Knowledge Construction and Negotiation of Leadership in Collaborative Talks among Multilingual Students

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Abstract —This article examines multilingual students' collaborative talks in a TESOL graduate seminar. A group of multilingual students discussed an assigned reading on language awareness and teaching methodology. The group discussion was video recorded and analyzed using a micro-ethnographic discourse analysis approach. The study investigated how multilingual students constructed academic knowledge and learning tool in group work. The author argues that knowledge is socially constructed through collaboration and dialogues among students with different linguistic, sociocultural, and educational backgrounds. This study also examined how multilingual students negotiated leadership in collaborative talks. The more experienced student, who is the native English speaker, assumed leadership through active participation. The less experienced students, who are non-native English speakers tried to gain leadership using their native language and cultural knowledge. It suggests that multilingual students, particular non-native English speakers, should actively participate in academic knowledge construction and bring in their linguistic and cultural resources to the classroom.

Index Terms—classroom discourse, collaboration, group interaction, discourse analysis, knowledge construction, leadership, multilingual students, TESOL students

I. Introduction

Group work has become increasingly popular in higher education context (Johnson, Johnson, & Smith, 2007). As an alternative approach to teacher-centered instruction, collaborative learning has been integrated in graduate level courses in forms of group presentation (Leki, 2001), group discussion (Kim, 2006), and group writing (Storch, 2011). However, participating in oral discussion poses a great challenge to multilingual students, who have diverse linguistic and cultural background and different expectations of group interaction (Leki, 2001; Liu, 2001; Morita, 2004; Seloni, 2012). Thus it is worth exploring social interaction among multilingual students in group work. One important aspect pertinent to their social interaction is the power relationship when they construct knowledge in group work.

The theoretical standpoint of the study stems primarily from Gumperz's (1982) interactional sociolinguistics. Adopting a micro-ethnographic approach to the discourse analysis of classroom events (Bloome, Carter, Christian, Otto, & Shuart-Faris, 2005), this study examined the collaborative discourse of multilingual students in the field of TESOL, with an emphasis on how they constructed academic knowledge and negotiated leadership during a classroom group discussion. Collaborative discourse is conceptualized as a social process in which individuals work together to construct knowledge and learning tool by using language and other semiotic tools (Pea, 1993). The study is guided by the following questions:

1) How do multilingual students in TESOL construct academic knowledge as they participate in group discussion?
2) In relation to the construction of knowledge, how do multilingual students negotiate leadership with their peers?

II. Theoretical Framework

Social constructionism theory provides theoretical lens to view language-in-use in classroom. One important concept pertaining to the discussion about knowledge construction is Bakhtin's (1981) notion of utterance. Bakhtin made the distinction between an utterance and a sentence. He argued that each utterance is unrepeatable and unique in its context. An utterance is spoken by a certain person at a particular time and space and is addressed to a particular someone else. Therefore, the meaning of words in an utterance varies and depends on who speaks to whom, when, where, and how (Bloome et al., 2005). Voloshinov (1973) also emphasized this dialogical relationship of words in the utterances:

Word is a two-sided act. It is determined equally by *whose* word it is and *for whom* it is meant. As a word, it is precisely the product *of the reciprocal relationship between speaker and listener, addresser and addressee*. (p. 86, emphasis in original)

The above view toward the meaning of a word is important to understand knowledge construction. Voloshinov (1973) argued "[t]he word is implicated in literally each and every act or contact between people – in collaboration on the job, in ideological exchanges, in the chance contacts of ordinary life, in political relationship, and so on" (p. 19). From a

social constructionism perspective, meaning is negotiated and co-constructed among interlocutors in a social event. Therefore, knowledge is co-constructed through people acting and reacting to each other (Bloome et al., 2005; Erickson & Shultz, 1977), and through each and every reflection and refraction of reality (Voloshinov, 1973). Furthermore, Pea (1993) argued that "knowledge is commonly socially constructed, through collaborative efforts towards shared objectives or by dialogues and challenges brought about by differences in persons' perspectives" (p. 48).

In a similar vein, Gergen (2009) proposed that social constructionism shifts the emphasis from individual learning to collaborative learning. He stated that such collaboration of knowledge construction underscores three important relationships: between teachers and students, among students and peers, and between classroom and the broader social contexts. This study is particularly interested in the relationship among peers and their joint effort to construct knowledge as a group. Social constructionism theory calls for a turn from monologic interaction to dialogic interaction in the classroom (Wells & Arauz, 2006). Such a shift highlights the important changes in classroom interaction. For instance, it expands the domain of students' participation; it challenges initiation-response-evaluation (Mehan, 1985) pattern of classroom discourse.

