Implementing Communication Strategy Instruction in the ESL Oral Classroom: What Do Low-Proficiency Learners Tell Us?

Wendy Y.K. Lam

This article reports findings from a strategy intervention study involving a treatment class (N=20) and a comparison class (N=20) in an ESL oral setting. Oral communication strategies were taught to the treatment class. A data-collection method comprising stimulated recall interviews that aimed to investigate respectively the learning process (i.e., strategy use) and the learning product (i.e., task performance) was employed. The findings indicate that strategy instruction might affect low-proficiency students more than high-proficiency students in terms of both strategy use and task performance. The article concludes with pedagogic implications for communication strategy instruction.

Cet article explique les résultats d'une étude portant sur les stratégies d'intervention et impliquant une classe expérimentale (N=20) et une classe témoin (N=20) dans un cours oral d'ALS. La classe expérimentale a appris des stratégies de communication orale. Notre méthode de collecte de données a impliqué des entrevues utilisant la méthode du rappel stimulé et portant sur le processus d'apprentissage (c.-à-d., emploi des stratégies) et les résultats d'apprentissage (c.-à-d., exécution des tâches). Les résultats indiquent que l'enseignement des stratégies pourrait avoir plus d'impact sur les élèves moins compétents que ceux plus compétents, tant pour l'emploi des stratégies que l'exécution des tâches. Une discussion des incidences pédagogiques en enseignement des stratégies de communication vient terminer l'article.

Introduction

In this article, I report findings from a strategy intervention study in a secondary English-as-a-second-language (ESL) oral classroom setting. Specifically, the study investigated the effects of strategy instruction on strategy use and task performance by low- and high-proficiency students at the same course level. It was anticipated that this would offer some understanding of the relationships between strategy teaching, strategy use, task performance, and language proficiency. There was also an attempt to study

both the learning process (i.e., strategy use) and the learning product (i.e., task performance).

Oral Communication Strategy Teaching Research

Strategies for second-language (L2) oral communication are commonly known as communication strategies. Despite widespread disagreement in the research literature about the exact nature of communication strategies (see Dörnyei & Scott, 1997, for a comprehensive review), problem-orientedness has been identified as a primary defining criterion for identifying communication strategies (Bialystok, 1990). One generally accepted definition of communication strategies is that they are used "only when a speaker perceives that there is a problem which may interrupt communication" (Bialystok, p. 3). The present study adopts a psycholinguistic perspective on oral communication strategy research and defines communication strategies as tactics adopted by ESL learners to solve oral communication problems (Nakatani & Goh, 2007). This study also echoes the position assumed by Konishi and Tarone (2004) that communication strategy teaching is an effective pedagogical tool for ESL communicative language instruction. Such teaching provides learners with both communicative practice and opportunities to learn a core set of English linguistic expressions. Thus learning to use communication strategies has language-learning potential.

Despite the potential value of teaching L2 learners how to use oral communication strategies, the number of intervention studies remains small. A brief review identifies outstanding issues that require further investigation. Dörnyei (1995) related a six-week training experiment in Hungary with 109 students in the use of three communication strategies, namely, topic avoidance and replacement, circumlocution, and using fillers and hesitation devices. The results showed that there was an improvement in measures related to students' overall speech performance and to both the quality of circumlocutions and the frequency of fillers and circumlocutions in the oral post-test, which consisted of topic description, cartoon description, and definition formulation. Dörnyei's study provided some evidence for the view that instruction may alter students' frequency and quality of strategy use.

More recently, Scullen and Jourdain (2000) examined the effects of the explicit teaching of oral circumlocution for undergraduate learners studying French as a foreign language at an United States university. The treatment group was explicitly taught how to use super-ordination, analogy, and function and description strategies immediately before the first, second, and third practice session respectively. Participants in both the treatment class (17 students) and the comparison class (8 students) completed a pre-test, three practice sessions, and a post-test. The results indicated that both the treatment and comparison classes made significant gains over time and that the between-group difference on the post-test was not significant. However,

given the short period of training and the small group sizes, further investigation is no doubt desirable.

