

Tapping ESL learners' problems and strategies in oral communication tasks: Insights from stimulated recall

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ABSTRACT

Understanding English as a Second Language (ESL) learners' problems and strategy use for oral communication tasks is important in order to help learners in oral language development. Nonetheless, these problems and strategies are normally inaccessible to the teachers, as learners' thought processes are hidden in the 'black box' of their minds. This renders it difficult to help learners develop second language (L2) oral skills. This paper reports on findings from a study that attempted to employ stimulated recall (SR) as a research method to tap the learners' thoughts in action when they were trying to cope with L2 group discussions. An analysis of the mental processes of two students was conducted. It was found that the students reported using different strategies to resolve the problems of 'what to say' and 'how to say it' during online speech processing. In addition, the more articulate learner could identify metacognitive strategies for planning ideas and monitoring group interaction. This paper argues that SR may be an appropriate and effective means to investigate learners' problems and strategies for L2 oral tasks. SR may also be usefully incorporated into the teaching of oral skills, whereby the teacher can explore learner strategies.

Introduction

There is value in studying the kinds of problems that students encounter during interactive oral communication and the strategic steps they might take to resolve these problems. The understanding so achieved can contribute to the more effective teaching and learning of oral skills in the ESL/English as a Foreign Language classroom. However, speaking is normally performed in real time, and this poses considerable challenges to teachers trying to understand learners' problems as they cope with L2 oral tasks. While we can gain some insight into students' writing through the drafting process, it is more difficult to find out what the problems are when they are speaking because what goes on in the learners' minds is hidden in the 'black box'. This paper argues that SR may offer a viable way of getting closer to the 'black box' of the student's mind and an appropriate method for research on the teaching of speaking in the ESL context.

Theoretical background

L2 speakers often encounter problems during oral communication tasks due to their limited language proficiency, and they may deploy strategies to help them complete the tasks (Dörnyei and Kormos 1998). In this study, learners' strategies for oral communication tasks are defined as plans, thoughts or behaviours intended by the learner to solve problems encountered during L2 oral tasks (Cohen 1998). The ability to get one's meaning across successfully to communicative partners, especially when problems arise in the communication process, is defined as strategic competence (Dörnyei and Thurrell 1991). Strategic competence is also referred to as a 'means to enhance effectiveness of communication' (Kasper and Kellerman 1997: 21). The notion of efficacy and goal-directedness is clearly associated with strategy use. Bachman and Palmer (1996) go further to underscore the importance of strategic competence, viewing strategy as the central part of language competence. This highlights the significance of strategies to the development of communicative language ability and the value for understanding learners' strategy use.

There has been considerable research on identifying various types of strategies and classifying them into different taxonomies (Chamot 2005). It has been argued that such research has not maintained the original focus on the essential contextuality of learners' strategy use. The approach taken in categorising strategy types often removes the strategies from the interactive context in which they originally occurred. Cook (1993: 137) advocates less emphasis on classification and taxonomic description and more emphasis on looking at the learner's strategy choices in the context of situation:

[T]he concept of strategy ... starts from the learner's choice. The learner is a human being with the free will to opt for one thing or the other; given that the learner is at a particular moment of time in a particular situation, what can the learner choose to do?

It is on this very premise that the present study was conducted to explore learners' strategies – what they opt to do to combat problems – in the context of group work discussion in the secondary ESL classroom. The study aims to enrich the knowledge base of strategy research in context by exploring the kinds of problems students encounter during L2 oral tasks and the strategies (if any) they deploy to resolve those problems.

Because strategies are for the most part unobservable (though some may be associated with an observable behaviour [Chamot 2005]), a wide range of data collection techniques, including introspection, are needed to tap the mental processes involved. The current study employs SR as an introspective

data collection method to tap ESL learners' problems and strategies in oral tasks. Gass and Mackey (2000: 1) define SR as 'one subset of a range of introspective methods that represent a means of eliciting data about thought processes involved in carrying out a task or activity'. SR can be characterised as a retrospective technique based on retrieval cues, which may entail audio and/or visual prompts (for example, video play-back). With the help of such prompts, the participants are expected to be able to recall thoughts they had while performing a task.

