provided actual interactional samples of three groups of teachers and the beliefs of the teachers. By conducting this research, teachers who will teach content classes in English can apply the results to their teaching, and the teachers who are currently involved in content classrooms can receive an opportunity to reflect their interactions with students. Therefore, the results of this study bring the meaningful insight into teaching English by the content-class approach in the Japanese context.

II. Methodology

In the present study, three different types of content classes were chosen as the target classes at the Japanese university. The clear difference between NESCS, JCS and NEST is that the
NESCSs and JCSs are not a language teacher. In order to accomplish to collect actual samples of teacher-student interactions and explore the reasons why the participants decide to use certain strategies to interact with students, a series of classroom observations with video recording, follow-up interviews, and reflective journals were employed.

1. Participants

**Instructors.** The research was conducted in a private university located in Tokyo. The present study involved six teachers who are currently teaching academic subjects in English at the university, and the teachers were chosen as the representatives of each group which is NESCS, JCS, and NEST. The NESCS teachers are specialists of the field and have a degree related to the subject.

**Table 1**

*Description of the target classes*

<table>
<thead>
<tr>
<th>Class</th>
<th>Students #</th>
<th>Students level of English</th>
<th>Nationality of students</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>1</td>
<td>15</td>
<td>Advanced</td>
<td>Japanese and international Business</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>23</td>
<td>Upper intermediate</td>
<td>Japanese and international Educational Philosophy</td>
</tr>
<tr>
<td>JCS</td>
<td>1</td>
<td>4</td>
<td>Advanced</td>
<td>Japanese and international Macroeconomics</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>16</td>
<td>Advanced</td>
<td>Japanese and international Economic issues</td>
</tr>
<tr>
<td>NEST</td>
<td>1</td>
<td>13</td>
<td>Intermediate to advanced</td>
<td>Japanese from faculty of letters English Literature</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
<td>Intermediate to upper intermediate</td>
<td>Japanese from faculty of law Peace Study</td>
</tr>
</tbody>
</table>

2. Data Collection

The actual samples of teacher-student interactions were collected by a series of classroom observations with video recording. Six ninety-minute classes were observed twice in a semester. In addition, the modified Communicative Orientation of Language Teaching (COLT) developed by Frohlich et al. (1985) was employed as the instrument of the classroom observation. The COLT has been constantly employed in previous classroom-observation research (Huang, 2011; Lyster,
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The elements of COLT were revised based on the result of the pilot study. After the observations, semi-structured interviews were conducted with the six teachers. Each interview took 20 to 35 minutes, and the interviews were audio-recorded and transcribed. The third methodology was class reflective journals by the teachers. Journal entries have been used in the second language research since 1970s (Nunan & Bailey, 2009). The six teachers were asked to write reflective journals about the classroom interactions with students in relation to their educational backgrounds and previous teaching experiences of the participants. The reflections were written twice about the classes.

3. Data Analysis

Observation data was partly transcribed by the researcher. Through re-watching the video recordings from the observations, each component of the teacher-student interactions were counted using the COLT scheme to investigate the frequency of the strategies in their classes, and the following were the target features:

A) L1 use
B) Discourse initiation from the students
C) Information gap: display, referential, open, and closed
D) Reaction to student/teacher utterances
E) Incorporation of student utterances: comment, recasting, repetition, paraphrase, elicitation, elaboration request, clarification request
F) Negotiation for meaning: comprehension check, confirmation check, and clarification check
G) Metalinguistic feedback

The frequencies were compared and contrasted with each other to find any differences or similarities. Moreover, chi-square tests were conducted to know whether the differences were statistically significant or not. The chi-square tests were conducted for the information gap, reaction to student/teacher utterances and sustained speech of the student utterances. The data of reflective journals and the interview transcriptions were analyzed using the KJ method which is one of the effective methods of analyzing qualitative data (Kawakita, 1970).

III. Results and Discussion

The results and discussion from classroom observations, semi-structured interviews, and reflective journals from the instructors are presented in this chapter, and the research questions introduced in the first chapter are addressed. As a result of the classroom observations, the tendency and the characteristics of the teacher-student interactions have been found in each type
of classes. The data of the interviews and the journal entries were compared and contrasted, and qualitatively analyzed using the KJ method. Moreover, the data revealed the relationship between teaching practices and personal beliefs.

1. Results of the COLT Part A

According to the results of the COLT Part A, the general characteristics of the classrooms were revealed.

**Content control.** Content control refers to who controls the classroom content. The possible controllers are teacher/text, teacher/text/students, and students. For example, when teacher/text/student controls content, a teacher and students are discussing along with the textbook content. Table 2 shows the result of how much the controller had content control in the classroom. The rate of Table 2 is based on the time how long the controller continued to control the classroom contents. As a result, in the NESCS classrooms, the teacher and text mostly controlled the content of the classroom, while the students controlled more in the NEST and the JCS classrooms. The results are contradicted with the stereotype about Japanese professors who are expected to just give a lecture for whole time. In Japanese universities, content classes are traditionally taught by transmitting of information from teachers, and the teaching is done in one direction from teachers to students (Abe, et al., 1998: Abe & Terazawa, 1997). The reason is because JCS1 referred to the classroom of a university in the United States, and JCS2 believes the interaction is important. The content control might be related to the activities in the classrooms such as group discussions. In the group discussions, the students were more likely to be a controller of the topic. The classes taught by JCS2 and NESCS2 displayed higher rate of student control, and these two classes implemented group discussions several times.