Rossiter (2003) reported the effects of communication strategy instruction on strategy use and on second-language performance. Two classes of adult immigrants in Canada participated in this study. One class received 12 hours of direct communication strategy training, and the second served as a comparison group. Two oral tasks (picture story narratives, object descriptions) were administered in week 1, week 5, and week 10. The post-test results showed a direct effect in favor of the communication strategy condition on a range of strategies used in the object description task, which was more effective than the narrative in eliciting communication strategies. Nonetheless, the author concluded that strategy training appeared to have little overall effect on learners' task performance.

The studies reviewed above did not consider whether proficiency level made a difference in the effects of strategy teaching. The relationship between strategy use and proficiency level is complex (Grenfell & Macaro, 2007; Takeuchi, Griffins, & Coyle, 2007). Research has shown that for young learners (especially from Hispanic backgrounds), greater proficiency is associated with more frequent use of social strategies in oral communication, including initiating or participating in peer interaction (Chesterfield & Chesterfield, 1985; Wong Fillmore, 1976). However, research has also indicated that proficient Chinese learners performed better without the use of social interaction strategies (Wong Fillmore, Ammon, McLaughlin, & Ammon, 1985). Given the unresolved issues, few attempts have been made to implement intervention studies that examine the relationship between proficiency level and strategy use in the development of the speaking skill.

One study by Rost and Ross (1991) is relevant to the present research because one of its research aims concerned whether local and inferential questioning strategies were teachable to less proficient students. Rost and Ross investigated the plausibility of teaching three proficiency-related clarification strategies in listening comprehension to Japanese learners of English at beginning levels. One key question relating to the teachability of strategies was: Would local and inferential questioning strategies used by more proficient listeners be trainable, so that the less proficient listeners, who initially did not yet use them, would use them after training? The result suggested that it was indeed possible to teach less proficient learners how to ask for lexical clarification in listening.

The paucity of work on investigating the effect of oral communication strategy instruction in the ESL classroom provides a good justification for more studies in the area (Nakatani & Goh, 2007). Whereas both Scullen and Jourdain's (2000) research and Rossiter's study (2003) focused on communication strategy instruction, the former dealt with French as an L2, and the

latter involved adult immigrants as learners. This calls for research involving younger learners using ESL in the oral classroom. An apparent lack of consistent findings across studies conducted in varied contexts resulting in continuing uncertainty about the effectiveness of strategy instruction on strategy use and task performance provides yet another rationale for more research in the field. As Hassan et al. (2005) summarize, for speaking ability, "training learners to use certain strategies appears successful but the evidence is not compelling (small number of studies, varied relevance, varied reliability)." In fact strategy training is still unheard of in many ESL classrooms in the Asian context, and the responses to oral communication strategy teaching have been rather mixed (Cohen & Macaro, 2007; Lam, 2005, 2006). The present study, therefore, aims to address the need for increased understanding of the relationship between strategy instruction, strategy use, task performance, and proficiency level.

The Study

Adopting a psycholinguistic perspective on oral communication strategy use, this study targets eight strategies that might enable learners to overcome potential communication problems at three key stages of speech-processing for teaching in the ESL classroom (Kormos, 2006; Nakatani & Goh, 2007). The first stage pertains to the planning and encoding of preverbal messages. At this stage, four strategies that may enable L2 speakers to overcome the problem of resource deficits—that is, Resourcing (Strategy 1) and Paraphrasing (Strategy 2), and to gain processing time, that is, *Using fillers* (Strategy 3) and Using self-repetition (Strategy 4)—are targeted. At the next stage of monitoring the phonetic plan and articulated speech, a strategy that may help L2 speakers to cope with deficiencies in their own speech, that is, *Using self-cor*rection (Strategy 5) is targeted. Finally, at the post-articulatory monitoring stage, three strategies that might help L2 speakers to cope with deficiencies in the interlocutor's speech, that is, Asking for repetition (Strategy 6), Asking for clarification (Strategy 7), and Asking for confirmation (Strategy 8) are targeted. For a full justification, see Dörnyei and Kormos (1998) and Lam (2005). The following research questions form the basis of the present study.

- 1. What are the effects of teaching the use of the eight strategies on high-proficiency and low-proficiency learners' actual use of these strategies?
- 2. Does strategy teaching improve high-proficiency and low-proficiency learners' performance in ESL group discussion tasks?