Social constructionism theory also offers an alternative lens to examine leadership. According to Gergen (2009), leadership emerges from the way people interact and exists in the collaborative relations with others. In a classroom, when students work in groups on joint tasks, they are negotiating their relationship through discoursing with each other. Evans (1993) investigated peer-led literature discussions and the factors that influence the discourse and participation structures in such group work. Her study demonstrated that the group interactions were influenced by the power relationships among participants due to gender, social status, and ethnicity. Goatley, Brock, and Raphel (1995) studied small-group literature discussions of students with diverse linguistic, social, and cultural backgrounds. They examined the meaning construction of literary texts and the participation modes of those students in peer-led literature discussions. Their results showed that students assume different roles and responsibilities while negotiating their understanding of the texts with their peers. Some students assume leadership role by asking questions, offering statements, initiating new topics, directing the conversation, or accessing the floor. Other students acted more as participants rather than as leaders in the group. In the present study, factors including language, culture and academic experience are considered while examining the negotiation of leadership among multilingual students. These factors may influence the power relationship and the participation patterns of their interactions.

III. METHODOLOGY

A. The Classroom Context

The study was conducted in a graduate seminar in a TESOL program at a large Midwestern university in the United States. The seminar was Foundations of Second Language Acquisition (SLA), which provided an overview of cognitive and linguistic aspects of SLA. The seminar was organized via lectures, group work, and student-led discussion. The particular classroom events being examined were student-led discussion of the assigned reading. Normally, there were approximately 15 students attending the seminar. For each lesson, two students took the role of facilitators and guided the discussion on a given topic. The rest of the class was divided into three groups with 3-4 members in each group. The classroom events usually consist of several steps:

1) Facilitators prepare an activity that organizes group discussion on a reading assignment;
2) Each group discusses the assigned reading and creates a graphic organizer to summarize the reading, highlight important concepts or raise questions;
3) Each group presents the graphic organizer to the whole class;
4) Facilitators summarize the whole discussion.

B. The Broader Social Context

The broader social context of the above classroom events has multiple layers (Bloome, Beierle, Grigorenko, & Goldman, 2009). To describe the social context, different layers represent "different levels of context that simultaneously constitute, and are constituted by, the levels above and below them" (Cole 1995, p. 108). In the macro-level institutional context, graduate students' presentation skills and classroom participation are highly valued. In the meso-level classroom context, the teacher provides graduate students with learning opportunities to co-construct classroom discourse collaboratively. The micro-level context of lessons consists of various topics of SLA theory and research, which include age-related factors, cross-linguistic influence, cognition, language awareness etc.

C. Data Collection

Data were collected in ten consecutive weeks through videotaping, audio recording, photographing, classroom observation, and follow-up interview. The entire student-led discussion was video recorded. Each group's collaborative talk was audio recorded separately. The artifacts (i.e. the graphic organizers on chart papers) generated during their collaboration were documented using a digital camera. In the meantime, the researcher observed the whole class and kept field notes. Interviews were conducted after class to get the participants' emic perspectives of the classroom events. The corpus of data consist of 6 hours of video recording, 18 hours of audio recording, 9 copies of the graphic organizers, and 3 hours interviews with the focal participants.

The focal event was the group discussion on 'language awareness (LA) and teaching methodology' (Svalberg, 2007). This event happened in the middle of the semester. The larger corpus of data was used as a broader context to assist the interpretation of this chosen event (Bloome et al., 2009). Four students participated in the discussion. A summary of their profile is given in Table I. Before this focal event, all four participants were familiar with the expectation of group work and they had collaborated with each other in previous group discussions as well.

