What Does a More Knowledgeable Peer Mean? A Socio-cultural Analysis of Group Interaction in a Vietnamese Classroom

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Abstract
Following Vygotsky, sociocultural research has argued the educational value of more knowledgeable peers in helping others to learn. The notion of a "peer", however, is not well defined. Peers may not all be the same and the better informed may not all operate in the same manner in situations of interaction. A study carried out in a Vietnamese classroom where young adults were studying English as a foreign language addressed this dilemma by comparing the processes within two different types of group. One type consisted of five students at the same class level and the second also consisted of five, but one was a student from a more senior class. Sociocultural analysis is used to explain the processes that created a "zone of proximal development" in each of the two group settings. The results showed that the differences were more complex than the simple presence of a better-informed peer would suggest.

Introduction
The purpose of this study is twofold. First, it is an attempt to use sociocultural theory which was developed and systematized by L. S. Vygotsky (1896-1934) and his collaborators as a conceptual framework to investigate the learning processes in group work in a natural classroom setting. To this end, sociocultural theory is used in the research design and to analyse and interpret the data. The study explores the role of peers in learning English as a foreign language (EFL). The students in this research were to practise oral English skills as a compulsory subject at university. Second, this study involves pedagogical goals in relation to EFL in group work. The study seeks to reveal the outcomes and processes of group interaction. It is not an intervention study although there is the introduction of a senior student working with the students in this research.

The Concept of “Peer” in Socio-cultural Theory
Socio-cultural theory is based on the concept that human activities take place in cultural contexts and are mediated by language and other symbol systems. Vygotsky (1978, 1986) points out that language develops entirely from social interaction. Language in his view serves as a mediating tool or a tool for higher thinking processes. Vygotsky wished to differentiate human from animal learning. Language is therefore not just a means by which individuals communicate, it is also a means for people to think, help others to learn or “co-construct knowledge together” (Mercer, 1995, p. 4).

Vygotsky’s concept of the ZPD and the roles of the more knowledgeable peers in assisting learners to move beyond their potential development levels has led to various interpretations of the roles of peers. However, the notion has not been well defined. Originally, the notion of peer in Vygotsky’s perspective refers to school children. The literature shows different interpretations: peers as learners (van Lier, 2000), learners who are different from teachers (Swain & Lapkin, 1998), more of less proficient learners (Ohta, 1995), more or less informed junior students (McDonald, Kidman, & Clarke, 1991), and peers as native and non-native speakers in the classroom (Barnard, 2002). Peers have been described as symmetrical or asymmetrical in relationship (Guerrero & Villamil, 1994). Peers are learners working jointly or collaboratively who share the same goal (Lantolf, 2000a).

Peers as School Children
The notion of peer has been associated particularly with the classroom. McDonald et al. (1991) in their junior classroom research found that school children peers adopted a teaching learning style in which the older peer worked like a teacher to help the younger
peer to learn. Forman and Cazden (1985) considered that peers assume separate but complementary social roles. One child may perform an observing, guiding and correcting role while the others perform the task procedures. Mercer (1995) pointed out that school children through collaborative talk with peers had co-constructed knowledge. Peers can tutor and scaffold the learning of classmates (Barnard, 2002).

Peers as Adult Learners
Research by van Boxtel, van der Linden, and Kanselaar (2000) on physics students revealed that peers could generate collaborative elaborative interaction in the dyads, which contributed to conceptual learning of physics. Swain (1995) contends that dialogues among learners can be similar to instructional conversations between teachers and learners. Peers can scaffold and mediate the learning process (Lantolf, 2000b). Peers in pairs can use language for meaning-making activity both within and beyond the context of the assigned role-play task. Peer interaction allows learners to act as both expert and novice, constructing their roles through the varying levels of expertise (Ohta, 1995). Peers in ESL (English as a Second Language) classroom can scaffold learning (Donato, 1994; Swain & Lapkin, 1998). Peer scaffolding is more likely to occur when pairs interact in a certain pattern: either collaboratively or in an expert-novice pattern (Storch, 2002).

Storch (2002) points out that the nature of scaffolding in peer interaction may be different. She quoted Ohta (1995) for the fluid role of the expert in pair work and both expert and novice taking turns to act as the expert. Donato (1988) found evidence of “collective scaffolding” in groups in which members drew on their resources and together scaffolded their resolution to language-related problems they encountered. Peer interaction with overt collaborative verbalization of meta-cognitive strategies, such as predicting, planning, and monitoring is a more effective means of mediating learning than is instruction in learning strategies in the absence of overt verbalization of these strategies (Swain, 2000).