Research Design

An intervention study was conducted in Hong Kong. Two intact classes of Secondary Two ESL students (20 in each), who were between 13 and 14 years

old and had six years of English at primary level and one year at secondary level, were selected for the study. A one-way ANOVA was conducted to ascertain that the two classes did not show any statistically significant differences in their English proficiency. One class was randomly assigned as the comparison class (C) and the other the treatment class (E). Results of the Kruskal-Wallis Test were then used to put students in each class into three high-proficiency groups and two low-proficiency groups; each group had five members. The same test was used to confirm that proficiency groups across the two classes were comparable. The teachers of both classes possessed bachelor's degrees in English language and literature, had qualified teacher status, and had taught in the school for about eight years.

The intervention study involved a total of eight oral lessons spread over five months (i.e., Week 1 to Week 20) for each of the two classes. Each lesson lasted one hour and 20 minutes. During the oral lessons, both classes engaged in a variety of group discussion tasks involving problem-solving, ranking, information gaps, and sharing opinions. Group discussion was selected as the major task type in the study as it was what the students were expected to do in their English oral lessons and other subject lessons. The E class received additional instruction in the use of the eight target strategies, whereas the C class did not. The teaching materials for both classes were field-tested and revised in the light of the feedback from the teachers and students in a pilot study.

The instructional approach adopted for the E class was explicit strategy training (Chamot, 2005; Murphy, 2008). Students were informed of the rationale and the value of strategy instruction, given names and examples of the eight target strategies to model, provided with opportunities to use and consolidate the target strategies, and guided to evaluate their strategy use at the end of the lesson. As for the C class, the teacher conducted the group tasks based on her knowledge, skills, and experience with no reference whatsoever to strategy use.

Data Collection and Data Analysis

Gauging strategy use as a learning process. Learners' utterances during L2 oral tasks are often the outcome of complex decision-making processes in which the speakers must determine which words and which syntactic patterns to use (Dörnyei & Kormos, 1998; Kormos, 2006). Focusing only on the product is, therefore, doing the learner a disservice, and it is believed that the processes involved in speech production should be given due regard (Cohen & Olshtain, 1993; Wigglesworth, 2005). Hence strategy use as one aspect of the process of learning to speak is addressed in the first research question.

Strategies are for the most part unobservable, although some may be associated with an observable behavior (Chamot, 2005). Thus there is a need for a wide range of data-collection techniques, including introspection, to tap

into mental processes. The current study employs stimulated recall as an introspective data-collection method to tap into ESL learners' problems and strategies in oral tasks with a view to understanding their processes of learning to speak a second language. Gass and Mackey (2000) defined stimulated recall 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" (p. 1). Stimulated recall can be characterized as a retrospective technique based on retrieval cues that may entail audio and/or visual prompts (e.g., video playback). With the help of such prompts, the participants are expected to be able to recall what they thought while performing a task.

Stimulated recall methodology was 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 that has not yet been internalized and routinized (Gass & Mackey, 2000). L2 learners are normally conscious of the strategies they deploy to help them as they struggle through the language-learning process. Such knowledge is describable because it is kept in short-term memory and learners are still able to verbalize it (Ericsson & Simon, 1996). As strategy use is amenable to reporting, stimulated recall was used to investigate whether the strategy teaching altered students' strategic thoughts in terms of quantity (i.e., frequency) and quality (i.e., manner) of strategy use.

To collect data for the first research question, one high-proficiency group and one low-proficiency group from each of the C and E classes were invited to do a 10-minute English group discussion task outside normal class hours in Week 1, Week 10, and Week 20. Both groups were fully informed of the purpose of the research, the commitment expected of every participant, and their right to drop out at any time (if needed). Every student in the two groups accepted the invitation. Both groups were given an imaginary situation in which they had to prioritize a list of items (i.e., body parts) in order of importance. During the task, they had to justify the ranking of each item (i.e., body part and function) and reach group consensus. This task was considered motivating and cognitively challenging enough to tap into learners' possible use of strategies in coping with problems when trying to complete the oral task.

To minimize memory loss and to enhance the validity of the stimulated recall data, both groups of students (a total of eight in each class) were individually interviewed immediately after the English group task (Ericsson & Simon, 1996; Gass & Mackey 2000). During the stimulated recall interviews, the videotaped English discussion was played back to the students, who were then asked to watch and pause to report on what they could remember about their thoughts during the specific episodes while the

English task was in action. Occasionally, I paused the videotape and asked, "What was at the back of your mind at that moment?" This recall question was to remind the students that the English group task was the focus of the recall, thus minimizing the possibility of their reporting thoughts that arose during the stimulated recall interview. Each interview conducted in the students' L1 to facilitate reporting lasted about 25 minutes and was audiotaped. The dataset consisted of a total of 48 individual stimulated recall interviews for both classes across Weeks 1, 10, and 20.

