

Mediation in Peer Interaction

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Abstract

This article examines the strategies used by the high-level English as a foreign language learners to mediate understanding in peer interactions. The data was generated from peer interactions of post graduate level students in their regular classroom. It was found that the students were able to understand communicative intent of their peers and provide support to each other; they worked collaboratively and co-constructed knowledge. They used different strategies to mediate understanding. The major strategies included: repetition, elaboration, definition, contextual cues, scaffolding, paralinguistic cues and real life examples.

Key words: mediation, zone of proximal development (ZPD), peer interaction, strategies, and scaffolding.

Introduction

Mediation broadly means the use of some auxiliary objects or tools to perform an activity. It is the creation and use of artificial auxiliary means of acting physically, socially and mentally (Lantolf, 2009). Vygotsky (1978) argues that humans do not act directly on the physical world; instead, rely on physical and symbolic tools (the auxiliaries) created by human culture(s) over time and are made available to succeeding generations. In the physical world, such auxiliaries include: shovels, hammers, bulldozers, dynamite, etc., which greatly enhance our capacity to perform a task with less effort. For example, when we need to dig a hole in the ground to plant a tree, we use a shovel (the auxiliary means) to make our tasks much easier than digging it with our own hands. The shovel functions as a mediator to perform our tasks efficiently. Similarly, we use such auxiliary means even in the social and psychological

worlds in which our tools consist of symbols, e.g., numbers, graphs, models, drawings, and linguistic symbols (Lantolf 2006; Karpov & Hayward, 1998). When interacting with other human beings, we mostly use linguistic symbols, and language is one of the most important symbolic systems for the mediation of human mental activity (Lantolf, 2009).

For mediation to be useful, it must be sensitive to the individual's or even group's zone of proximal development (ZPD) (Lantolf, 2009). Vygotsky (1978) defines ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (p.86). Vygotsky viewed peer interaction as an effective way of developing skills in learners, and believed that when a learner is in the ZPD for a particular task, providing the appropriate

assistance will give the learner enough 'boost' to do the task successfully. Thus, ZPD is concerned with the features of language learners; the concrete activities they participate in, and as a result of which what is unachievable alone becomes achievable (Lantolf, 2009). This indicates that a person, who mediates, needs to know what an individual has already achieved and what s/he can achieve with assistance or additional mediation. Additional mediation may come from someone else from the integration of artefacts. According to Olmedo (2003) participation in a mediation role in a peer interaction includes the following steps:

- a. The learner (language mediator) must understand the communicative intent of another person's speech in whatever way or whatever language it is expressed.
- b. The person must monitor the behaviour of a peer or peers to be sure that they have not understood his message.
- c. The learner should select proper strategy that can ensure proper understanding of the message conveyed by him.
- d. The learner must address the peers using that strategy.

Theoretical Framework

The construct of mediation is central to the socio cultural theory (SCT) of Vygotsky (1986). The foundational principle of SCT is that all forms of human mental (cognitive and emotional) activity that includes learning a language are mediated by psychological tools such as language, signs and symbols (Karpov & Hayward, 1998). Swain, Lapkin, Knouzi, Suzuki and Brooks (2009) and van Lier (2000) view that when a human interacts with other human beings and artefacts; his/her behaviour is mediated by sign/ symbol system.

SCT views language learners not as processors of input or producers of output but as speakers/ hearers involved in developmental processes which are realized in interaction (Ohta, 2000). Higher mental activity in a human arises in the interactions when we enter into with other members in our society (Lantolf, 2009; Donato & McCormick, 1994). Watanbe (2008) agrees with Vygotsky (1978) that learning originates in social mediation; concepts emerge through dynamic interaction, shaping and transforming each other in an interconnected system. Therefore, language development is intrinsically a social process (Apple and Lantolf, 1994).

Another view of SCT is that language development occurs in the context of joint activity (Vygotsky, 1978). Walqui (2006) believes learning to be deeply embedded in a socio cultural milieu as he thinks, "learning is a matter not only of cognitive development but also of shared social practices" (p.159). Similarly, van Lier (1996) appears to believe "in order to learn, a person must be active" (p.171). Development does not proceed as the unfolding of inborn capacities, but as the transformation of innate capacities once they intertwine with socio culturally constructed mediational means (Lantolf & Pavlenko, 1995).