The use of SR methodology in understanding learners' problems in L2 oral interactions is gaining importance, as learners' utterances during L2 oral tasks are often the outcome of complex decision processes in which the speakers have to determine what words to use and what syntactic patterns to employ (Kormos 2006). Focusing on the product only, therefore, does the learner a disservice, since the processes involved in speech production should also be given due regard. In fact, learner processes are keys to L2 acquisition (Wigglesworth 2005). A few studies in oral interactions have employed SR as a research tool to uncover the thought processes of the participants when engaging in oral activities in the L2 classroom (Poulisse, Bongaerts and Kellerman 1987; Cohen and Olshtain 1993; Dörnyei and Kormos 1998). These studies generally support the argument that SR methodology can yield valuable data that is otherwise unavailable about the learner's thought in action. Despite the promising results, the number of studies that have employed SR methodology to attempt to get closer to the 'black box' of the learners' minds in L2 oral communication remains small.

SR methodology is particularly apt in investigating possible strategy use in L2 oral tasks in the present study, not least because learners' strategy use is part of their declarative knowledge, which is not yet internalised and routinised (Gass and Mackey 2000). L2 learners are normally conscious of the strategies they deploy to help them as they struggle their way along the language learning process. Such knowledge is describable because it is kept in short-term memory and learners are still able to verbalise it. Through repeated practice, however, declarative knowledge becomes automatic and routinised and enters into the long-term memory to form part of the procedural knowledge, which can no longer be available for verbal reporting (Ericsson and Simon 1993). So when strategy use becomes automatic, it is no longer available for reporting. Nonetheless, apart from pre-existing strategies, which are likely to have become automatic, the strategies the learners use are mostly not yet automatised and are therefore probably available for reporting in the SR methodology. This paper aims to profile ESL learners' problems and strategy use in oral communication through an SR process.

The study

DESIGN AND PARTICIPANTS

The findings reported in this paper are drawn from a larger study, which involved 41 secondary students of about 13 to 14 years of age who had previously studied English as a second language for seven to eight years in Hong Kong. The larger study aimed to examine the effects of oral communication strategy training on learners' strategy use in the ESL classroom (Lam 2005).

A quasi-experimental design was adopted in the larger study in which a treatment class received strategy training (N = 21) and a comparison class (N = 20) served as a control group. Selected strategies were taught to the treatment class with a view to helping the students to cope with English group discussion tasks, in which the learners were asked to agree on a ranking order. It was believed that the tasks might provide an ideal avenue for the students to try out strategies in order to cope with oral communication problems as they negotiated meaning.

A multi-method approach to assessing the effects of the strategy intervention was adopted. Data were collected on a pre-post basis from (1) the learners' performances in group discussions, (2) the strategy questionnaires, (3) the observations of learners' strategy use and (4) the SR interviews. The baseline data from the SR interviews conducted before the strategy instruction form the basis of this paper.

COLLECTION OF SR DATA

In this part of the study, two groups of four students (one from the treatment class and one from the comparison class) were invited to do a ten-minute English group discussion task outside normal class hours. Both groups were given an imaginary situation in which they had to prioritise a list of body parts in order of importance (Appendix A). During the task, they had to justify the ranking of each item and reach a group consensus. This task was considered motivating and cognitively challenging for tapping possible use of learners' strategies in coping with problems when trying to complete the oral task.

To minimise memory loss and to enhance the validity of the SR data, both groups of students (a total of eight) were individually interviewed soon after the English group task. Each of the four students was interviewed by the researcher. During the SR interviews, the video-taped English discussion was played back to the students, who were then asked to watch and to report on what they could remember about their thoughts during specific episodes while the English task was in action. Occasionally, the researcher paused the videotape and asked, 'What was at the back of your mind at that

moment?' This recall question aimed to remind the students that the English group task was the focus of the recall, thus minimising the possibility that they would report thoughts that came up during the SR interviews. As recommended by Gass and Mackey (2000), the recall questions and the interview procedure were field-tested in two pilot studies prior to the main study (Lam 2004). Each SR interview was conducted in the student's first language (L1) to facilitate reporting, lasted about 30 minutes and was audio-taped. Altogether there were eight individual SR interviews.