The 48 interviews were translated into English and transcribed for analysis. The first step in analyzing protocol data was to identify a suitable unit of analysis in each interview (Green, 1998). Each time the video was stopped and a student engaged in reporting constituted an episode that was identified as the unit for analysis. As the stimulated recall interviews aimed to elicit data about strategic thoughts (if any) when the students were engaging in the discussion tasks, each stimulated recall in an episode was segmented, marked, and bounded by a pair of slashes—//—whenever a mention of a strategy type was identified (Gass & Mackey, 2000; Green). Each recall segment was then assigned a strategy name, although it was possible that no strategies could be identified. To enhance interrater reliability in coding, two raters were invited independently to code all 48 of the interviews; the reliability coefficient was 0.8608. Strategies identified as those targeted for teaching in the treatment class were counted.

Assessing Task Performance as Learning Product

After investigating the effects of strategy teaching on the learning process (i.e., strategy use), I now turn to the effects on the learning product (i.e., task performance). To ascertain whether instruction would lead to improved task performance in the E class compared with the C class, a whole-class English group discussion task was conducted during normal class hours, and the performances of all five groups (three high-proficiency groups and two low-proficiency groups) in each of the C class and E class were rated in Week 1 and Week 20. In addition, the same pull-out English group task used to elicit data on strategy use as reported above, but designed for one high-proficiency and one low-proficiency group in each of the E and the C classes, was rated in Week 1 and Week 20.

Both the whole-class task and the pull-out-group task required the students to prioritize 10 items and to give reasons; both tasks were of comparable difficulty and interest level and had been piloted to ensure that they were able to generate good interaction. Twenty recordings of the whole-class tasks and eight recordings of the pull-out-group task (i.e., a total of 28 recordings) were collected; each recording lasted about eight minutes.

Four English-language teachers (one native speaker and three near-native speakers) were asked to assess each recording independently with respect to

English proficiency and task effectiveness. English proficiency was an impressionistic rating given by the assessors about a group's pronunciation, vocabulary use and grammar; and task effectiveness was the rating of the group's general effectiveness and confidence in handling the task. The rating was done on a six-point scale (1=very weak; 6=very good). The interrater reliability coefficients were .8266 for English proficiency and .8790 for task effectiveness.

Findings

Research Question 1

What are the effects of teaching the use of the eight strategies on high-proficiency and low-proficiency learners' actual use of these strategies?

Target strategies, non-target strategies, and non-strategies constitute 100% of all the coded segments. The proportional frequency (%) of each of the eight target strategies is the raw frequency of the target strategy in relation to the total number of coded segments. (Non-target strategies and non-strategies were identified, but are not included in this article.) Quantitative results for the target strategies are presented in Table 1, which contrasts the high-proficiency group and low-proficiency group in terms of the frequency of reported uses of each of the eight target strategies. Each cell represents findings for one group (four students) in each class.

Table 1 indicates that only the low-proficiency students in the E class demonstrated consistent increases (8.4%, 26.4%, 44.8%) in the aggregated proportional frequency and variety of the use of the whole range of target strategies; neither their high-proficiency counterparts in the E class nor their low-proficiency counterparts in the C class displayed such a consistent pattern over time. These findings indicate that strategy teaching might be associated with consistent increases in aggregated frequency and variety of strategy use by low-proficiency students.

Moreover, Table 1 indicates that only the low-proficiency students in the E class showed sustained increases (5.6%, 21.6%, 22.4%) in the reporting of resourcing. (Although there were consistent increases in the reporting of using fillers and using self-repetition, both raw frequency and percentages were too low to warrant attention.) These results show that strategy teaching might be related to consistent increases in the use of resourcing by low-proficiency students.