Peer interaction

The nature of peer interaction involving L2 learners and its significance to learning has received some attention in the second language acquisition (SLA) literature. It is generally assumed that peer interaction promotes learning. L2 learners are expected to be sensitive to the language skills of their peers (Donato, 1994) and capable of providing support to their peers for learning. They try to create a context of shared understanding in which the negotiation of language form and meaning co-occur (Donato, 1994).

They can also provide scaffolding to their peers quite efficiently using interactive strategies that appear sensitive to their ZPD; which helps to maximize communication and comprehension (Lantolf, 2009). Wood, Bruner and Rose (1976) define scaffolding as "Those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence" (p.90). Successful scaffolding requires peers or group members to respect one another's perspectives and trust each other's opinions (Stone, 1993). It is assumed that L2 learners can exploit the affordances (van Lier, 2000) or occasions for learning (Swain & Lapkin, 1998) which are made available by their peers in their interaction. Highlighting the learning that takes place in peer interaction, Olmendo (2003) states that group members, as a mediator, can understand the communicative intent of their peers' speech, judge their understanding and facilitate their comprehension.

However, it should be noted that there can be different patterns of interaction and certain patterns of interaction are claimed to be more conducive to learning than those of others (e.g Nelson & Murphy, 1993; Storch, 2001, 2002). According to Storch (2002), there are four different patterns of interaction: collaborative, dominant-dominant, dominant-passive and expert-novice. While in collaborative interaction, two or more learners work together throughout the task completion, in dominant-dominant interaction learners show unwillingness to engage with each other's contribution. Similarly, in dominant-passive interaction, a dominant learner takes control of the task and the passive learner or learners maintain(s) a subservant role, but in expert-novice interaction a learner who is more knowledgeable supports less

knowledgeable learner(s). Thus, the two interaction patterns: collaborative and expert-novice, have collaborative orientation and the other two (dominant-dominant and dominant-passive) have non-collaborative orientation. Learning is generally expected to be more effective in the pairs or groups with collaborative orientation than in the pairs or groups with non-collaborative orientation (Storch, 2002).

Related Research

There has been a growing interest investigating the ways L2 learners mediate while interacting with peers. Donato (1994) collected protocols from third semester students of French at an American University who participated in a collaborative planning. The study showed that the university level students are able to construct collectively a scaffold for each other's performance in a collaborative interaction. Similarly, Olmendo (2003) generated data from elementary school children in Chicago. His study found that even the small children (the beginner-level L2 learners of English) use different types of strategies to mediate understanding such as: translation, paraphrasing, code switching, scaffolding by providing verbal cues, paralinguistic cues, modelling the behaviour, providing situational cues and interpreting contextual and situational cues. Additionally, in Watanabe's (2008) study both the higher and the lower proficiency peers could provide opportunities for learning when they worked collaboratively.

While Storch (2002) claims learning to be more effective in pairs that interact in an expert-novice relationship, Lantolf (2009) believes that all language development does not emerge from expert-novice mediation; learning can emerge even in the absence of expert mediation. Furthermore, Swain (1995)

highlights that dialogues among learners can be as effective as the instructional conversations between teachers and learners and Lantolf (2009) further claims, “dialogic mediation among peers is likely to be more effective than the monologic mediation displayed by teachers” (p.84).

However, Gibbons (2003) investigated on how the teachers, through interaction with students, mediate between the students’ current linguistic level in English and the understanding of the content of the subject. The study indicated that teachers mediate language learning in several ways. The major strategies used by them include mode shifting through recasting, indicating the need for reformulation, signalling to learners how to formulate and recontextualizing personal knowledge.

Although a good number of studies have focused on peer interaction, very little research has documented how L2 learners mediate understanding in peer interaction. Furthermore, to the best of my knowledge, no attempt has been made to explore the strategies used by high-level EFL learners to mediate understanding when engaged in peer interaction. To this end, this study has been designed to investigate on the same.

Subjects

This study included six post graduate students studying at Lancaster University, UK. Four of them were studying their MA in TESOL (Teaching English to Speakers of Other Languages) and the other two were doing a MA in TEFL (Teaching English as a Foreign Language). They were from two different countries (China and Japan). All the participants had learnt English as a foreign language in their countries, and none had the experience of living and studying in a foreign country prior to their visit to the UK. Their ages ranged between 25 to 35 years. During the data collection period, they

participated in interactions in which they had to talk to each other and understand some concepts related to second language acquisition.