Table 2

<table>
<thead>
<tr>
<th>Class</th>
<th>Teacher/ Text (%)</th>
<th>Teacher/ Text/Stud. (%)</th>
<th>Student (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>1 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 52.9</td>
<td>18.2</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>Average 76.4</td>
<td>9.1</td>
<td>14.4</td>
</tr>
<tr>
<td>JCS</td>
<td>1 46.9</td>
<td>47.3</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>2 40.7</td>
<td>21.9</td>
<td>37.2</td>
</tr>
<tr>
<td></td>
<td>Average 43.8</td>
<td>34.6</td>
<td>21.3</td>
</tr>
<tr>
<td>NEST</td>
<td>1 52.7</td>
<td>41</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>2 25.5</td>
<td>54.9</td>
<td>19.4</td>
</tr>
<tr>
<td></td>
<td>Average 39.1</td>
<td>47.9</td>
<td>12.4</td>
</tr>
</tbody>
</table>
2. Results of the COLT Part B: Teacher Verbal Interactions

**Research question 1: What are the characteristics of teacher verbal interactions with students in content classrooms taught by three different groups of teachers?**

The COLT Part B teacher verbal interactions consist of target language, information gap, reaction to form or meaning, incorporation of student utterances, and negotiation for meaning. The results revealed that the characteristics of the teacher-student interactions.

**The target language.** The first language (L1) refers to Japanese throughout this paper because the context of this research was a Japanese university. According to the result, L1 use happened in most of the classes except the class taught by NESCS1, and was observed the most in the NESTs classes. Although the teachers used Japanese, the use was mostly just a single word. The purpose of the use of L1 by the teachers was to assist the insufficient second language (L2) ability of the students in the NESCS and the JCS classes, and it was to entertain students in the NEST classes. For example, NESCS2 teacher used the translation of the terminology such as the name of a Japanese law, because Japanese students were able to understand the meaning of the word immediately in L1. In the class taught by NEST1, the teacher said, “Douzo [go ahead]” several times when students started activities. The use of the Japanese expression might be useful to create relaxed atmosphere of the classroom.

NESCS1 class did not include any L1 use, and this might be related to the number of the Japanese students in the class. The number of Japanese students was much lower than international students in NESCS1 class, so the teacher did not feel that L1 use might not be meaningful in the class. Furthermore, the level of English in NESCS1 was advanced, since the program set criteria about English skills to take the program. The JCS teachers were native Japanese speakers, but both of the teachers did not use L1 often. When JCS1 used L1, the teacher was trying to introduce the concept of Japanese proverb to the class. Thus, the teacher stated the proverb in Japanese first, and then translated the proverb into English.
Table 3

The Frequency of L1 Use of the Teachers

<table>
<thead>
<tr>
<th>Class</th>
<th>L1 use</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
<tr>
<td>JCS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
<tr>
<td>NEST</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

**Information gap.** Information gap is divided into request info and giving info. Request info refers to asking questions from teachers, and the types of questions consist of display, in which the answer is already known by the speaker, referential, whose answer is not known by the speaker, open, and closed. Open questions elicit longer answers, and closed questions can be answered by yes/no, or a single word. In content classes, display questions are often used as comprehension checks or checking the answers of the task in general. A referential question is used to ask opinions of the students. Each question of the teachers was categorized by the researcher based on the categorization introduced by Kinsella in 1991 (as cited Brown, 2007). Thus, the words used in the questions were carefully checked by the researcher to understand the intention of the teachers. Table 4 is the result of the frequency of the request info from the teachers.
In the JCS and the NEST classes, display questions were more frequently asked by the teachers. Although the number was just slightly different, referential question was the most frequent type in NESCS teachers. On the other hand, an open question was the least asked questions across the types of classes. The NEST teachers asked questions 201 times, and the number was the highest among three groups. The difference from the NESCS was 55 times, but a chi square test did not prove the significance of the difference. Thus, this result cannot confirm the questions types are influenced by the characteristics of the teachers.

**Incorporation of student utterances.** This parameter refers to how the teacher responded to the utterances of students. The components are correction, recasting, repetition, comment, paraphrase, elicitation/expansion, elaboration request, clarification request, metalinguistic feedback, negotiation for meaning. The results in Table 6 showed that repetition was the common strategy to incorporate the utterances of the students across the types of classes, and indeed repetition most frequently occurred in the NESCS and the NEST classes. In the NEST classes, the number of repetitions was quite high. The reason for this might be related to the length of the utterances of the students explained in Table 12. The students tended to answer the questions in just one to two words or one sentence. Thus, the repetition was more likely to happen. Although the frequency of repetition was higher in JCS classes, making comments was the most frequent strategy in the JCS classes. The JCS teachers often positively commented after the students answered the questions or reacted. For instance, the teachers commented by saying “Interesting idea”, and “Good try”. Other teachers also commented positively, but the frequency was much

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### Table 4

The Frequency of Each Question Type

<table>
<thead>
<tr>
<th>Class</th>
<th>Display (n=164)</th>
<th>Referential (n=134)</th>
<th>Open (n=105)</th>
<th>Closed (n=136)</th>
<th>$x^2$</th>
<th>$P$</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>1</td>
<td>16</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>6.568</td>
<td>.363</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>22</td>
<td>33</td>
<td>25</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JCS</td>
<td>3</td>
<td>54</td>
<td>28</td>
<td>21</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>18</td>
<td>10</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEST</td>
<td>5</td>
<td>40</td>
<td>23</td>
<td>29</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>28</td>
<td>26</td>
<td>12</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Incorporation of student utterances. This parameter refers to how the teacher responded to the utterances of students. The components are correction, recasting, repetition, comment, paraphrase, elicitation/expansion, elaboration request, clarification request, metalinguistic feedback, negotiation for meaning. The results in Table 6 showed that repetition was the common strategy to incorporate the utterances of the students across the types of classes, and indeed repetition most frequently occurred in the NESCS and the NEST classes. In the NEST classes, the number of repetitions was quite high. The reason for this might be related to the length of the utterances of the students explained in Table 12. The students tended to answer the questions in just one to two words or one sentence. Thus, the repetition was more likely to happen. Although the frequency of repetition was higher in JCS classes, making comments was the most frequent strategy in the JCS classes. The JCS teachers often positively commented after the students answered the questions or reacted. For instance, the teachers commented by saying “Interesting idea”, and “Good try”. Other teachers also commented positively, but the frequency was much
lower than the JCS teachers. Another notable fact was that metalinguistic feedback only happened in the NEST classes. For example, the NEST teachers offered the feedback about the use of the grammar point and discourse function of unfamiliar vocabulary. Moreover, direct correction of student utterances did not occur in all of the classrooms.