Apart from improvements in terms of quantity of strategy use, it would be interesting to find out if the low-proficiency students in the E class demonstrated any qualitative differences in their use of resourcing compared with their counterparts in the C class and the high-proficiency students in the E class. A qualitative analysis of resourcing was, therefore, conducted to examine whether there were any differences between the E and C classes in

Table 1
Raw Frequencies and Proportional Frequencies (%) of Reported Use of Individual Target Strategies by Proficiency

Proficiency	Rav	/ freque	ncies		Proportional frequencies (%)								
	C class			E class			C class				E class		
Strategy		1	10	20	1	10	20	1	10	20	1	10	20
Resourcing	Н	3	1	3	1	8	3	6.6	3.6	9.5	2.8	19.2	8.4
	L	1	5	0	2	9	8	2.2	18.0	0.0	5.6	21.6	22.4
Paraphrasing	Н	13	0	11	3	3	5	28.6	0.0	34.8	8.4	7.2	14.0
	L	4	4	3	1	0	3	8.8	14.4	9.5	2.8	0.0	8.4
Using fillers	Н	2	0	0	0	2	1	4.4	0.0	0.0	0.0	4.8	2.8
	L	0	0	0	0	1	2	0.0	0.0	0.0	0.0	2.4	5.6
Using													
self-repetition	Н	0	0	0	0	0	1	0.0	0.0	0.0	0.0	0.0	2.8
	L	0	0	0	0	1	1	0.0	0.0	0.0	0.0	2.4	2.8
Using													
self-correction	Н	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	
	L	0	0	0	0	0	1	0.0	0.0	0.0	0.0	0.0	2.8
Asking for													
repetition	Н	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
	L	0	0	0	0	0	1	0.0	0.0	0.0	0.0	0.0	2.8
Asking for													
clarification	Н	0	2	0	0	0	0	0.0	7.2	0.0	0.0	0.0	0.0
	L	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
Asking for													
confirmation	Н	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
	L	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
Aggregated													
frequency	Н	18	3	14	4	13	10	39.6	10.8	44.3	11.2	31.2	28.0
	L	5	9	3	3	11	16	11.0	32.4	9.5	8.4	26.4	44.8
Aggregated													
variety	Н	3	2	2	2	3	4	3	2	2	2	3	4
	L	2	2	1	2	3	6	2	2	1	2	3	6

using resourcing as a strategic move to solve problems in group work discussion and whether proficiency made a difference. To conduct a qualitative analysis of strategy use, recurrent themes from the stimulated recall data about the reported use of resourcing were first drawn out (Miles & Huberman, 1994). Four themes emerged: using resourcing (a) to understand others, (b) to understand the task, (c) to generate ideas, and (d) to generate language. Next, segments coded under each of the four themes were counted to gauge the effects of the intervention (Miles & Huberman).

To compare the number of occurrences of each theme by treatment and by proficiency, an effects matrix was used; its purpose was to gauge what

Table 2
Effects Matrix 1: Strategic Use of Resourcing by the E Class

Week 1	Week 10	Week 20			
To understand others H(1) L(0) I was reading the notes to help me think about what he was saying about "skin."	To understand others $H(0) L(2)$ I was thinking about what he was saying about "skin" actually at that moment I was referring to the notes because I could find "will not be hurt easily" in the notes.	To understand others H (0) L(0)			
To understand the task $H(0)$ $L(2)$ I was taking a glance at the hints provided in the notes while I was speaking because I had forgotten what the notes said about the functions of the different body parts.	To understand the task H(0) L(0)	To understand the task H(0) L(0)			
To generate ideas H(0) L(0)	To generate ideas H(7) L(3) So I was referring to the notes to help me get useful ideas like "smells danger" and "see in the dark," etc. The words weren't difficult. I could also pronounce them. So I was able to explain succinctly the usefulness and functions of the different body parts.	To generate ideas $H(2) L(3)$ At that time, I also had one better idea about "teeth." So I changed it and explained why. They also agreed with me actually the reason why I was able to say all those reasons clearly and promptly was that they were all in the notes. I said them out so it wasn't that difficult. That's really useful.			
To generate language H(0) L(0)	To generate language $H(1) L(4)$ I was reading the notes there to see how I could read aloud the next item to know what to say next. There I was talking about "legs." I felt that was my best sentence because I was able to read from the notes. I was very fluent. I could read every word clearly.	To generate language H(1) L(5) Actually I was referring to the phrases from the notes again I chose "I don't think so" and said it out because I knew how to read or pronounce the words.			
H* 1	8	3			

H*Denotes aggregated frequency counts of high-proficiency students.

L*Denotes aggregated frequency counts of low-proficiency students.