TABLE I.
THE PROFILE OF THE FOCAL PARTICIPANTS

Participant	Sam	Jenny	Sophia	Mina
Country of origin	America	South Korea	South Korea	Indonesia
First language	English	Korean	Korean	Indonesian
Additional language(s)	Chinese, Korean, Nepali	English	English	English
Gender	Male	Female	Female	Female
Academic experience	MA in TESOL, taught English in China, Nepal, and South Korea for six years	MA in TESOL, No substantial teaching experience	MA in TESOL, No substantial teaching experience	A visiting scholar for short term, taught English in Indonesia

This event was selected for two reasons. First, the discussion topic 'language awareness and teaching methodology' well represents the content of a TESOL graduate seminar. After screening the corpus of video and audio data, this literacy event was selected as a "representative case" of the literacy practices which Street (2000) defined as the "broader cultural conception of particular ways of thinking about and doing reading and writing in cultural contexts" (p. 22). Second, an alternative way to view literacy events is focusing on how interlocutors create meaning through acting and reacting to each other (Bloome et al., 2005). The selected literacy event demonstrated the action and reactions of group members at the level of face-to-face interaction.

D. Data Analysis

This study used a micro-ethnographic discourse analysis approach (Bloome et al. 2005). The classroom event was analyzed on a line-by-line, message-by-message basis. According to the analytic framework of Green and Wallat (1981), the unit of analysis in this study was a message unit which contains the smallest conversational meaning. The message unit was determined in a post hoc manner. The boundary of message units was segmented by considering the message context (Erickson & Shultz, 1977) and contextualization cues, including paralinguistic/prosodic cues and nonverbal cues (Gumperz, 1992). After parsing individual message units, the conversational functions or strategies of message units were identified (Bloome & Egan-Robertson, 1993; Green & Wallat, 1981).

After describing message units, the next step was to identify interactional units, which were defined as thematically tied message units based on conversational cohesion (Green & Wallat, 1981). Thus, message units formed interactional units with consideration of contextualization cues, context, and conversational cohesion. In this study, the 12-minute group interaction consisted of six interactional units. In addition to the contextual evidence, interview data were used to support the analysis.

IV. RESULTS

A. Description of the Focal Event

The group discussion begins with Sam's demonstration of his understanding about the assigned reading. He introduces his own visual representation – a triangle consisting of learners, teaching, and languages at each corner. After displaying his knowledge of the article, Sam asks his peers' opinions about the article. The other group members – Sophia, Jenny, and Mina – share their ideas. The four group members create a graphic organizer to represent their understanding of the article. The group first draws a school building with five floors representing five features of language teaching methodology. Second, they create a teacher holding the school building and identify several crucial language teaching techniques for the teacher. Afterward, the group attempts to make connections between teaching methodology and techniques. Finally, they build up a school-teacher image to present their shared knowledge about language awareness and language teaching. Fig. I represents the artifact that was created by the group during collaborative talks.
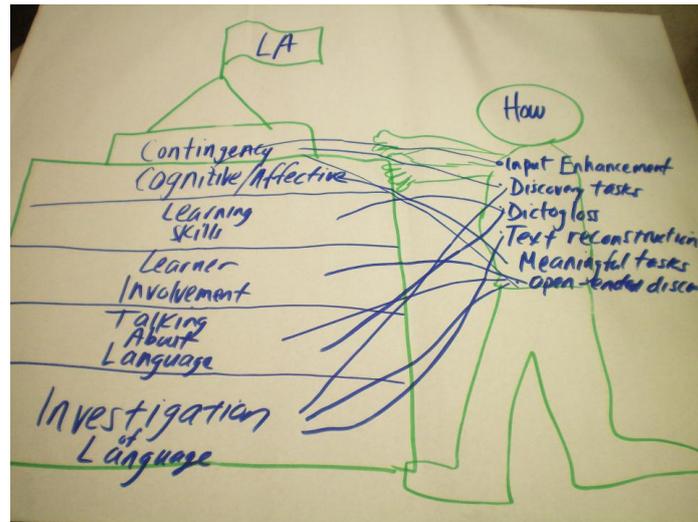
Figure I. The graphic organizer created by the group

B. Construction of Academic Knowledge

Transcript 1: displaying understanding and knowledge

1   **Sam:** Mm | yeah so yeah to me
2   The article even this particular section was about these three+
3   *(Pointing to his graphic organizer – the triangle)*
4   **Jenny:** I can see that yes
5   **Sam:** XXXX that's how I visualize it
6   Was just learners teaching and languages and
7   How do you how do teachers raise the awareness of learners ↑
8   **Jenny:** How do teachers XXXX
9   **Sam:** Tech techniques
10   And there was like the tenets
11   The tenets being like the main parts of teaching SLA teaching
12   And then what from the language
13   What aspects of the language do we want to highlight ↑
14   **Jenny:** Um-hum
15   **Sam:** As teachers what aspects of the language do we want the learners to notice ↑
16   **Jenny:** Um-hum
17   **Sam:** So that was like you can break language into sounds words and morphemes=
18   **Jenny:** =Linguistic features
19   **Sam:** But there is also like the discourse genre features
20   which could be reading writing speaking listening
21   And then within reading and writing like writing you want them to notice
22   Umm, different discourses in writing
23   Is it academic ↑
24   Is it poetry ↑
25   Informal ↑ formal ↑
26   **Sophia:** Um-hum
27   **Sam:** Ah so I guess that that relates to you know these techniques
28   So enhancing highlighting explicit teaching versus implicit teaching
29   **Sophia:** Um-hum