All of these findings relate to different classroom practices, not merely practising English. They are about what is generally called problem solving and the tasks differ in each study.

Affective Factors
Sociocultural theory has been criticised for its lack of emphasis on affective factors. Dean (1994), Goldstein (1999), and Wertsch (1985) point out that Vygotsky acknowledged the social context of these external interactions; however, he paid inadequate attention to the instinctual/affective components teaching-learning interactions. Vygotsky did little empirical research on the affective aspects of consciousness, and direct discussion of affect emerges infrequently in his writings.

In fact, he paid some attention to affective factors but it seems his untimely death in 1934 prevented him from carrying out empirical research in this area. The retranslation of his book originally called Thought and Language has the following statement:

There exists a dynamic meaningful system that constitutes a unity of affective and intellectual processes. Every idea contains some remnant of the individual’s affective relationship to that aspect of reality, which it represents. (Vygotsky, 1987, p. 50)

As for other sociocultural theorists and their focus on affective factors, Goldstein (1999) points out,
Allusions to the role and the value of affect and interpersonal relationships in cognitive development can be found in the work of scholars who draw upon Vygotsky’s theories; however, they are rarely considered in depth. (p. 654)

Recently, John-Steiner (2000) has claimed, “Developing children, as well as developing adults, expand their affective resources by appropriating the consequences of shared experience” (p. 128). John-Steiner (2000) and Mahn and John-Steiner (2002) point out that teachers can build on students’ prior experiences, thereby helping them develop the confidence that engenders competence. Teachers can instil the gift of confidence in their students by offering caring support.

So far, there has not been research which compared and contrasted the group work of peers of the same level with peers of the same level assisted by a more advanced peer. There has not been either any study within a sociocultural theory framework to investigate the feelings of peers working in groups. The current research tries to fill this gap in our understanding.

**The Research**

This research took place in Vietnam. There were two kinds of groups in this research: unassisted groups (peer groups), each of five students of the same class, and assisted groups (peer groups including a more senior student), each of four peers and a senior student. The research took place in a natural classroom setting. The group work was part of the normal process of the work of the class. During the study, each student in the class had experience of both the unassisted and assisted group conditions.

**Research Methodology**

Qualitative research methods (see for example Denzin & Lincoln, 1994) were used. The research used multiple data collection methods of audio-recordings, video recordings, journals, and interviews. The data gathered through these triangulated means have been cross analysed in order to obtain an in-depth understanding of the roles of peers and their feelings about their participation in the two different groups.

**Research Participants**

The participants were forty-five volunteer Vietnamese students aged from 18-22 and one senior student. They were learning oral English as a compulsory skill in their second semester of the first year at university level. Their level of English was pre-intermediate.

The senior student was from an advanced class. She was not trained to be a teacher and was not trained for the purpose of the research. She was advised by the researcher to participate in the group as a group member and helped the students with language tasks. The senior student was introduced to the other students and had informal talks with them and made their acquaintance before the data collection started.

The classroom teacher was an experienced American volunteer. She had been teaching English in Vietnam for three years when the data collection was conducted. She co-operated with the project but was not observed as part of the study. The teacher taught her class as usual, and did not revise her planned activities or methodology for the purposes of the research being conducted.

**The Unit under Research**

In the assigned unit under research, the students were to practise speaking English. *Well-Spoken* is the class course book. The topics, which were covered during the research, were thematic using topics for discussion, such as *urban and rural*, and
holidays. The aim of the material in *Well Spoken* is to motivate pre-intermediate learners of English to take part in conversations and discussions of various lengths and levels.

**Data Collection**
I followed ethical procedures as required by School of Education, Victoria University of Wellington, New Zealand and by the institution where I went to observe. By the end of the data collection, twenty-four group work sessions had been audio recorded: twelve recordings of the unassisted groups and twelve of the assisted groups. Each recording was about twenty minutes. Each student wore a tiny microphone on the collar or a button on his/her shirt. The microphones were hooked to a small cassette recorder for each group. After each group session, the students wrote a journal with provided guiding questions written both in English and Vietnamese. The journals were completed by the students at home and collected by the researcher the next day. When each student had participated in unassisted and assisted group work, he/she was interviewed for 20 minutes and tape-recorded.

The classroom setting and the position of the groups under observation are shown in Diagram 1. The students sat on fixed benches facing the blackboard. When there was group work, students in the front rows turned back to the rows behind. Both of the groups were sitting in the same corner of the class to minimize the interference with other groups. Other groups were working as usual while the two groups were observed. When it was the turn of the other groups to be observed, they moved to the shaded positions in the diagram.