ANALYSIS OF SR DATA

The eight SR interviews were translated into English and transcribed for analysis. The first step in analysing protocol data was to identify a unit of analysis in each interview (Green 1998). Each time the video was stopped, the student gave a report, which constituted an episode and was taken as the unit for analysis. As the SR interviews aimed to elicit baseline data about strategic thoughts (if any) when the students were engaging in the discussion tasks, every SR in an episode was segmented, marked and bounded by a pair of slashes < // > whenever a mention of a strategy type was identified (Green 1998; Gass and Mackey 2000). Each recall segment was then assigned a strategy name. (It was possible that no strategies were identified.) To enhance inter-rater reliability in coding, two raters were invited to independently code all the SR interviews; the reliability coefficient was 0.8608. An example of an episode together with the recall segment coded at a strategy type (that is, < paraphrasing >) is shown in the following grid.

EPISODE I	
Video clip	
Student 1	= But I think ... is ... no nose is important
Student 2	= But as I think more ... er ... we have powerful ears
Student 3	powerful ears means hear more things right?
Student 2	Yes, we can hear other ... people what they are thinking about em ... but it's no secret right? Not very good, I think.
Student 4	No secret is good ... I like it.
(PAUSE)	
Researcher	
Do you remember what you were thinking about there?	
SR	
I was talking about 'powerful ears'. /At that point, I wanted to say that our personal privacy would be intruded upon. But I couldn't think of the English words to express this idea. So I just said 'it's no secrets ... not very good' as they were simpler to express. / < paraphrasing >	

Figure 1: A sample episode with a coded SR segment

FINDINGS

A total of 19 different types of strategies were identified by the two raters from the eight SR interviews (Appendix B). The number of types of strategies reported by the individuals ranged between two and seven (Appendix C). The next section gives details of the stimulated recalls of the students. For reasons of space, only a highly articulate student and a much less articulate student are selected for comparison and discussion here. It should therefore be acknowledged that, given the extremely small sample size selected for presentation in this paper, the findings may not reflect the full range of strategic thoughts found in the study.

Student 1

Student 1 (S1) was one of the most articulate among the eight students; she reported seven different types of strategies. Her reports were mostly detailed and free of pausing, hesitation or other signs of *post-hoc* rationalisation. The reports gave the impression of representing an accurate recall of what had happened during the English group task. S1's SR segments in the order she reported are as follows.

SR segment 1

/I was using the instruction sheet to help me think about what he was saying about 'super skin'. While he was speaking, I was thinking that 'skin' was really important because it could protect ourselves. / < resourcing >

The SR responses indicate that S1 explicitly recognised what could be achieved by the strategic use of the notes that were given before the task ('I was using the instruction sheet to help me think about ...'). It is worth noting that, even though she was one of the best students, she was quite heavily reliant on the notes given by the teacher as a valuable resource for speaking while the task was in action.

SR segment 2

I was talking about 'powerful ears'. /At that point, I wanted to say that our personal privacy would be intruded upon. But I couldn't think of the English words to express this idea. So I just said 'it's no secrets ... not very good' as they were simpler to express. / < paraphrasing >

In this episode, the comments of S1 indicate that she was aware of her problem ('I couldn't think of the English words') and of her intention to resolve the problem strategically by using paraphrases and more familiar items ('I just said "it's no secrets ... not very good" as they were simpler'), a strategy that was most frequently reported by all the students in coping with similar problems.