Recasting and elaboration request was higher in the NEST classes. This is related to the section of reaction of the teachers. The teachers tried to let students speak more in their interaction, since the utterances of the students were shorter. Moreover, the teacher recast the mispronunciation of the vocabulary while the students were reading out loud. Paraphrase was often seen in NESCS2 class, because the teacher asked the students to report what they talked in the group discussions, and then the teacher paraphrased the report for the rest of the class.

Table 6

The Frequency of the Incorporation of Student Utterances of the Teachers

<table>
<thead>
<tr>
<th>Class</th>
<th>Correction</th>
<th>Recasting</th>
<th>Repetition</th>
<th>Paraphrase</th>
<th>Comment</th>
<th>Elicitation</th>
<th>Expansion</th>
<th>Clarification Request</th>
<th>Elaboration Request</th>
<th>Meta- Linguistic Feedback</th>
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<tbody>
<tr>
<td>NESCS 1</td>
<td>0</td>
<td>3</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>2</td>
<td>20</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
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<td>36</td>
<td>13</td>
<td>14</td>
<td>9</td>
<td>11</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>JCS</td>
<td>1</td>
<td>0</td>
<td>21</td>
<td>9</td>
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<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>13</td>
<td>2</td>
<td>3</td>
<td>3</td>
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<td>0</td>
</tr>
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<td>Total</td>
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<td>9</td>
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<td>10</td>
<td>13</td>
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<td>0</td>
</tr>
<tr>
<td>NEST</td>
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<td>0</td>
<td>12</td>
<td>27</td>
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<td>6</td>
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<tr>
<td>Total</td>
<td>0</td>
<td>12</td>
<td>52</td>
<td>10</td>
<td>16</td>
<td>9</td>
<td>6</td>
<td>17</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Negotiation for meaning. Negotiation for meaning consists of three types of checks which are confirmation check, clarification check, and comprehension check. Overall, the frequency of negotiation for meaning was not higher than the results in the previous studies as demonstrated in the Table 7. As a result, negotiation for meaning from the teachers most occurred in the JCS classrooms, and the least in the NESCS classrooms. The JCS teachers did confirmation check and clarification check after the students uttered longer sentences. Furthermore, comprehension check did not happen in the NESCS classrooms and NEST1 at all. Throughout the classes, clarification check was the most frequent type of negotiation. Comprehension check often
happened when the students asked questions in NEST2 class. The teachers answered to the questions and said, “Is it ok?”

Table 7

*The Frequency of Negotiation for Meaning from the Teachers*

<table>
<thead>
<tr>
<th>Class</th>
<th>Confirmation check</th>
<th>Clarification check</th>
<th>Comprehension check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS 1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>JCS</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>NEST</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

To sum up, each group of teachers demonstrated different characteristics in relation to the verbal interactions. NESCS teachers had more control than students, and they did not incorporate any language aspect in their classrooms. NESCS2 used Japanese as a mean of assisting students. JCS teachers often positively commented on the student utterances, and negotiation for meaning was observed the most in their classes. Similar to NESCS, JCS teachers did not include language aspect and focused on the content. On the contrary, NEST teachers instructed language aspects such as vocabulary and grammar. NEST teachers repeated keywords from student utterances, and they also tried to lessen the stress of the students by asking them whether they have questions or not.

3. Results of the COLT Part B: Student verbal interactions

**Research Question 2: What are the characteristics of student verbal interactions with teachers in content classrooms taught by three different groups of teachers?**

**Discourse initiation.** The result of discourse initiation shows how many times the students initiated the conversation in the classrooms. The discourse can be questions to the teachers or comments to the topic by the students. According to Table 8, the students in the NESCS classes most frequently took initiations. This result might be influenced by the characteristics of the students. In NESCS1 class, the majority of the students were international students including native speakers of English. In many classrooms where English is the main language for
communication, asking questions and making comments while teachers are speaking is common and expected by the teachers. Discourse initiation occurred 13 times in the NEST classes, but the initiation mostly happened when the students were engaged in the group work. Asking questions in front of other classmates is sometimes embarrassing for Japanese students. Thus, the students in the NEST classes which consisted of only Japanese students might have not taken the initiatives in front of the whole class, but did so during the group work.

Table 8

<table>
<thead>
<tr>
<th>Class</th>
<th>Discourse Initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>1 (16)</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total 18</td>
</tr>
<tr>
<td>JCS</td>
<td>1 (2)</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total 10</td>
</tr>
<tr>
<td>NEST</td>
<td>1 (6)</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total 13</td>
</tr>
</tbody>
</table>

Note. Values in parentheses represent frequencies of initiation in group discussions

In the JCS classes, the discourse initiation did not happen as often as the NESCS classes even though the classes also included more than 10 international students. This might be related to the cultural difference of the teachers and the students. In the NESCS classes, the students knew the teacher was from the western culture which requesting information from students is common, but the JCS teachers are Japanese; therefore, the students might have hesitated to interrupt while the teacher was speaking. For example, one student took both NESCS1 and JCS2 classes, and the student actively commented and asked questions to NESCS1, but the students said, “Can I ask a question?” before asking a question in JCS2 classroom. Therefore, the students might not have known which classroom culture was applied in the JCS classrooms. Another reason would be associated with the system of team teaching. JCS2 was only responsible for three weeks, and the students might have needed time to acclimate the new teacher.