![Diagram 1: Classroom Setting and Data Collection](image-url)
Results

Peers and Opportunities to Speak in Group Work

“Speech is always cast in the form of an utterance belonging to a particular speaking subject, and outside this form it cannot exist” (Bakhtin, 1986, p.71). An utterance is defined as a unit of speech communication determined by a change of speaking subjects. An utterance also shows interpersonal sharing or turn taking in social interaction. The result is shown in the following table:

<table>
<thead>
<tr>
<th>Language</th>
<th>Unassisted groups (N=60)</th>
<th>Assisted groups (N=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean</td>
</tr>
<tr>
<td>English</td>
<td>706</td>
<td>11.77</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>124</td>
<td>2.06</td>
</tr>
<tr>
<td>Combined</td>
<td>44</td>
<td>0.73</td>
</tr>
<tr>
<td>Total</td>
<td>876</td>
<td>14.60</td>
</tr>
</tbody>
</table>

Note: A combined utterance includes both English and Vietnamese. The senior student’s utterances were not counted.

As table 1 shows there is a very small difference in their mean frequency of utterance contribution according to whether the students were in the peer group or the peer group with the senior student. On average, an unassisted student produced slightly more utterances, 14.60, as compared with 14.37 produced by an assisted student.

Six hundred and thirty utterances were produced by the senior student, which is nearly the same number of all utterances produced by all the assisted students in all group sessions. The reason is that she spoke individually to each member of the group. As a result, the assisted students had fewer opportunities to speak than the unassisted (see Table 1).

The language in which the utterances were produced varied according to the type of group. More English utterances were produced on average by each assisted student. The senior student always used English and the students used English to respond to her and to speak with other students. It could have been her presence as a representation of a classroom teacher that prompted the students to speak English. The unassisted groups were probably freer to use the language they felt comfortable with. As a result, they switched to Vietnamese and combined languages more often. The unassisted students produced 124 utterances in Vietnamese whereas the assisted students produced only five utterances in Vietnamese (see Table 1).

The following figures illustrate the patterns of utterance allocation each kind of group at the beginning of a discussion (other phases of interaction have similar patterns).
Figure 1: Unassisted group: Topic - Anger

Note: The arrow shows the moving of each turn or utterance. It does not show the length of each utterance. The figure was adapted from Sfard & Kieran, 2001.

The figures above show that the interaction pattern in the peer group was not regular whereas the senior student engaged dyadically with the members in the assisted groups.
The unassisted group can be said to be working in a collaborative mode and the assisted group in an expert-novice mode. The following sequences among many others recorded were chosen to illustrate the ways peers interacted and negotiated in group work.

Peers’ negotiation in Group Work

Sequence 1: Unassisted group: Topic - Rural and Urban

Students were to talk about the differences between city and country. The textbook provides a list of categories but the classroom teacher asked them to discuss only four.

01 S1 Now we talk about the country and city and your health. I think in the city, there is more pollution.
02 S2 Can you speak again?
03 S1 I think in the city there is more pollution to affect your health.
04 S2 I think so.
05 S1 Binh, please.
06 S2 I think so. There are many public hospital and health services.
07 S1 OK. Tung.
08 S2 Speak English.
(Laughter)
09 S3 I think in the city there is polluted air. It is not good for health.
10 S1 Polluted air in the city.
11 S4 What do you think about health in the country?
12 S3 I don’t want to say about health in the country. I want to say about education. The children in the country do not have good conditions to study.
13 S4 But we are discussing health.
14 S1 No, all the differences in the country and city.
15 S4 I think that our health in the country is very good.
16 S1 Sorry, do we have to do part 2. We need to talk about the differences between city and country. We can discuss about health, holidays, clothes, stress, people and rainy weather.
17 S2 No, we discuss all the differences between city and country.
18 S1 I think the teacher told us to do that.
19 S2 When did she tell you? Yesterday?
20 S1 Some minutes ago. Did you hear that information?
21 S3 No.
22 S5 I have no ideas.
23 S1 So we talk about all the topics. Continue.
24 S3 The people in the city are not very friendly and they live alone. The people in the country they are very friendly and get along with each other well.

S1 adopted the group leader role to tell other peers what to do (lines 01, 05, 16, and 24). S2, S3 and S4 brought in different points of view. Although S1 tended to dominate the procedures of the group work, every peer spoke or offered his/her opinions. The students adopted different roles but worked collaboratively. For example, S2 reminded the group that the goal of the discussion was to speak English. S5 said little.