Table 3
Effects Matrix 2: Strategic use of Resourcing by the C Class

Week 1	Week 10	Week 20			
To understand others H(1) L(1) I was trying to understand what Ray was talking about so I was	To understand others H (0) L(2) I was listening and referring to the notes to see what they were	To understand others H (0) L(0)			
reading the notes to help me check his meaning.	talking about.				
To understand the task H(0) L(0)	To understand the task $H(0) L(2)$ I was referring to the notes to help me refresh my memory of the functions and meanings of the body parts.	To understand the task H(0) L(0)			
To generate ideas H(1) L(0)	To generate ideas H(1) L(1)	To generate ideas H(2) L(0)			
I was referring to the notes and saying out some benefits of the body parts because I couldn't think of any by myself.	Oh yes. I wanted to say something but couldn't think of what to say exactly. So I was referring to the notes to help me get some ideas like "funny" and "happy," etc.	I was trying to think of what reasons to give and saw some useful tips in the notes.			
To generate language H(1) L(0)	To generate language H(0) L(0)	To generate language H(1) L(0)			
Yeah, I was referring to the suggested words and structures in the task sheet before saying that. My English is not really very good. At that moment, I had the word in mind after taking a glance at it in the notes That helped me in the discussion.		I was trying to think of how to explain and what words to use and the notes gave me some help.			
H* 3	1	3			
L* 1	5	0			

H*Denotes aggregated frequency counts of high-proficiency students.

"changes a particular program or treatment brought about in its target population" (Miles & Huberman, 1994, p. 137). Tables 2 and 3, Effects Matrix 1 and Effects Matrix 2, present findings for the E class and the C class respectively on the strategic use of resourcing across time. *H* denotes high-profi-

L*Denotes aggregated frequency counts of low-proficiency students.

ciency students and L low-proficiency students. The numbers in parentheses denote the number of occurrences reported by the students.

Effects Matrix 1 in Table 2 shows a striking phenomenon. For the E class, although the low-proficiency students did not report using resourcing to help them generate ideas or language in Week 1, they reported consistent increases in Week 10 (N=3) and Week 20 (N=3) for using resourcing to help them generate ideas, and even more obvious increases in Week 10 (N=4) and Week 20 (N=5) for using resourcing to help them produce language. Such consistent increases were not evident with their high-proficiency counterparts in the E class or low-proficiency counterparts in the C class (Table 3, Effects Matrix 2). This finding suggests that strategy teaching appeared to be related to the low-proficiency students' reports of using more resourcing to help them solve problems with both content and language.

It is also encouraging to note that the E class, including the low-proficiency students, showed signs of self-evaluation in the task as revealed by such specific comments as: *I was able to explain succinctly; I was able to say all those reasons clearly and promptly; that was my best sentence ... I was very fluent. I could read every word clearly.* This was not at all evident in the C class. This result would suggest that strategy instruction might be associated with the fact that the E class—including low-proficiency students—was to reflect on and evaluate individual performance.

Research Question 2

Does strategy teaching improve high-proficiency and low-proficiency learners' performance in ESL group discussion tasks?

Table 4 sets out the ratings of English proficiency and task effectiveness. Regarding the whole-class task, H represents the mean rating of three high-proficiency groups and L that of the two low-proficiency groups. Regarding the pull-out-group task, H denotes the mean rating of one high-proficiency group and L that of one low-proficiency group. The difference between the means in Weeks 1 and 20 is preceded by a positive sign (+) if there is a gain in the post-mean and by a negative sign (–) if there is a loss.

Table 4 indicates that for the E class, the low-proficiency groups had higher pre/post gains than their low-proficiency counterparts in the C class on three out of four comparisons, whereas the high-proficiency E class groups had higher pre/post gains than their high-proficiency counterparts in the C class on only two of four comparisons. In addition, the low-proficiency groups in the E class had higher pre/post gains than their high-proficiency counterparts in the E class on three of four comparisons, whereas the low-proficiency groups in the C class had higher pre/post gains than their high-proficiency counterparts in the C class on only two out of four comparisons. These results suggest that strategy instruction might be related to