**Sustained speech.** The next component is sustained speech of the students which refers to the length of the student speech. Ultra-minimal speech consists of a single or two words, minimal
COMPARING TEACHER-STUDENT INTERACTIONS

speech refers to one or two sentences, and sustained speech means more than three sentences. According to Table 12, about 60% of the utterances of the students were ultra-minimal speech. Thus, the student speech tended to be a single or two words in these classrooms in terms of teacher-student interactions. One of the reasons would be related to the proficiency levels of the students. Different from the NESCS and the JCS classes, the NEST classes included lower intermediate to upper intermediate levels of students, and their speaking ability also seemed to be lower than the students of other classes. Another possible reason might be the characteristic of the questions from the teachers. According to the result of questioning from the teacher, the NEST teachers asked more display questions than referential questions, and referential questions require students to generate much longer answers than display questions do as previous research revealed (as cited Ellis, 2008; Long & Sato, 1983). In the NESCS and the JCS classes, more than half of the utterances were longer than a sentence. This result was statistically significant, so the tendency of sustained speech of student utterances was supported by statistics. In the NESCS and the JCS classes, the students were more likely to speak more than one sentence, while the students in the NEST classes tended to speak one or two words to the teacher.

Table 12

The Rate of Sustained Speech of Student Verbal Interactions

<table>
<thead>
<tr>
<th>Class</th>
<th>Ultra-Minimal</th>
<th>Minimal</th>
<th>Sustained</th>
<th>Total</th>
<th>( x^2 )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>32 (54.2)</td>
<td>16 (27.1)</td>
<td>11 (18.6)</td>
<td>64 (45.3)</td>
<td>33.749*</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>32 (34.7)</td>
<td>25 (27.1)</td>
<td>35 (38)</td>
<td>141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>64 (45.3)</td>
<td>41 (29)</td>
<td>36 (25.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JCS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>48 (39)</td>
<td>36 (29.2)</td>
<td>39 (31.7)</td>
<td>62 (33.5)</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>14 (22.5)</td>
<td>16 (25.8)</td>
<td>32 (51.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62 (33.5)</td>
<td>52 (28.1)</td>
<td>71 (38.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>30 (49.1)</td>
<td>24 (39.3)</td>
<td>7 (11.4)</td>
<td>72 (59)</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>42 (68.8)</td>
<td>14 (22.9)</td>
<td>5 (8.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72 (59)</td>
<td>38 (31.1)</td>
<td>12 (9.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The values before parentheses represent frequencies and these in parentheses represent percentages.

Negotiation for meaning. Negotiation for meaning from the students hardly happened in the NESCS and NEST classrooms. Thus, the frequency of negotiation for meaning was not affected by the characteristics of the students or the teachers, because the number of negotiation for meaning was quite low across the teacher types. The most frequent type of negotiation was clarification.
The students often tried to clarify the aims of questions that the teacher asked in JCS1 classroom. No comprehension check was found in all of the classes. Even though negotiation for meaning is important in the second language learning field, the students might be inexperienced in negotiating in classrooms.

Table 14

<table>
<thead>
<tr>
<th>Class</th>
<th>Confirmation check</th>
<th>Clarification check</th>
<th>Comprehension check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESCS</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>JCS</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>15</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>NEST</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

In conclusion, the characteristics of student verbal interaction differed from each group, and the characteristics might be deeply connected to the culture and English ability of the students. The students in the classes which taught by NESCS actively initiated the conversation by commenting on the topic or asking questions. What is more, the students did not use Japanese since most of the students were international students from various countries. In the JCS classes, the students also actively asked questions and expressed their opinions with longer sentences. Negotiation for meaning and sustained speech was observed most frequently in the JCS classrooms. Unlike NESCS and JCS classes, NEST classes consisted of only Japanese students. The level of English in the NEST classes was relatively lower than other target classes. Ultra-minimal speech was the most observed speech during teacher-student interactions in the NEST classes, and discourse initiation occurred while students were engaged in group work. The students did not comment on the topic when the teachers were talking.

4. Results of the Interviews and Reflective Journals

Research question 3: How do personal beliefs and past experiences influence teaching practices in content classrooms of a Japanese university?

The transcriptions of the interviews and the journal entries were analyzed using the KJ
method. According to the results, the influence of the personal beliefs and the background of the teachers on the teaching practices were found. From the analysis, three or four main beliefs which influence teaching practices were revealed for each type of the teachers. The ideas in the journals and interviews were labeled based on the keywords from the data. The ideas were compared, and some similarities and difficulties were revealed and displayed in the figure 1. The line means there is a relationship between the ideas, and the arrows show the contradiction between two ideas. According to the data, the teachers share similarities across the types.

**Results of the NESCSs.** The main beliefs found from the NESCS data include the importance of meaningful interactions, making connections, and limit language-class aspects from the classroom. These beliefs were reflected in their teaching practices in the classrooms. Meaningful interactions were accomplished by questionings from the teachers, group discussions, and the instructions from the teacher. The teachers also ask questions in order to let students connect their experiences and knowledge with the new information. The NESCS regarded their job was teaching content, so the teachers did not incorporate language aspects such as error corrections and assessed based on the quality of the ideas and not linguistic aspects in the productions of the students.