Sequence 2: Assisted group: Topic - Rural and Urban

01 SS Ok are you ready?
02 S1 Yes.
You do part two. You just choose four categories. Ok, what categories would you like to talk? How many categories are there?

Six

We choose only four. Which ones do you want to focus on?

Health.

How about the next one? Do you want to talk about holidays? What else.

People.

Yes, and the last one.

The rainy weather.

That’s all.

What do you think about your health when you live in the country and your health when you live in the city?

I guess you have good health in the country because there is fresh air.

Just fresh air. What else is good for your health? How about vegetables and something like that?

I do exercise.

So you think you have good health in the city because you do exercise?

In the country or in the city?

In the city.

Tell a lie.

(Laughter)

How about you?

I often do exercise in my country and in the city I came to live. Every morning I do exercise.

So you think your health is good in the city? How about you? Do you think your health is good in the city or in the country?

In the country.

Yes.

How about the atmosphere in the city, is it good for your health?

Do you think the air in the city is good for your health? Do you think it is much polluted than the country?

Yes, there are more factories in the city. There is smoke from factories and transport.

So do you think your health is better in the country or in the city?

It is the country because it is fresher in the country.

If brief, do you think that your health is better in the city or in the country?

In the country.

How about holidays. We should move to the next one.

The senior student rephrased the requirement to make sure that everyone in the group understood what to do. She adopted the group leader role and also a teacher role (01, 03, 05, 07, and 09). Then she acted as an expert giving prompts and suggestions so that other peers could contribute more ideas (12, 14, and 16). S1 made a joke at S4 (18). The group then reached a consensus (30). Every student presented his/her own ideas. The senior student sometimes called on other group members for contribution or she shared the opportunity so that everyone could speak out (19 and 21). The senior student sometimes addressed other students collectively (16, 24, 27 and 29) but sometimes diadically (19, and 21).
Feelings during Group Work

Enjoyment

Most of the responses presented in this section come from the answers to the journal question, “Did you enjoy the group work today? If yes, what in particular did you enjoy?” Responses also come from all journal reports relevant to the issue of enjoyment.

Whether in unassisted or assisted groups, the students enjoyed their group work. What interested and motivated them the most was the collaboration with friends. Only three unassisted students reported that they enjoyed the discussion because they had opportunities to speak English whereas 12 assisted students reported this. This is consistent with the results reported in Table 1. Ten assisted students said that they enjoyed the discussion because they had assistance from the senior student. Following are some extracts:

Yes. I enjoyed the group work today because I could express my thoughts to my friends. Besides, I could get more information from my friends’ ideas. (14-U-J)

I enjoyed the whole group when each of us tried to discuss the topic. (03-A-J)

The enjoyment, according to these students, stemmed from the exchange of ideas with the group members or friends. It was the collaboration process of sharing understanding. In addition to this kind of enjoyment, some assisted students considered that guidance from the senior student helped them enjoy their group work:

I liked the group discussion today because there was assistance from the senior student so I could speak more on this very interesting topic. (10-A-J) [Translation from Vietnamese]

However, the students did not always enjoy their group work. An example follows:

Sometimes, group members’ ideas were in conflict so the discussion was not interesting. (38-U-J) [Translation from Vietnamese]

Stress

Feelings include not only enjoyment but also stress. The students felt the need to use the target language, to listen and to share ideas with other members. In the journals, the students were asked, “Did you find the group work today stressful? Please explain if yes or no.” Eleven unassisted and eight assisted students said that they experienced stress during group work.

I felt stressful because I had to speak English from beginning to end so I felt difficult to express what I needed to speak in English. (13-U-J)

Yes, I felt stressed because I had to concentrate to keep up with friends and I had to contribute my ideas. And the ideas must be correct. (20-U-J) [Translation from Vietnamese]

In the assisted groups, eight students reported feelings of stress. Two assisted students said that the joint learning sometimes made them work harder and this led to stress. Working with a senior student caused stress for one student because he/she was afraid of not speaking English well. In addition to giving reasons for feeling stressed, the students reported why they were not stressed. Some examples follow:
No, absolutely not. My friends had interesting and humorous ideas so the atmosphere was friendly and cheerful. (32-U-J) [Translation from Vietnamese]

No, not at all. On the contrary, I felt comfortable and excited. With the assistance of the senior student, I felt more confident when I spoke. (32-A-J) [Translation from Vietnamese]

Overall, most of the students in the both types of groups answered that they did not experience stress. Working in groups was more enjoyable than stressful. However, working with peers created stress because the group situation required peers to pay attention to each other. So the more knowledgeable peer could bring enjoyment and confidence, but also the feelings of stress. The students may have enjoyed the group work and felt stressed in the same session.