SR segment 3

/I was wondering why he didn't think that 'super nose' was important if he considered that 'powerful ears' were important. So I asked him 'why'. I wanted him to clarify his point. / < seeking clarification >

S1 was explicit about the problem of not being able to follow the logic of her interlocutor ('I was wondering why ...'). Moreover, she seemed to be aware of the importance of meaning negotiation in promoting oral communication and asked strategically for clarification in order to facilitate understanding ('I asked him ...').

SR segment 4

/We had originally decided that 'hair' was more important than 'handsome face' in the preparation session. But at that moment, I felt that 'handsome face' was more important. I was thinking that many people were bald and it seemed OK. But if you looked ugly, that might really be a problem. I had no intention of saying all these. It was too difficult to express these ideas in English. So I just said 'nowadays we can see many people without hair'. / < simplification >

In recalling her decision to simplify a message, S1 revealed considerably her on-task thoughts including the problem ('It was too difficult to express ...') and the strategic solution to simplify in some detail ('I had no intention of saying all these ... So I just said ...'). This account was particularly elaborate, providing the evidence that she was capable of recounting precise details of her mental activities.

SR segment 5

/I started teasing him already at this point. Actually I had thought of how to tease him before speaking. I knew what Stephen would say about ears and he said exactly what I had anticipated. [Laughter.] As I had already prepared my arguments to refute him, so I didn't have much difficulty there. He fell into my 'trap' [Laughter]. / < planning ideas in advance >

S1 was not only quick to respond strategically to on-the-spot problems, but was proactive in pre-empting her group-mate ('I had already prepared my arguments ...'). This reflects conscious planning, pro-activity and goal-directedness in her strategic moves. In other words, she demonstrated metacognitive awareness and was capable of advance planning as to what to say before it was her turn, thereby enabling her to gain an upper hand in the task ('I didn't have much difficulty there').

SR segments 6 and 7

/Em ... everyone was giving their opinions quite readily but Penny didn't say anything. I was sure everyone had some opinions. So at that time, I wanted to know how she felt. / < monitoring contribution >

/I originally wanted to say that 'muscles is not very important' but felt that Stephen had something to say at that point. So I stopped and let him come in. /
< monitoring turn-taking >

S1 was clearly oriented towards facilitating the group task. First, she was aware that 'Penny didn't say anything' and decided to tackle the potential problem by inviting her to give opinions, thus monitoring contribution from her peers and facilitating the conduct of the discussion. Similarly, she was aware that a group member intended to speak; she 'felt that Stephen had something to say' and decided to 'opt out' by letting her peer take the turn. She let her fellow student have the floor, thus facilitating the discussion by cooperating and responding appropriately in a group task. Again, this shows her metacognitive awareness of the need to monitor the contribution and turn-taking manners in the English task.

Overall, S1 demonstrated high strategic awareness. Consistently, she was aware of her own limitations and problems, and of the need to take strategic moves to monitor, solve or pre-empt online communication problems. Furthermore, she demonstrated metacognitive awareness, taking deliberate steps to plan, monitor and evaluate the conduct of the group task.

Student 2

Student 2 (S2) was the least articulate among the eight students and he reported only twice throughout the interview. The poverty of his comments was obvious. He was not very forthcoming in reporting his thoughts, his awareness of the problems or the goals towards which his strategic moves were aimed, which might be due to his relative lack of articulateness. S2 commented briefly on two occasions only, as follows.

SR segments 1 and 2

/ ... [Long pause] I couldn't organise the English words I needed to express myself. So I just gave up expressing the idea altogether. Er ... / [Pause.]
< abandoning message >

/I didn't understand the meaning of the words and I didn't know how to pronounce them. So ... [Pause] I just quietly asked my neighbour for help.
< asking for help >

There was evidence that S2 was fully aware of his problems ('I couldn't organise ...'; 'I didn't understand ...'; and 'I didn't know how to ...'). S2 also reported possible strategic behaviours to solve the problems ('So I just gave up' and 'So ... [Pause] I just quietly asked ...'). His comments seem to indicate that he was aware of the strategic need for not expressing all his ideas and for asking for help with how to say something. Nonetheless, one

should note that both comments are characterised by long pauses, which might be indicative of *post-hoc* rationalisation during the SR interview rather than genuine strategic thoughts during the English task.