Transcript 1 is the first interactional unit in which Sam displays his knowledge about the reading. At the beginning, he uses the phrase "to me" (line 1) to indicate his own interpretation of the article. Jenny responds to Sam's initiation (line 4). In line 6, Sam states that the article is about "learners, teaching, and languages." In the following lines, Sam positions the whole group as teachers by rephrasing the question "how do you" into "how do teachers". According to the interview, Sam has six years teaching experience before coming into the graduate program. Currently he is teaching undergraduate courses in the same institution. Therefore, it is perhaps not surprising that he brings his teacher identity into the discussion. Later, he explicitly defines the whole group as teachers, for example, he uses the collective pronoun "we" and the phrase "as teachers" in line 15.

In the following conversation, Sam continues to discuss the aspects of teaching and languages. He talks about the tenets of SLA teaching (lines 9-11), different aspects of language (lines 13-15), linguistic features (lines 17-18),

discourse and genre features (lines 19-25), and finally teaching techniques (lines 27-28). Sam controls the floor most of the time, while other students constantly backchannel (e.g. um-hum) their engagement in the conversation. After Sam proposes that language can be categorized into different aspects, Jenny helps him describe these aspects as "linguistic features" in lines 17-18. Another issue worth noting is that Sam frequently uses interrogative sentences and raising intonation to provoke group members' thoughts, which to some extent grants him the leadership role in the first segment of the interaction, for instance, in line 7, 13, 15, 23, 24, and 25.

In short, transcript 1 shows that in the process of displaying knowledge, Sam is not simply repeating what is in the article, but reconstructs the text by incorporating his understanding as a student and teacher. Learners can bring in their educational history and personal experience into the interpretation. Because of their diverse languages and cultural backgrounds, the group members may understand what counts as knowledge differently. In this interactional unit, Sam considers that personal understanding and experience are as important as the text itself when constructing academic knowledge. By displaying his conceptual understanding, he not only moves the group task forward but also actively engages in building academic knowledge. Other peers' comprehension about knowledge construction will be explored in the next interactional unit.

Transcript 2: negotiating understanding and knowledge

30   **Sam:** Did you have ↑ what was your idea ↑
31   Sophia: I |||
32   **Sam:** What's our time limit ↑
33   **Facilitator:** About five more minutes
34   **Sam:** Ok we were just XXXX
35   **Sophia:** Actually it was long time along I read this article
36   Yeah I just remove all other things
37   In the third part
38   I only focused on the five features
39   **Sam:** Hmm |||
40   *The group remains silent for 15 seconds then Sam speaks to Mina*
41   **Sam:** So how are you thinking we could organize this ↑
42   Did you have any idea as you are reading ↑
43   **Mina:** Yes | I just got the copy
44   **Sam:** You just got the copy
45   Ok ok well, yeah it is a pretty lengthy article | so
46   Jenny how did you organize it ↑
47   **Jenny:** I used tables and XXXX
48   I divided it as the cognitive part, educational part, social input, and political
49   **Sam:** *Oh*
50   **Jenny:** So it was different from yours but
51   **Sam:** We could have two triangles
52   **Jenny:** But mine | we are supposed to focus on one right ↑
53   **Sam:** You said you have cognitive part =
54   **Jenny:** = educational social and political
55   But we are assigned to the educational one here
56   **Sam:** Right ok
57   **Jenny:** And from here I thought the principles for LA studies and methodology
58   **Sam:** Um-hum
59   **Jenny:** The short part that Sophia just mentioned the techniques
60   And then about teachers' LA
61   How teachers are supposed to be aware of this and their teaching of the language
62   **Sam:** Ok

In the second interactional unit represented in transcript 2, Sam initiates the negotiation of knowledge by asking a direct question to his peers. In line 30, Sam asks "what was your idea" which implies that knowledge includes personal idea or understanding. In line 31, Sophia takes the floor and tries to respond to Sam's question. However, her response is interrupted by Sam's side conversation with the facilitator (lines 32-34). Interestingly, it seems that Sam begins to establish the leadership role in the group by asking the facilitator the time limit for the task. In lines 35-38, Sophia continues to give her opinion. In line 38, Sophia states that she only focuses on the five features that are explicitly stated in the article without further justifying her ideas. This message shows that Sophia only considers what appear in the text count as knowledge, which is quite different from Sam's viewpoint. This is followed by a long silence in line 40, which suggests that Sam expects more explanation from Sophia.