**Meaningful interactions.** According to the results, the NESCS teachers value the meaningful interactions with students. When the teachers managed to meaningfully interact with students in the class, the teachers regard the class as successful. Meaningful refers to multiple qualities which are authentic, exchanging different perspectives, and to spark curiosity of the students. Therefore, the teachers appreciate the diversity of the classroom because the students came from various cultural backgrounds so that the exchange became more active. NESCS2 teacher stated that the teacher tried to simulate the class to that in the countries where English is spoken as a main language such as the United States and the United Kingdom. These beliefs influence teaching practices of the teachers.
Figure 1

The result of the KJ method

<table>
<thead>
<tr>
<th>NESCS</th>
<th>Meaningful interactions</th>
<th>Good to have heterogeneous classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Discovering together</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gain new perspectives from the interactions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spark and sustain curiosity of students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group discussions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simulate classroom to a classroom in the US</td>
</tr>
<tr>
<td></td>
<td>Making connections</td>
<td>Questions to make intellectual connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questions for reasoning the topic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Find connection between the topic and experience</td>
</tr>
<tr>
<td>JCS</td>
<td>Limit Language class aspect</td>
<td>Japanese students need support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not necessarily limit input in English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output should be in English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focus ideas in assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Error corrections are counter-productive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students learn English implicitly</td>
</tr>
<tr>
<td></td>
<td>Authenticity</td>
<td>Benefits of diversity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content teachers just teach content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Necessity of English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simulate classroom to a classroom in the US</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Authentic language use among students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correction demotivates students</td>
</tr>
<tr>
<td></td>
<td>Past experience</td>
<td>Praising students comments or answers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giving impacts to attract students attention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium language does not affect teaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching experience in the US</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of Japanese students does not affect teaching</td>
</tr>
<tr>
<td></td>
<td>Personal development</td>
<td>Reflect own teaching and classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Near native ability of English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conscious about own English, not notice errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own passion in the subject motivate students</td>
</tr>
<tr>
<td></td>
<td>Interactions/ cooperation</td>
<td>Set controversial topic, careful planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooperative learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive evaluation on active participation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Needs of students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NEST</th>
<th>Student voice</th>
<th>Collaboration of teacher and students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students have amazing knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative learning is effective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher talk is necessary for support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions to elicit students’ opinions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limit feeling of ‘this is a language class’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students have amazing knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative learning is effective</td>
<td></td>
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<tr>
<td></td>
<td>Teacher talk is necessary for support</td>
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<td>Questions to elicit students’ opinions</td>
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<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
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<tr>
<td></td>
<td>Limit feeling of ‘this is a language class’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students have amazing knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative learning is effective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher talk is necessary for support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions to elicit students’ opinions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
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<td></td>
<td>Limit feeling of ‘this is a language class’</td>
<td></td>
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<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students have amazing knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative learning is effective</td>
<td></td>
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<tr>
<td></td>
<td>Teacher talk is necessary for support</td>
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<tr>
<td></td>
<td>Questions to elicit students’ opinions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limit feeling of ‘this is a language class’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not interrupt or correct while students are speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students have amazing knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative learning is effective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher talk is necessary for support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions to elicit students’ opinions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student fluency</th>
<th>Building fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language teacher as well as a content provider</td>
<td></td>
</tr>
<tr>
<td>Reduce students’ stress, correcting not embarrassing way</td>
<td></td>
</tr>
<tr>
<td>Hesitate to just give a correct answer</td>
<td></td>
</tr>
<tr>
<td>Students have little opportunities to use English</td>
<td></td>
</tr>
<tr>
<td>Warm up to switch mindset for English use</td>
<td></td>
</tr>
<tr>
<td>Teachers are responsible to create English atmosphere</td>
<td></td>
</tr>
<tr>
<td>Four skills of English is incorporated</td>
<td></td>
</tr>
<tr>
<td>Not take off points on grammar issues</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson authority</th>
<th>English only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncomfortable to be authoritative</td>
<td></td>
</tr>
<tr>
<td>Language teacher as well as a content provider</td>
<td></td>
</tr>
<tr>
<td>Reduce students’ stress, correcting not embarrassing way</td>
<td></td>
</tr>
<tr>
<td>Hesitate to just give a correct answer</td>
<td></td>
</tr>
<tr>
<td>Students have little opportunities to use English</td>
<td></td>
</tr>
<tr>
<td>Warm up to switch mindset for English use</td>
<td></td>
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<tr>
<td>Teachers are responsible to create English atmosphere</td>
<td></td>
</tr>
<tr>
<td>Four skills of English is incorporated</td>
<td></td>
</tr>
<tr>
<td>Not take off points on grammar issues</td>
<td></td>
</tr>
<tr>
<td>Uncomfortable to be authoritative</td>
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</tr>
<tr>
<td>Language teacher as well as a content provider</td>
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<tr>
<td>Reduce students’ stress, correcting not embarrassing way</td>
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<tr>
<td>Hesitate to just give a correct answer</td>
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<tr>
<td>Students have little opportunities to use English</td>
<td></td>
</tr>
<tr>
<td>Warm up to switch mindset for English use</td>
<td></td>
</tr>
<tr>
<td>Teachers are responsible to create English atmosphere</td>
<td></td>
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COMPARING TEACHER-STUDENT INTERACTIONS

NESCS2 asked more referential questions to provide the students with opportunities to express their ideas. Through exchanging ideas, the students were able to receive different perspectives from others, and the students would be more interested in the topic. NESCS1 also value the meaningful interactions with the students. The teacher tried to give more authentic examples related to the subject matter for students to obtain more meaningful insight of the subject.

**Making connections.** The teachers believe that making connection is important for learners to deepen understanding. Therefore, NESCS1 teacher stated the purpose of the questioning was mainly to provide the students with opportunities of reasoning the topic and making connection between the new information and the experience and the knowledge of the students.