Method

This study is solely based on the primary source of data. The data was generated from a real class devoted to developing the learners’ understanding about different social approaches to language learning. The students in their class were divided into different groups and two of the groups were randomly selected to record their voices. The recording was continued for about an hour during which both groups participated in three interactions. Then, one of the interactions from each group was purposively selected and transcribed to investigate the strategies used by the students to mediate understanding. While transcribing the data, pseudonyms were used.

Data Analysis

In this section the interaction of the participants is presented and the way they mediate understanding is analyzed. The interaction patterns and the tasks they were involved in are as follows.

Task 1

In this task, the students were asked to discuss the question ‘Can language be used without consideration of context?’

Sabu: Ok... what do you think?

Roj: No...

Sabu: You mean...?

Roj: um... no language without **context**...uh because we always use language to communicate. ..Ok we not communicate and use language (Laughs) <6>. It cannot be separate.

- Sabu:** Yes...(Laughs)... They cannot **separate**. What do you think? [May be indicating to Saru]
- Saru:** ...Uh... Communication should be based on context.
- Sabu:** Contact?
- Saru:** Context (modified pronunciation)
- Sabu:** Con-?
- Roj:** Context
- Sabu:** Oh, context.
- Saru:** Yeah, Ok... I cannot think any example without consideration of context.
- Sabu:** Yeah
- Roj:** Yeah
- Sabu:** Without consi - I think it's meaningful... because <6> in the absence of context no language takes place... we need at least a context ...for example ... It can be linguistics ...
- Roj:** Yeah...
- Sabu:** Or ...social
- Saru:** Social?
- Sabu:** It means uhh... the real situation in the world or the society in which the language is used.
- Saru:** Oh, yeah. Thank you.

(**Note:** The transcription is based on the convention used by Brooks, Swain, Lapkin and Knouzi 2010; see the conventions in Appendix A).

In the excerpt above, it can be observed that the participants work collaboratively to build knowledge. At the beginning, they might not have clear concept about the content, but they initiate interaction and use different techniques to mediate understanding. The interaction is initiated by Sabu who might not have an idea about the question. Roj replies to her using a single word and Sabu fails to understand and makes a clarification request. Then, Roj elaborates the idea and Sabu recasts the

information, may be, to highlight the idea presented by her friend or to show her agreement. After this, it can be seen that Sabu is unable to understand the pronunciation when Saru pronounces the word 'context'. Saru modifies her pronunciation but it also does not work. Then, Roj appears to mediate between them with another pronunciation.

Next, following Saru, Sabu tries to add more information to make her idea more clear. This time, she tries to make the concept of 'context' clear, using two examples: linguistics and social but Saru fails to understand the second term (social) and asks for clarification. Then, to mediate understanding, Sabu gives a definition of the term; as a result, Saru is able to understand.

Task 2

In this task, the students are asked to find the meaning of 'Ellipsis' and find examples from their language.

Excerpt 2

- Rosy:** I am not very understand ellipsis... What is ellipsis?
- Suravi:** Umm... No idea...
- Sony:** Uh...This is omission... deletion of some items.
- Sony:** Mm ...deletion?
- Sony:** Yeah, deleting some parts from an utterance.
- Rosy:** Umm... How?
- Sony:** ... For example <6> If somebody says 'What do you like? Tea or coffee?' What would be your answer?
- Rosy:** Tea.
- Suravi:** Tea.

Sony: Yeah...Simply **Tea**. Then what is the meaning here?... Means, I **like tea**. (slowing the pace and using low tone)

Suravi: Yeah

Rosy: Yeah

Sony: ...This is an example of **ellipsis**... Got the idea?

Suravi: Oh, Yeah.

Rosy: Can you give example from your language?

Suravi: Umm... It's very similar in my language too...

(**Note:** The transcription is based on the convention used by Brooks et al. 2010; see the conventions in Appendix A).