After the long pause, Sam turns to other peers to solicit their ideas. In the following two message units (lines 41 and 42), he first uses the collective pronoun "we" to signify the group relation; then he immediately asks Mina what her idea is. Again, this demonstrates that Sam considers personal understanding as an indispensable component of knowledge

construction. Nonetheless, Mina's response in line 43 implies that she has not finished reading the article thus she does not have much to contribute to the discussion. Interestingly, in line 45, Sam seems to mitigate the tension by saying "it is a pretty lengthy article" and using hedges such as "ok ok well." To some extent, his reaction can be interpreted as a face-saving act to sustain group interaction.

In line 46, Sam directly asks Jenny's opinion. In the next two message units (lines 47 and 48), Jenny explains that she divides the article into subsections and uses a table to organize the article. Sam's acknowledgement and paralinguistic cue (i.e. changing his pitch in line 49) show his interest in Jenny's response. Even though Jenny points out that her organization is different from his (line 50), Sam still tries to incorporate Jenny's idea by saying "we could have two triangles" in the following message, which can be seen as an instance of co-construction of knowledge. In lines 52 to 56, Jenny and Sam agree that they should focus on the educational part. Then Jenny continues talking about the "five features" that was mentioned earlier by Sophia in line 38. Here, aligning one's idea with a peer can be interpreted as another instance of co-construction of knowledge. At last, Jenny briefly explains the concept of teachers' language awareness in lines 60 and 61.

In summary, the group tries to integrate everybody's idea, as exemplified in lines 51 and 59. However, the three female students – Sophia, Jenny and Mina – provide limited understanding about the article. It might be because Sophia and Jenny lack teaching experience thus they do not incorporate their personal understanding. In the case of Mina, apparently she does not prepare the task well. In addition, transcript 2 shows some interesting findings regarding constructing leadership. Sam initiates the negotiation of understanding by asking direct questions to his peers three times (lines 30, 41, 42, and 46). Besides, he takes the responsibility of managing time for discussion (lines 32 to 34), which shows that he asserts his leadership through interactions with his peers.

Transcripts 1 and 2 demonstrate that knowledge is not static, and is socially constructed across multiple levels of context (i.e. the individual level, the classroom context, and the institutional context) and across learners' educational history (i.e., past experience, current status as graduate students, and dual roles as a student and teacher). Knowledge is also co-constructed by sharing different persons' perspectives, adding new values, juxtaposing upon each other's ideas, and offering explanation and critiques. However, the native speaker Sam who has more teaching experience participates deeply in building academic knowledge. In contrast, the other three non-native English speaking female students show quite limited engagement in constructing academic knowledge. In the next section, I will continue to explore how group members construct the graphic organizer through their collaborative discourse.

C. Creation of Graphic Organizer Using Metaphor

Transcript 3(a): creating the graphic organizer – part one
63   **Sam:** How about we draw a school
64   **Sophia:** School ↑
65   **Sam:** School ↓
66   A school building and we can have five floors
67   **Sophia:** Ah yeah yeah
68   **Jenny:** Wow you are good
69   **Sam:** Well I just saw your table
70   So does anyone a good artist ↑
71   Can you draw a school or just a building ↑
72   *The group unfolds a chart paper on the desk*
73   **Jenny:** A really big building
74   **Sam:** Yeah and we can have like
75   **Facilitator:** Wow school (*Facilitator thumbs up*)
76   **Jenny:** It is his idea (*Pointing to Sam*)
77   *Sophia picks up a blue marker and tries to draw a school*
78   **Sam:** You must be a good artist
79   **Sophia:** No no no no no
80   **Sam:** You are Korean
81   **Jenny:** What does that mean (*laughs*)
82   **Sam:** Anytime I ask my students to do art work
83   they would just create these brilliant [portraits
84   **Sophia:**   [Right right right I'm not Korean (*laughs*)
85   *Sophia drops down the blue marker*