**Limit language-class aspects.** Both of the teachers considered their classes as a content class. Therefore, the linguistic aspects were not seen in their classrooms, and the teachers tried to limit the language-class aspects in the classrooms. In both of the classrooms, error correction was not observed even though the utterances of the students included errors. In their classrooms, the understanding and reasoning of the contents and expressing their own idea about the topic are valuable. In the NESCS classes, the teachers prioritized the quality of the ideas in the productions of the students, so the teachers stated that they usually do not take off points on the grammar mistakes in the productions of the students. The teachers admitted the quality of the ideas of the Japanese students is high, but the teacher also knew that the students struggled to express the thoughts in writing. Thus, assessing their productions is challenging for the teachers. Even though the language instruction was not incorporated in their classes, the teachers stated that the students could learn English implicitly through taking the classes. Therefore, the students could naturally improve their skills as they participate in the classroom activities. Moreover, the teachers do not actively include the language aspects, but the teacher expressed that Japanese students need some kinds of support to successfully join the activity.

**Results of the JCSs.** The JCS teachers shared similar beliefs about teaching content classes in English. The JCSs value authenticity of the classrooms, and JCS1 tried to refer to the classroom in the U.S. when the teacher is engaged in content classes in English. JCS2 utilized the benefits of authentic environment of the classroom. In addition, the teachers are interested in personal development, so the teachers attended the workshop and incorporate what they learned in their classes. Cooperation and interaction were important for the teachers to conduct the classes, and the teachers used group discussions to let the students interact with other classmates.
Authenticity. An authentic classroom refers to the classroom in the countries where English is a medium of communication. In the classroom of the society where English is a main language of interactions, the linguistic aspects would not be included. That is why the JCS teachers also did not include the linguistic aspects in their classrooms. For example, both of the JCSs did not correct errors of the students. L1 use was also not seen in the JCS classrooms. One reason pointed by the teachers is related to the proficiency levels of the non-native English speaking students. In order to take these classes, the students need to possess certain levels of English, so the students including Japanese students were high proficient learners of English. In a classroom of university in the United States, because teachers just concentrate on teaching contents, they do not have to deal with language instruction. The JCSs are also the content specialists, and the linguistic elements were not incorporated in their classrooms. JCS1 remarked that the teaching language should be done by NESTs, and content teachers can concentrate on teaching the contents. The JCSs appreciated the diversity of the classrooms. Both of the classrooms consisted of international students and Japanese students. In JCS2 class, the majority was international students. The students came from various countries, and they often share the opinions from their own cultural point of view. Because the students can learn different perspectives about the topics, the exchange of thoughts became meaningful.

Past experience. According to the JCSs, their past experiences influence the current teaching practices. Both of the JCSs have participated in the workshop in the United States, and the teachers incorporated what they learned in their teaching. In universities of the United States, JCS1 attended the workshop about cooperative learning, and JCS2 joined the workshop for the non-native English speaking teachers who teach content in English. JCS1 occasionally used cooperative learning methods especially pair discussion when the students hesitated to answer the questions from the teacher. When JCS2 attended workshop in the United States, the lecturer often praised what the participants said. At that time, JCS2 described that praising the comments can improve motivation of the learners, so JCS2 consciously commented on the utterances. The teaching experience in the American university affected the teaching practices of JCS1. JCS1 tried to simulate the classroom to that in the United States.

Personal development. Another important component is the personal development of the teachers. Both of the JCSs stated the necessity of the improvement of the abilities which are English ability of the teachers and teaching practices as well as the understanding of the issues in their own field. Both of the JCSs mentioned the need to improve the ability of English. JCS1 stated that the teacher has to be near native in English to successfully teach the content class in
**Interaction and Cooperation.** According to the JCSs, the classroom should be interactive. Both of the JCSs said this was not limited in content classes, but they tried to create interactive classrooms in general. In order to create interactive classrooms, JCS2 carefully planned the discussion questions. For example, JCS2 selected the controversial topic in order to elicit different opinions from the students such as commission system of the salary. Moreover, JCS1 told that the active participation in classroom discussion would be positively evaluated at the beginning of the class. The JCSs occasionally asked students to work in group and pair and discuss the topics, and they believe that cooperative learning is effective in their classes. JCS1 remarked that the students can learn and deepen understanding when they teach the topics. Therefore, JCS1 tried to provide the students with opportunities to express what they know and think with others to effectively learn the subjects.

**Results of the NESTs.** According to the interview and the journal entries, the four main beliefs of NESTs which influenced their teaching practices were found. The four main beliefs were about the importance of building fluency of the students, hearing student voice, lessening authority of the teachers, and treatment of the L1. In order to apply these beliefs in their classrooms, the NESTs conducted activities to help building fluency, and cooperative learning to elicit the voice of the students, and made efforts to lessen the authority of the teachers, and have policy about the Japanese use.

**Building fluency.** For the NESTs, the teacher focused on building the fluency of the students rather than building accuracy through conducting activities and teacher-student interactions. Regarding fluency, the teachers prioritized the organization of the ideas rather than the linguistic structure of the production of the students. The teacher never interrupted while the students were speaking. This was different from the NESCS and the JCS teachers because the NESCS and JCS teachers sometimes started talking in the middle of the utterances of the students in the observed classrooms. The teachers assigned the activity to build the fluency in their classroom. The content of NEST1 class was English literature, and the teacher often assigned an activity of reading out loud. As EFL teachers, the teaching practices of the NESTs are influenced by the experience of teaching in Japan and training in TESOL programs. NEST1 valued implementing of the four skills of English even in content classrooms. Therefore, the teacher asked students to write the essays as well as read materials. NEST2 strongly believes that English is a tool of communication, so the students need to practice using English and build the fluency. The NESTs also stated that they do not take off points from grammar mistakes and evaluate based on the
quality of ideas and academic writing skills such as organization of the paragraphs.