Table 4
Mean Ratings (on a 6-point scale) on English Group Discussion Tasks

				English	score		Task effectiveness score						
		Week 1		Wee	k 20	Pre/post Wee gain		eek 1 Wee		k 20	Pre/post gain		
Whole-class task													
Class	Ability	Mean	SD	Mean	SD	Mean	Mean	SD	Mean	SD	Mean		
)	Н	3.42	0.79	3.33	0.65	-0.08	3.50	0.80	3.50	0.80	0.00		
	L	2.88	0.99	2.88	0.83	0.00	2.13	1.36	3.25	0.46	+1.13		
Ξ	Н	3.67	0.49	2.92	0.90	-0.75	3.50	0.90	3.67	1.15	+0.17		
	L	1.88	0.64	2.88	1.25	+1.00	2.38	0.74	3.50	0.76	+1.13		
					Pu	ıll-out-grou	p task						
Class	Ability	Mean	SD	Mean	SD	Mean	Mean	SD	Mean	SD	Mean		
)	Н	2.75	0.50	3.25	0.96	+0.50	2.50	0.58	2.75	0.96	+0.25		
	L	2.50	1.29	2.00	0.82	-0.50	3.00	0.82	2.00	0.00	-1.00		
Ξ	Н	4.25	0.50	5.00	0.82	+0.75	4.00	0.00	4.00	1.41	+0.00		
	L	2.75	0.96	3.00	0.00	+0.25	2.50	0.58	3.00	0.82	+0.50		

the low-proficiency students making greater improvements in task performance.

It should also be noted that on the English scores, the low-proficiency groups in the E class had higher pre/post gains than the low-proficiency groups in the C class on both the whole-class and the pull-out-group tasks. Moreover, the low-proficiency groups made the highest pre/post gain (i.e., +1.00) in the English score across all groups in both the E and C classes. Similar patterns were not evident in the task effectiveness ratings. This indicates that strategy training might be associated with low-proficiency students making more improvements on the English score than on the task effectiveness score. Nonetheless, the mean scores of the low-proficiency students were invariably lower than those of their high-proficiency counterparts. This might have made it easier for the low achievers to make progress and attain higher pre/post gains. By the same token, as the high achievers had higher initial scores than the low achievers, there may have been a ceiling effect, rendering it harder to make gains. This should be borne in mind when interpreting the findings.

Discussion and Pedagogical Implications

To recapitulate the major findings on the two research questions, strategy instruction seemed to be associated with the low-proficiency students: (a) reporting consistent increases in their frequency and variety of use of the whole range of target strategies, using consistently more resourcing to help them with ideas and language, and demonstrating enhanced ability to reflect

on and evaluate their performance; and (b) making greater improvements, especially in the English score, in group discussion tasks than the high-proficiency students.

In general, this study indicates that strategy training seems to benefit low-proficiency students more than high-proficiency students. This supports Canale and Swain's (1980) postulation that low-level students could benefit from learning effective communication strategies such as paraphrasing, using gestures, and asking questions for clarification. Given their linguistic limitations, low-proficiency students would be more receptive to strategy use, which after all aims to help them complete the tasks more effectively. In contrast, high-proficiency students may choose not to use or notice the strategies as often as low-proficiency students on the assumption that strategy use may not be news to them as they already have a repertoire of preexisting strategies (Grenfell & Macaro, 2007) and/or they possess language competence that enables them to complete the tasks with relative ease. It should be remembered, however, that low-level students naturally need more strategies to help them operate than do high-level students because the former are linguistically (and perhaps cognitively) weaker, whereas the latter may be more capable.

Nevertheless, the study provides evidence that strategy instruction did seem to enhance the use of resourcing (i.e., strategic use of information provided in the task instruction sheet) by less proficient speakers. This finding corroborates a finding in Samuda's (2001) study that low-proficiency learners mined language from the task input data (i.e. task rubrics) in order to enable greater precision in negotiating meaning in group oral tasks. Samuda argued that this mined language functioned as a communication strategy and as such functioned similarly to resourcing in the present study.

One plausible reason for the apparently high uptake of resourcing by low-proficiency students is that the strategy enables them to cope with the problem of resource deficits during the initial phase of speech processing (Dörnyei & Kormos, 1998). Unlike their high-proficiency counterparts, most low-proficiency L2 speakers probably face the problem of lack of L2 vocabulary and accompanying grammatical knowledge to express meaning. By using resourcing, weaker students can easily refer to the suggested vocabulary, structures, and ideas provided in the task sheet to help them fill lexis-related knowledge gaps (Dörnyei & Kormos). Resourcing thus helps less proficient L2 speakers to solve the problems of what to say and how to say it during the initial, planning, and preverbal stages of on-line speech processing (Lam, 2005, 2006).