Transcripts 3(a) and 3(b) form the third interactional unit. It illustrates how the group attempts to construct the first half of the graphic organizer. In line 63, Sam makes a suggestion "how about we draw a school." Sophia immediately questions his suggestion using a raising intonation in line 64. However, Sam affirms his idea with a falling intonation in line 65. These two message units are quite interesting when looking at the prosodic cues (Gumperz, 1992). If Sophia's raising intonation was interpreted as a challenge to Sam's suggestion of drawing a school, Sam's confirmative intonation somewhat embodied his authoritative stance. In line 66, Sam justifies "we can have five floors" to represent the five features of teaching methodology. Thus he identifies a key metaphor to integrate different ideas. In the next two

lines, both Sophia and Jenny accept his suggestion. In addition, Sam uses the collective pronoun "we" twice (lines 63 and 66) to signify that the whole group is constructing this graphic organizer together. In lines 68 and 69, Sam integrates Jenny's table into the graphic representation, which again shows that they are co-constructing the graphic organizer as a joint activity.

After the group agrees upon his suggestion, Sam first assigns the role to Sophia in lines 70 and 71. By using the interrogative sentence and a raising intonation "can you draw a school," Sam positions himself as the leader. When the facilitator shows great interest in the graphic organizer through both verbal and nonverbal responses (i.e. "wow school" and thumbs up in line 75), Jenny acknowledges that "it is his idea" (line 76), which validates Sam's leadership role. In line 77, Sophia's non-verbal behavior indicates that she wants to take up the assigned role (i.e. picking up the marker). Subsequently, Sam validates her role by making a judgment "you must be a good artist." However, Sophia dis-validates Sam's comment by staying "no no no no no" in line 79. From lines 80 to 85, Sam encourages Sophia to continue drawing because he believes that Korean students are usually good at creating art work from his previous teaching experience. Sophia is indeed a Korean. By stating that "I'm not Korean" sarcastically in line 84, she resists the cultural ideology that Sam imposes on her. Later, the interview data reveal why Sophia gives up drawing the school building. At this moment, Sam intended to provide encouragement to Sophia by saying "you must be a good artist." However, Sophia understood that she must draw a perfect picture for the whole group. Sophia said if Sam had not made such a comment, she probably would give a try. However, the great peer pressure made her give up drawing and resist the role assigned by Sam.

Transcript 3(b): creating the graphic organizer – part one continued

86   **Sam:** Can you visualize it ↑
87   **Jenny:** We can use this right ↑ (*Jenny picks up the green marker*)
88   **Sam:** Yes

89   *Jenny and Sophia speak in Korean while Jenny is drawing the rectangular*
90   **Jenny:** How do I draw this ↑
91   I'm not good at drawing
92   **Sophia:** Just draw it roughly
93   **Jenny:** No I must draw it well

94   **Jenny:** I'm sorry I don't know
95   **Sam:** It's the tower oh+ ↑
96   **Sophia:** LA is the flag
97   **Sam:** Yes there is gonna be a flag at the top
98   So should we have five floors ↑
99   **Jenny:** Yes
100   *Sam draws the five floors with the blue marker*
101   **Sam:** Kind of like a tower of learning
102   **Jenny:** Yep

Since Sophia gives up drawing, Sam asks Jenny whether she can visualize it. Once again, Sam assumes group leadership by assigning the role to another peer using an interrogative sentence in line 86. To avoid taking up the assigned role, Jenny does not respond to Sam's question directly; instead she asks whether "we" could use a different color in line 87. Her response is intriguing in that she uses the collective pronoun "we" to emphasize that constructing the graphic organizer is a group endeavor.

In the following segment of the conversation, Jenny and Sophia switch to their native language. Lines 89 to 93 in the rectangular are literal translation from Korean to English. Their side conversation reveals that Jenny also feels that she has the responsibility to draw the organizer very well. As her native peer, Sophia encourages her to fulfill the task in a friendly way (line 92). Switching to their native language creates a secure and comfortable space for them to express their feelings. Thus linguistic and cultural knowledge are valuable resource for multilingual students in group work. Moreover, their code switching seems to resist the dominant discourse and cultural ideology imposed by Sam. In the following interaction, the whole group works collaboratively on constructing the graphic organizer. In line 98, Sam proposes to draw five floors representing the five tenets of teaching methodology, which is immediately recognized by Jenny. Finally, Sam creates the first half of the graphic organizer (see the left part of Fig. I).