This excerpt shows 'expert- novice' pattern of interaction (See, Storch, 2002). At the beginning of the interaction, Rosy and Suravi seem to be unfamiliar with the term ellipsis but Sony seems to have understood the term. The interaction indicates that more knowledgeable person or expert (Sony) supports less knowledgeable persons (Rosy and Suravi) to understand the concept; as a result, Rosy and Suravi are able to understand the meaning of the term. Thus, it can be argued that their peer (Sony) is able to provide them with an opportunity for learning (Wantabe, 2008; Stroch, 2002). Sony uses different strategies to mediate understanding (Olmendo, 2003).

It can be seen that the very first utterance, 'I am not very understand ellipsis' produced by Rosy is not grammatically correct but it still carries a meaning so her peers are able to understand her. To mediate understanding, Sony starts with giving the meaning of the word ellipsis. She uses the word 'omission' then she substitutes it with another word 'deletion'. Rosy is not able to understand the meaning again but Sony

repeats the information. But the repetition does not help and Rosy asks for clarification. Then, Sony changes her strategy and provides an example which, most probably, happens in real life situation of her peers 'What do you like tea or coffee?' With this example, she is trying to contextualize personal knowledge (Gibbons, 2003). Then, again when she says the sentence, 'I like tea' she slows down her pace and uses a high and low intonation pattern. This seems to be her another strategy to mediate understanding. She also makes comprehension check by saying 'Got the idea?' to be sure that they had understood. At the end of the conversation, the sentence, 'It is very similar to my language' produced by Suravi gives an indication that Suravi has now clearly understood the concept.

Discussion and Conclusion

The results can be explained by reference to Vygotsky's (1978) theory of cognitive development. Languaging, using language as a cognitive tool to make and shape meaning (Swain, 2006), has helped the participants to mediate their understanding and knowledge is constructed actively by the learners (Donato, 1994).

It is quite interesting to observe that the two interactions selected for the study represent two different types of interaction patterns: collaborative and expert- novice; learning took place effectively in both. The first interaction indicates that the peers are working collaboratively. At the beginning, all of them seem to be somehow unfamiliar with the content, but as a result of the interaction, they are able to co-construct their knowledge. The results are consistent with the previous studies (e.g. Lantolf, 2009; Watanbe, 2008; Donato, 1940) that collaborative work among the participants provides them an opportunity to support

each other and co-construct knowledge. This might also provide evidence to the claims made by Vygotsky (1978) that learning is a social process and by Lantolf (2009) that learning takes place even in the absence of expert mediation. However, the second interaction (expert - novice) indicates that more knowledgeable learner can create a supportive environment, in which less knowledgeable learners can participate and acquire knowledge (Greenfield, 1984). Hence, this finding is in line with the finding by Storch (2002) that learning becomes more effective in pairs that interact in an expert-novice relationship. When learners are engaged in a peer interaction, a novice or less knowledgeable learner gets an opportunity to learn from more knowledgeable person or expert (see Vygotsky 1978).

Very similar to the previous studies (Donato 1994; Olmando, 2003; Watanbe 2008), this study indicates that L2 learners use different strategies like repetition, elaboration, contextual cues, paralinguistic cues (modified pronunciation, intonation pattern, pace of speech etc.) and real life examples to mediate understanding. They also appear to be able to provide scaffolded help to their peers during the interactions (Donato, 1994 and Webb, 1989) and facilitate comprehension of their peers (Olmendo, 2003; Webb, 1989). This further indicates that L2 learners work collaboratively and all the group members equally contribute to the task completion when all of them are somehow equally knowledgeable about the task. As a result of the collaborative effort, they can co-construct knowledge. But, when a group consists of the members who are not equally knowledgeable, all the members may not be able to contribute equally to task completion. However, learning takes place in such interactions too.

Thus, it can be concluded that the high-level EFL learners are sensitive to the

communicative intent of their peers and capable of using different strategies to mediate understanding; learning takes place in both types of interaction: collaborative and expert- novice. More importantly, perhaps from a pedagogical perspective, the finding of this study suggests that, when students get an opportunity to work in group, they are able to produce comprehensible input to their peers (Pica, 1989), as a result learning is likely to occur. Thus, the implication of this study is that peer interaction in an EFL classroom may provide learners with an opportunity to learn from their peers.

About the author

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Appendix 1

Transcription Convention

1. ... Pause of less than 5 seconds
2. [] Transcriber's commentary
3. <> pause of more than 5 seconds
4. - incomplete utterance
5. **Bold** emphasis
6. Underlining Overlapped speech