Thus both S1 and S2 reported problems with ‘what to say’ (content) and ‘how to say it’ (language) during the online L2 oral communication. Both students recalled taking strategic moves to help them circumvent the problems. In addition, the more articulate student was able to identify metacognitive strategies for planning ideas before her turn to speak, and for monitoring the contributions of peers and the turn-taking patterns for optimal group interaction (Wenden 2001).

Discussion

The two cases have provided evidence that students deployed strategies to solve online speech processing problems such as ‘what to say’ and ‘how to say it’. This is consistent with problems delineated in models of speech processing (Kormos 2006). In addition, learners used metacognitive strategies to do local and global planning, to monitor contributions of group members and to facilitate the conduct of task (Wenden 2001). The recall segments recorded during the SR interviews were students’ reports – in their own voices and from their perspective – of what had been going on in their minds during the tasks. It is this first level of thinking during the tasks that may reflect strategic thoughts when students were trying to resolve problems in the interactive English group discussions. In this way, the study responds to Gass and Mackey’s (2000) advocacy of the use of SR to address unanswered issues in oral interaction research. For instance, they propose that the questions as to why Foster’s (1998) findings contradict previous studies in the literature might be resolved by ‘posing questions to probe learners’ thoughts during the time of the original interaction using audiotapes as stimulus’ (Gass and Mackey 2000: 135). In response to this suggestion, the present investigation has provided evidence (albeit limited) that it is feasible to employ SR methodology to probe learners’ thoughts when learners are negotiating meaning in oral tasks.

The second level of thinking operated during the SR interviews in which students were able to reflect on and talk about the thought processes that had taken place during the English group discussion task. That is, in the post-task activities, students could think back and comment (albeit in varying levels of detail) on events that had taken place. The SR data seem to lend support to the view that students were able to handle meta-talk on oral performance decisions and processes. It is this second level of thinking that may reflect students’ awareness of strategic moves (if any).

A strength of SR methodology is that it can be used to identify students' strategic thoughts and to obtain reasonably reliable, though of course not perfect, evidence of their thinking. In addition, the method enables us to get a picture of the extent to which students are aware of their strategic behaviour in action. This way, the research instrument offers information about students' declarative knowledge of strategy use (that is, their awareness of or knowledge about strategy use), and such information may not be available from other sources. Hence, the SR method contributes to our understanding of the learners' strategy use in two distinct ways: first, by providing a 'window' into the 'black box' of students' minds and into their strategic thinking (if any); second, by enabling us to understand students' awareness of what counts as strategic. As such, the method plays a specific and distinct role in our understanding of students' strategy use.

Nonetheless, it should be remembered that SR can only tap the contents of consciousness; that is, declarative knowledge such as problems and strategies, which were conscious to the learners during the English task. Any pre-existing strategic moves that are routinised are probably not detected in the SR interviews because procedural knowledge governing such strategy-use enters long-term, rather than short-term, memory and so is not available for verbal reporting (Ericsson and Simon 1993). In addition, to facilitate reporting, the SR interviews were conducted in the learners' L1 and then translated into English. As such, the SR data might not have been fully captured or accurately interpreted.

The afore-mentioned limitations may then suggest the need to complement SR methodology with observational methods so as to obtain a fuller understanding of what constitutes strategic features in oral data. Performance data from observations yield information about actual behaviours rather than reports of such behaviours. Yet surface behaviours might not always reflect underlying strategic processing, which is often inaccessible through observation. By complementing SR data with observational data, it may be possible to identify performance features (for example, hesitations, pauses, false starts) in oral production that reflect covert strategic processes. Reliable ways to identify performance features of strategic behaviour in oral tasks will be pedagogically useful in helping teachers to detect learners' communication problems and to offer remedies. Triangulating SR data with observational data may also help address issues of validity, since it is possible to question the extent to which the reported thought processes were taking place during the event rather than being constructed after the event due to memory loss or influences from similar past events (Nisbett and Wilson 1977).