To sum up, transcripts 3(a) and 3(b) demonstrate that the group attempts to organize their ideas by creating a graphic organizer using a metaphor. Previous interactions exemplified in transcripts 1 and 2 have shown that Sam, Sophia, and Jenny all mentioned the five tenet/features of teaching methodology. In order to recognize this shared knowledge, they create an image of a school building with five floors which visually represent the five tenets of teaching methodology. Thus, the metaphor serves as a powerful and strategic tool for integrating different persons' ideas. The process of creating such a guiding metaphor (Gergen, 2009) and assigning roles to draw the image underscores the power dynamics among these multilingual students. Particularly, the two Korean students – Jenny and Sophia – have challenged the assigned roles and cultural ideology imposed by Sam. They use their shared native language and culture to mitigate the tension in group task. It is also interesting to observe the difference of interactional pattern between two

Korean students and that among Korean and American students. The following discussion will further explore the negotiation of leadership among them.

D. Negotiation of Leadership

Transcript 4: reflection and refraction of knowledge
103 **Sam:** So tell me what are the five tenets
104 **Jenny:** Ongoing investigation
105 This is kind of the longest
106 of language as a dynamic phenomenon
107 **Sam:** OK *(Sam writes down "investigation of language" on the chart paper)*
108 **Jenny:** Ok we will do that
109 **Jenny:** Talking analytically about the language
110 **Sam:** Ok *(Sam writes down "talking about language")*
111 **Jenny:** Then learner involvement
112 **Sam:** Learner involvement
113 *(Sam writes down "learner involvement")*
114 **Jenny:** Learning skills for learner independence
115 **Sam:** Ok *(Sam writes down "learner skills")*
116 **Facilitator:** Probably about three more minutes then we will start going around and presenting the graphic organizer
117 **Jenny:** And then both cognitive and affective
118 **Sam:** Cognitive and [affective
119 **Sophia:**   [affective level
120 *(Sam writes down "cognitive/affective")*

Transcript 4 represents the fourth interactional unit where the group begins to map their shared understanding of the article into the graphic organizer that they just created (see Fig. 1). In line 103, Sam initiates the interaction by using an imperative sentence "tell me what are the five tenets", which reinforces his leadership role. In the rest of the conversation, Jenny acts as an information provider (lines 104, 106, 109, 111, 114, 117). To some extent, Jenny assumes certain degree of authority by providing the information. However, in lines 107, 110, 115, Sam rephrases the terms and writes them down on the graphic organizer, which reinforces his authority as the leader. If Jenny's reporting was considered as the reflection of knowledge from the text, Sam's rephrasing could be interpreted as the refraction of knowledge. Thus, their collaboration indicates that knowledge is co-constructed through every reflection and refraction of reality (Voloshinov, 1973); it also highlights the power relationship in gaining authority over knowledge construction.

Transcript 5: creating the graphic organizer – part two
121 **Sam:** Now we need need a teacher
122 **Sophia:** Yeah teacher
123 **Sam:** Kind of building the school
124 Can you draw a human ↑
125 **Jenny:** This color↑ (*holding a green maker*)
126 **Sam:** Um-hum ↑
127 **Jenny:** With this color ↑ (*holding the green maker*)
128 **Sam:** Can you draw a human ↑
129 **Sophia:** *Human* ↑ Yeah
130 **Sam:** A big human
131 **Jenny:** Big big human
132 **Sophia:** Ah I see
133 **Jenny:** But with this color please ↓ (*handing the green maker to Sophia*)
134 *Sam laughs*
135 **Sophia:** Err in the body you would draw other things ↑
136 **Sam:** Oh I would just draw some ideas about his head
137 He got a lot of ideas
138 **Sophia:** So head ↑ =
139 **Sam:** = no no no just like here (*Pointing to a particular area to draw the head*)
140 **Sophia:** And body ↑
141 **Sam:** Yeah
142 And some arms holding up the school
143 **Sophia:** Oh+ I see
144 **Jenny:** Maybe you can draw it (*Jenny talks to Sam*)
145 **Sophia:** Yeah yeah
146 **Sam:** I'm really bad (*Sam laughs and starts drawing the human*)
147 **Jenny:** You do this at home right ↑