**Student voice.** Both of the NESTs considered the ideas of the students as important; therefore, the teacher provides students with chances to share their opinions through questionings and group discussions. To support the students, the teacher admitted they use teacher talk. The NESTs said that the students have good knowledge and ideas about the content, so the teacher asked questions and conducted group discussions to elicit their knowledge and ideas about the subject matters. Even though the teachers expend efforts to elicit ideas of the students, the students hesitated to share their opinions in the observed classrooms. The results were shown in the sustained speech of the student verbal interaction, and the students answered the questions from the teacher by one or two words. Therefore, the teachers decided that the students in the NESTs need support from the teachers. In order to support the understanding of the students, the teacher employed teacher talk. For example, the teachers slowed down the pace of the language and repeated the instruction several times.

**Lessen authority.** The NESTs pointed out the authority of the teachers in the classroom. In the class, the teachers are content providers and also language teachers, so the students tended to blindly believe what the teacher said. The NESTs teachers have strong beliefs about student voice as introduced in the previous paragraphs; therefore, the teachers hesitated to just provide right answers to the students. Therefore, the teachers tried to hear the opinions of the students by asking questions or assign group discussion. In order to lessen the stress of the students, the teachers did not correct the errors of students in front of other classmates. NEST1 tried to correct in an enjoyable way.

**Treatment of L1.** The beliefs about the treatment of L1 are different among NESTs. NEST1 has strong English-only policy, while NEST2 is less strict about the use of Japanese. NEST1 stated that the students rarely use English outside of the classroom, and creating an English-only environment is responsibility of the teachers. On the other hand, NEST1 accepted L1 use during the group discussions. NEST1 said that expressing ideas about the content matters in the second language first is hard for learners. The perspective of the teacher is similar to the NESCS teachers. Thus, the students can express the ideas in their L1 first, and then they can change the idea into English when they report to the teacher.

IV. Pedagogical Implications

Based on the results and discussion, meaningful insight into the Japanese CBI classrooms were provided. The three different groups of teachers demonstrated different characteristics to
conduct their classes in English. Each group showed their strengths and weaknesses. These facts directed the necessity of teacher training and careful planning for successful CBI programs in Japanese contexts. In this chapter, the effective model of CBI in Japanese context is suggested, and the advice for each group of teachers is introduced. Following the suggestions for teachers, several implications are offered for the program developers and holders.

1. Implications for CBI class in Japanese context

The effective model of CBI in Japanese contexts should include discussion as a main classroom approach. According to the classroom observation, the class without discussion was fully controlled by the teacher. Other classes assigned group discussion several times, and the students were actively engaged in the discussion. In order to improve communicative competence of the students as well as teaching content, discussion is a useful method, since discussion requires students to personalize the topic and express their opinions in the target language. Through interactions, learners can receive comprehensible input (Long, 1983) and learn from each other. Therefore, teachers need to prepare and set time for discussion during the classes. Moreover, more referential questions should be asked by teachers than display questions which mostly work as a comprehension check. The referential questions can elicit their opinions and longer sentences rather than just a single word. Regarding discussion, discussion questions and reading should be assigned before the class, so that students can prepare their own opinions and what to say in a classroom. English as Foreign Language (EFL) learners, especially Japanese students, often face difficulty to participate in discussion. In the present study, the Japanese students were often left behind in group discussion even though other international students actively expressed their ideas. If, however, they could prepare enough to participate before the class, they would be able to join a conversation among classmates and share their opinions. Through achieving these tasks, students can build their confidence to join group work.

In order to linguistically support learners, teachers should understand the difficulties that second language learners experience, and they can train students during classes. Second language learners face various hardships. For Japanese learners, fear of making mistakes and lack of confidence often obstructs learners from expressing their ideas in English. These facts are known by NESTs, but NESCSs and JCSs are not always familiar with the difficulties of second language learners. Thus, teachers of CBI should understand and support them.

As for student characteristics, a CBI program needs to set criteria of English proficiency for students to take the program in order to secure the balance between language and content instruction. Two of the classes in the present study were open to various levels of students; hence,
the teacher spent more time on language instruction compared to other classes. If goals of the program do not include any linguistic aspects, the criteria of the non-native speakers of English should be higher. In addition to the proficiency level of the target language, students should be familiar with the target content, because learning completely new topic in the second language is extremely hard for learners. What is more, a CBI program can be more interactive if the class consists of both Japanese and international students. According to the classroom observation in the present study, the heterogeneous classes were more interactive, and the students initiated during the class such as asking questions and making comments. For this reason, Japanese learners can learn the authentic language use from international students, and they also can learn different perspectives about the given topic.

When an institution develops a CBI program, communication between a program holder such as department and teachers is necessary. In the interview, one of the participants stated, “I don’t know the perspective of the department. I wonder how they see it (his class)” , so the teacher was sometimes confused about the balance between language and content since he did not know the expectation of the department. Teachers and departments should share the same goals and objectives that they want students to achieve through taking the course.

2. Suggestions for teacher-training workshop

Based on the model of Japanese CBI which is suggested previous paragraphs, pedagogical implications toward each group of teachers are provided with ideas for teacher-training workshop. If a university wants to utilize a CBI class as a chance to develop English ability of students, teachers of CBI need to attend teacher training. In teacher-training workshop for Japanese CBI, the focus would be raising awareness of teachers toward student-centered classroom, methodology of teaching second language, cooperative learning, the characteristics of EFL learners, and how to utilize their strength. In workshop, student-centered instruction would be emphasized. If students are provided with opportunities to express their ideas in the classroom, the classroom would be more interactive and student-centered.