Other Feelings
In the interviews, I asked the students, “In what ways was your experience in the group work with a senior student different from without the senior student?” Eleven students reported on their positive feelings when unassisted. For example, they reported the feelings at ease, of being natural among friends, of being independent and active. Here is one example:

Without a senior student, we were more natural and spoke more. We were cheerful. (24-I) [Translation from Vietnamese]

Twenty students reported positive feelings when working with a senior student. The senior student helped them feel more confident (nine responses), motivated (five responses) and comfortable to do the task (five responses). However, not all the students reported that they liked the assisted group work. Working in the assisted groups caused feelings of being dependent and passive (three students), and afraid of making mistakes (two students). Some examples follow:

Without a senior student, I was not confident. The group work with friends was less exciting. (04-I) [Translation from Vietnamese]

The senior student guided me and kept me on task. When we were together with friends, we had to do our best. But when there was a senior student, we relied on her. (02-IA) [Translation from Vietnamese]

Students in both the unassisted and assisted groups reported both positive and negative feelings. While some of the unassisted students reported that they enjoyed being natural among friends, others felt more confident doing the task with the help of the senior student. Students reported positive feelings more often when they were in an assisted group.

Although both groups were of the same size and consisted of peers, the introduction of a “more knowledgeable peer” produced a major change in the way the groups operated. For instance, the audio transcriptions show that during group work, the unassisted students had more spontaneous fun and sometimes went off-task whereas the senior student controlled and directed the assisted group work. The assisted students were more task-focused and completed the task assigned more efficiently. The video recordings revealed that the unassisted students relied more on the instructions on the blackboard. The senior student rephrased the task requirement to save the assisted students from reading blackboard instructions.
Discussion and Conclusion

In different contexts of group work, peers worked differently. The role of peer is more complex than the simple presence of a better-informed peer would suggest. As shown from the audio transcriptions, journal reports, and interviews, the students benefited from group work whether with peers or with peers and a more informed peer. Peers can be collaborators or knowledge sharers in working in a language task. The senior peer represented the role of a teacher. She directed and controlled the discussion in a teacher-led mode. However, her assistance helped the students focus and produce the target language, which was the goal of the unit under study.

Socio-cultural theory has been associated with social constructivism. It is against transmission teaching which emphasises the strict control of teachers over students. In this research, the interaction of the peer groups with the senior student, however, seemed to meet the goal and objective of learning English as a foreign language in Vietnam as stated in the textbook designed by the foreign authors. That is considering social interaction as opportunities to produce the target language. It merits further research if different senior students would create different patterns of interaction in group work.

Sociocultural theory can be extended to explain why the patterns of interaction were different in the two kinds of groups. In Vietnam, the influence of Confucianism upholds respect for the more knowledgeable. The students in the group with a senior student automatically placed her in the role of the expert. In addition, the notion of “peer” was perceived as “friend” in the students’ responses. The notion of friendship in Vietnamese culture denotes a long lasting and close relationship. The students in this research could have known each other well since high school. They were in the same class in the first year at university. Peers mean friends who work in the same group, though “friend” has a more personal meaning than “peer”. Furthermore, the notion of “friend” used by the students in this research may not have the same connotations as in English or in different contexts.

The students in this research were familiar with the process of classroom management where the more knowledgeable in the class is usually the teacher. The senior student in this research was not trained to be a teacher but she talked to the students in the assisted group like a teacher. She posed the questions and gave suggestions for the students to respond. She started each discussion and ended it. She gave explanations when needed. She and other students had perceived the classroom as an environment in which the “more knowledgeable other” was a teacher. Again, the classroom is a reflection of a broader culture of which values and beliefs towards learning and teaching process have been built as cultural representations.

Sociocultural theory has been criticised for overlooking emotions in favour of cognition. This research indicates that working with peers or peers and a more knowledgeable peer aroused different feelings including enjoyment and stress. Further research to investigate the kinds of emotions that lead to greater learning would provide more practical insights into classroom learning.

Both types of groups succeeded in practising English in this research. However, their composition resulted in different ways of achieving this. The peer groups followed a pattern of spontaneous contribution of ideas. The assisted groups were controlled by the senior student who tried to distribute the opportunities to everyone in the group. Since both groups successfully discussed the topics and the purpose of group work was to practise oral English, did the real value of group work lie in the small size of the group rather than the nature of the participants?
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References