The findings have also indicated that students varied greatly in the range of problems and strategies reported. As noted, a total of 19 strategy types were identified (Appendix B) and the number of types of strategies reported ranged from two to seven per student (Appendix C). There are obvious variations among the students in the ways they approach strategy use: some students tend to draw on a few types of strategies, whereas others refer to more strategy types without focusing on any. Strategies are in fact personal approaches of learners to coping with tasks, and learning styles and strategies are intertwined (Ehrman, Leaver and Oxford 2003). It is also well documented in the literature that culture has a large influence over the learners' preferred choices of strategies (see, for example, Bedell and Oxford 1996). It is expected that students of different learning styles with different cultural backgrounds may probably employ strategies in a diverse way as they learn to communicate in a second language. This raises the interesting issue of coping with learner differences in approaches to tackling problems in oral communication. However, it should also be noted that students may vary greatly in their levels of articulateness (Wigglesworth 2005), as we have seen in this study. Given this, their verbal reports may differ considerably in quality and quantity, and this has implications for the interpretation of SR findings; consequently the findings of the present study and the conclusions to be drawn in the next section should be viewed in this light.

This paper has argued that SR methodology may provide a viable way in which we can get closer to the 'black box' of the learner's mind. ESL teachers may be in a better position to help learners access their oral communication problems, strategy use (if any) and, more generally, the process of L2 oral performance. This could be done in micro-teaching sessions in which students' oral communication tasks are videotaped and played back as post-task reflection and analysis activities. In this way, SR can be useful to research thought processes (problems and strategies), but can also be used by teachers to work on learners' strategies in this area.

Conclusions and implications

It is important to understand ESL learners' problems and strategies in oral tasks. Such understanding on the part of the teacher can offer useful insights that can help us to be more effective teachers of the skill of speaking. Learners also need to understand strategies and what they do when they are speaking so that they can develop their strategic awareness and strategic competence. The value of raising L2 learners' strategic awareness in conducting oral communication tasks has been confirmed in recent studies (for example, Nakatani 2005). It may also be desirable to conduct explicit

strategy instruction whereby learners can be provided with appropriate models and practise strategy use with a view to improving task performance (Rossiter 2003; Chamot 2005).

In view of the richness of SR data, it may be desirable to capitalise on the strengths of the SR methodology in assessing learners' strategy use, not only in terms of the types of strategies the learners report using, but also in the effectiveness of their strategy use. It is possible – via longitudinal studies – to track whether there are changes to the quality of strategy use over a period of time. Coupled with observational data, SR data may provide more comprehensive information about the learning process (for example, strategic thinking) and the learning product (for example, oral performance).

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REFERENCES

- Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice*. Oxford: Oxford University Press.
- Bedell, D., & Oxford, R. L. (1996). Cross-cultural comparisons of language strategies in the People's Republic of China and other countries. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 47–60). Honolulu: University of Hawaii.
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112–130.
- Cohen, A. D. (1998). *Strategies in learning and using a second language*. London: Longman.
- Cohen, A. D., & Olshtain, E. (1993). The production of speech acts by EFL learners. *TESOL Quarterly*, 27(1), 33–56.
- Cook, V. J. (1993). *Linguistics and second language acquisition*. New York: St Martin's Press.
- Dörnyei, Z., & Kormos, J. (1998). *Problem-solving mechanisms in L2 communication: A psycholinguistic perspective*. *Studies in Second Language Acquisition*, 20(3), 349–385.
- Dörnyei, Z., & Thurrell, S. (1991). Strategic competence and how to teach it. *ELT Journal*, 45(1), 16–23.
- Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003). A brief overview of individual differences in second language learning. *System*, 31(3), 313–330.