148   **Sam:** *Oh* yeah
149   **Jenny:** Cool
150   **Sam:** Arms here (*Sam draws the arms*)
151   Mm looks like a Frankstein
152   *All laugh*

In transcript 5, which is the fifth interactional unit, the group continues to construct the second half of the graphic organizer (see the right part of Fig. 1). In line 121, Sam proposes that "now we need a teacher". Sophia validates his proposal in the next message unit. To further justify his proposal, Sam explains the relationship between the school metaphor and the teacher metaphor in line 123. From lines 124 to 130, similar interactional patterns are observed as those in transcripts 3(a) and 3(b). Sam assigns the role to Sophia rather than drawing the image by himself. But Sophia does not take up the role until Sam reassigns the role to her in line 128. However, even though Sophia responds to Sam's question in line 129, the change of pitch shows her uncertainty. The interview data indicate that Sophia struggles with what Sam expects her to draw. In the next few lines (lines 135 to 143), she communicates with Sam on how to draw the teacher. Sam provides detailed instruction on where and how to draw the head and the body in lines 136, 137, 139 and 142. These lines show that Sam has already visualized the graphic organizer. The fact that Sam asks his peers to create the graphic organizer following his instruction embodies his leadership. Nonetheless, after realizing that Sam has the graphic organizer in his mind, Jenny in turn reassigns the role to Sam by saying "Maybe you can draw it" in line 144. In other words, Jenny challenges Sam's leadership role.

The analysis of the above transcripts demonstrates that multilingual students negotiate what counts as knowledge and decide what information should be included in the graphic organizer. The cultural artifact generated during collaborative talks mediates their interaction. Through the co-construction of knowledge and learning tool, Sam assumes leadership role by initiating topics, asking questions, making proposals or suggestions, monitoring the progress of group task, and assigning roles to peers. His leadership is acknowledged and sometimes challenged by his peers. The other group members – Jenny and Sophia – utilized their linguistic and cultural resources to help each other complete the task. Their different interactional patterns in constructing knowledge and negotiating leadership are due to several factors: First, teaching experience has direct relevance to leadership in this collaborative discussion. Because Sam has considerably more teaching experience than the other multilingual students, he deeply engages in academic knowledge construction and becomes more dominant in leading the discussion. Second, the difference may also due to their English language proficiency. Comparison of the first and second transcripts shows that the native speaker – Sam elaborates his thoughts more deeply than the three non-native speakers. However Jenny and Sophia are able to use their native language and shared cultural understanding to support each other. Finally, leadership is also related to the participants' level of preparedness for the discussion. The implications of these findings are discussed in the conclusion.

V. CONCLUSION AND IMPLICATION

The study explored the collaborative talks among multilingual TESOL graduate students in a classroom group discussion. In current higher education context, collaborative learning is being valued and increasingly employed in graduate level courses. Thus, being able to interact with peers effectively and orchestrating the discussion collaboratively have become crucial components of graduate students' academic development. With the aim of investigating the social interactions and power dynamics, researchers and educators need to understand what is happening in the group discussion. For instance, how do graduate students construct academic knowledge? How do they use mediating tools to facilitate their learning? How do they position themselves in relation to others in the context? What are the cultural meanings and significance of those social interactions?

This study tries to shed some light on the above-mentioned issues. It expands the understanding of interactional patterns in peer-led discussions from a social constructivism perspective, particularly with regard to social construction of knowledge and negotiation of leadership. It demonstrates that knowledge is socially constructed through collaboration and dialogues among students with diverse linguistic, sociocultural, and educational backgrounds. In fact, students' language, culture, and educational history influence the roles and power relationship within small groups. Furthermore, these factors shape the interactional patterns and eventually impact on the knowledge constructed in the peer-led discussion.

The study suggests that multilingual students, particular non-native English speakers, should actively participate in academic knowledge construction and bring in their linguistic and cultural resources to the classroom. This study also raises a series of pedagogical questions for classroom education. For example, how do teachers organize group tasks where everybody can make a contribution? How do teachers design activities that enable all students to focus on academic knowledge construction? These questions are not restricted to graduate level teaching in the field of TESOL; they may apply to other levels of classroom education.

APPENDIX

Transcription Key

↑	Raising intonation
↓	Falling intonation
XXXX	Undecipherable
=	Latching of successive talk
|	Short pause
|||	Long pause
[	Overlap utterance
[	
Vowel+	Elongated vowel
Words	Pitch or style change
Italic	Nonverbal behaviors

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