Teaching methodology will be presented in workshop, since content specialists including NESCS and JCS have not officially been trained as a language teacher. University academics are usually teaching based on their experiences and do not possess enough knowledge about teaching methodologies (Willcoxson, 1998). Error correction is an essential component for second language learning, and error correction was not observed at all in the classes of this present study. The participants of this study hesitated to correct errors of students because students could be demotivated by the correction. Similarly, teachers of CBI classes in the previous studies tend to
leave errors without any correction (Allen et al., 1990; Musumeci, 1996; Shah, 2003). However, students are expected that errors would be corrected by teachers (Brown, 2007). Thus, teachers in CBI sometimes need to correct errors of students in an appropriate way. In workshop, different types of error corrections can be introduced such as recasting, giving metalinguistic clues, and clarification request. As for JCSs, they are able to use Japanese if the use of Japanese is helpful for learners to understand the content. For example, the NESCS2 who speaks fluent Japanese occasionally used Japanese to assist understanding of the students, when the students did not understand the name of law in English. The ability of Japanese is an advantage of JCSs.

V. Conclusion

The present study was conducted to reveal the characteristics of the teacher-student interactions in classes where academic subjects were taught in English by NESCS, JCS, and NEST teachers. In addition, the influence of personal experiences and the teacher beliefs were explored to find insights into content classrooms in the Japanese university context. Even though the data revealed the patterns of teacher-student interactions in content classrooms, the results cannot be generalized due to the small size of the participants. The findings from the present study demonstrated that the characteristics of the interactional patterns are different from teacher to teacher, and the interactions are influenced by the personal experiences and the beliefs of the teachers. The classrooms of the NESCS teachers are rather teacher-centered. Moreover, the NESCS teachers want students to gain benefits from meaningful interactions to deepen their understanding about the given topic in the classroom and be interested in the subject. The JCS teachers positively commented on the answers with intention of motivating learners. The utterances of the students in the JCS classes were longer due to the time commitment to the discussion. Both the NESCS and the JCS teachers were different from the NEST teachers in that the NESCS and JCS teachers did not include language aspects. Only the NEST teachers reacted to the form of the students and provide metalinguistic feedback occasionally during the classes. The NEST teachers attempted to hear the opinions of the students, but the length of the utterances of the students was shorter than that in other classes. This might be related to the proficiency levels of the students and also the classroom culture among Japanese students.

In the present study, the student voice is missing, and this point needs to be included in a further study. For example, opinions of what students expect from content classrooms conducted in English and what they want to improve through taking the class. If the needs of students contain language aspects, the department should include their needs and train teachers to be able
to include some linguistic aspects in classrooms even though the class is a content class. The approach of teaching content class in English will increase in Japanese university context, so further study should be done with the larger number of participants including teachers and students. In addition, the outcomes of the students after the completion of content classrooms would be meaningful to look at to add the effectiveness of the approach in second language learning. In this study, some of the teachers did not agree, but others agreed with that their teaching practices are not influenced by the medium language of the classroom, so the further study needs to compare the teaching practices in the class in Japanese and English to support the statement.

References


COMPARING TEACHER-STUDENT INTERACTIONS


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Appendix

A1: Interview Questions (English)

- Personal educational backgrounds and teaching experiences
  1. Have you taught academic subject in English other than this class
  2. Do you think your educational backgrounds or previous teaching experiences influence your teaching practices? If so, how?

- Teacher-student interaction
  3. What do you think are the main aims of teacher questioning? (Shi-ying, 2011)
  4. Which types of questioning strategies would you prefer to use: questions which questioner does not know the answer (referential) or questions which questioner knows the answer (display)? Why? (Shi-ying, 2011)
  5. Do you think grammar is necessary for learners to be fluent speaker of English? (Johnson, 1992)
  6. How do you incorporate grammar instruction in your class?
  7. Should errors of students be corrected by the teacher? Why or why not? (Johnson, 1992)
  8. If you correct errors, how would you correct the errors? Do you have any preferable method? Why?
  9. To what extent do you feel you try to follow an English-only policy in the classroom? (Ford, 2009)
  10. Can you give examples of when you use the L1 yourself in class? (Ford, 2009)

- General questions
  11. Do you think your policy is primarily the result of theory, principle, intuition, experience, pragmatism, or something else? (Ford, 2009)

- Questions from the observations
B1: Directions for Keeping a Journal

Please make a journal entry in either Japanese/English describing your classes. For Japanese teachers, it is no problem to write this journal in Japanese. When you reflect on Name of the class you taught on DATE, what comes into your mind? Did you achieve the intended goals? How was the interaction with the students? Did you enjoy teaching the class? Why or why not? Could you make such reflection in one page of A4 size paper using word processor?

You can write in whatever way you feel comfortable. For example, you may start answering the questions above or you may describe whatever your thoughts about the class. You can write as you like, however, I would like you to include your thoughts about the following.

1. Did you care about how you ask questions, respond to students’ utterances, explain or lecture on the subject matters, etc. because you are teaching an academic content course in English? If so, how and why?

2. Do you have a specific belief or past experience that affects the way you conduct the class, for example, the way you ask questions to students, respond to students’ utterances, explain or lecture on the subject matters? If so, could you describe it?

3. Did you notice errors of the English language such as grammar, vocabulary, and pronunciation made by students? If yes, how did you respond to those errors and why did you choose the way?

Please submit the file by DATE to e12m3202@soka.ac.jp (to Saki Inoue). Thank you very much for your time and cooperation. You can refer to the chart below for your reference.

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## D1: Modified COLT Part A

### COLT part A

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