- Ericsson, K. A., & Simon, H. A. (1993). *Protocol analysis: Verbal reports as data* (2nd ed.). Cambridge, MA: MIT Press.
- Foster, P. (1998). A classroom perspective on the negotiation of meaning. *Applied Linguistics*, 19, 1–23.
- Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Green, A. (1998). *Verbal protocol analysis in language testing research: A handbook*. Cambridge: Cambridge University Press.
- Kasper, G., & Kellerman, E. (1997). *Communication strategies: Psycholinguistic and sociolinguistic perspectives*. London & New York: Longman.
- Kormos, J. (2006). *Speech production and second language acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lam, W. Y. K. (2004). *Teaching strategy use for oral communication tasks to ESL learners*. Unpublished PhD thesis, School of Education, University of Leeds, United Kingdom.
- Lam, W. Y. K. (2005). Is strategic competence teachable? *The Journal of Asia TEFL*, 2(4), 87–112.
- Nakatani, Y. (2005). The effects of awareness-raising training on oral communication strategy use. *The Modern Language Journal*, 89(1), 76–91.
- Nisbett, R., & Wilson, T. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231–259.
- Poullisse, N., Bongaerts, T., & Kellerman, E. (1987). The use of retrospective verbal reports in the analysis of compensatory strategies. In C. Faerch & G. Kasper (Eds.), *Introspection in second language research* (pp. 213–229). Clevedon: Multilingual Matters.
- Rositer, M. J. (2003). 'It's like chicken but bigger': Effects of communication strategy in the ESL classroom. *Canadian Modern Language Review*, 60(2), 105–121.
- Wenden, A. (2001). Metacognitive knowledge in SLA: The neglected variable. In M. P. Breen (Ed.), *Learner contributions to language learning. New directions in research* (pp. 44–64). UK: Longman Pearson Education.
- Wigglesworth, G. (2005). Current approaches to researching second language learner processes. *Annual Review of Applied Linguistics*, 25, 98–111.

Appendix A

Group discussion task, 'Buying Body Parts!'

You are in the year 3000. You can now buy new parts for your body. The new parts are:

- | | |
|--|---|
| <ul style="list-style-type: none">• super skin that does not change• super nose that can smell danger• super-smart brain that works better than a computer• pretty or handsome face that lasts forever• powerful legs that can walk as fast as a car | <ul style="list-style-type: none">• x-ray eyes• super hair that does not fall out• powerful ears that can hear what other people think• super strong heart that lasts forever• high-power muscles |
|--|---|

But you do not have enough money to buy all the new parts. As a group, decide which parts are more important and which are less important. Put the ten body parts in order from 1 to 10. '1' is the most important; '10' is the least important. You must give reasons for your choice.

The following questions may help you think of ideas:

1. Why do you want the new parts?
2. How can they help you? How can they change your life?
3. How are you going to use them?

The following ideas may help you:

- | | |
|---|---|
| <ul style="list-style-type: none">• Protect myself• Make me strong• Run away from danger• Other people will like me• Will be beautiful forever• May live a very long life• Can see through danger | <ul style="list-style-type: none">• May look like a robot• Many people will be jealous of me• May know many unhappy things• May hurt others easily• May see horrible things |
|---|---|

Appendix B

Types and frequencies of strategies reported in the stimulated recall interviews (N = 8)

Types of strategies	Frequencies of the strategies reported
1 Paraphrasing	15
2 Simplification	10
3 Activating background knowledge	8
4 Monitoring contribution	7
5 Abandoning message	6
6 Asking for help	4
7 Taking risks	4
8 Using gestures	3
9 Resourcing	3
10 Enhancing task knowledge	2
11 Facilitating progress	2
12 Seeking clarification	2
13 Monitoring turn-taking	2
14 Using fillers	1
15 Elaborating	1
16 Facilitating atmosphere	1
17 Focusing on task	1
18 Planning ideas in advance	1
19 Seeking views	1
Aggregated frequencies of strategies reported	74
Aggregated types of strategies reported	19
Aggregated numbers of SR segments reported	79

Appendix C

Types of strategy reported per student/interview

Student/interview	Number of types of strategy reported
1	7
2	2
3	5
4	5
5	6
6	4
7	3
8	7