Another reason may be related to a match between the students' learning stage (cognitive level) and the corresponding relatively low linguistic and cognitive demands of resourcing. When using resourcing, low-proficiency

learners can operate—almost effortlessly, even under time pressure—at a basic level during the English tasks. Although proficient speakers also resort to "bedrock strategies" (Green & Oxford, 1995, p. 289), they are in a better position to combine them with other strategies that are not frequently and effectively used by less successful learners. Hence it is likely that having completed the discussion task twice in Weeks 1 and 10, the high-proficiency students might not have found resourcing effective or challenging enough to wish to use it so much in Week 20. This is consistent with the notion that easy strategies that demand only surface processing tend to be favored by elementary and/or less proficient learners (Chesterfield & Chesterfield, 1985; Green & Oxford). It is, therefore, possible that oral strategies that enable speakers to formulate ideas and express them relatively effortlessly may serve as "bedrock strategies" as proposed by Green and Oxford in oral communication for low-proficiency learners, an example of which appears to be resourcing.

The notion of bedrock strategies may also explain why strategy teaching did not seem to affect paraphrasing, which was another strategy recommended to L2 learners on the assumption that they might use it to deal with resource deficits (Dörnyei & Kormos, 1998). A possible reason may be its high linguistic demands. That is, L2 speakers need a repertoire of linguistic structures (i.e., vocabulary with accompanying grammatical structures) at their disposal in order for them to choose without effort a similar expression to respond in real time. Hence a linguistically deficient speaker is likely to deploy paraphrasing to little avail.

The discussion thus far is consistent with the notion of a hierarchical development (natural order) of strategy use spostulated by Chesterfield and Chesterfield (1985); the acquisition of the target strategies involved in speech processing could well be developmental. Chesterfield and Chesterfield argued that children invariably start using memorization and repetition as their fundamental strategies in oral interaction. As children grow up, they augment their initial repertoire with more sophisticated strategies like verbal interaction getters, formulaic expressions, and strategies showing awareness and monitoring of grammatical errors. In a similar vein, it is only natural that the young learners in the present study, and particularly the less proficient speakers, need to rely on easy strategies such as resourcing to get by. When they become linguistically more capable, they may well be able to resort to other target strategies, the use of which demands a higher linguistic level and a greater strategic awareness.

One might question why the high-proficiency students in the study did not seem to have been influenced by strategy teaching. To facilitate the development of strategy use, repeated exploration and practice on the part of the learners over an extended period is necessary (Lam, 2005; Cohen, 2007).

The high-proficiency students might not have had sufficient time to develop strategy use. In order to expose the treatment class to a spectrum of strategies and to comply with the time constraints of the school, only one session could be allocated to the teaching and learning of each strategy. This was probably not adequate to bring about any sustained development because of limited practice time for individual strategies.

It is argued that strategy instruction was associated with overall higher reported strategy use and increased use of resourcing in particular by low-proficiency students compared with their high-proficiency counterparts. These consistent increases may have accounted for the low-proficiency students making greater improvements in task performance, especially in the English scores (i.e., vocabulary, pronunciation, and grammar) than the high-proficiency students. The qualitative analysis of resourcing demonstrates that many more low-proficiency students than high-proficiency students in the treatment class deployed resourcing to help them generate ideas and language during the tasks. This could further motivate low-proficiency students to make greater improvements than those of their high-proficiency counterparts.

Last, using stimulated recall as a research tool to collect data on the learning process (i.e., strategy use) is worthy of some discussion. The method provides an avenue to gain a picture of the extent to which students are aware of their strategic behavior in action. It is especially encouraging to find that not only high-proficiency students, but also low-proficiency students were able to reflect on and evaluate how well they performed in a task. As Macaro (2001) rightly pointed out, one cannot simply study good languagelearners and then propose that the behavior observed should be that adopted by low achievers in order to make them high achievers. Instead, one must observe how low achievers operate in a given context and then ask why they operate in this way. Thus the stimulated recall protocol may be an appropriate tool for observing and understanding less proficient speakers, thereby helping them become higher achievers. As Rubin, Chamot, Harris, and Anderson (2007) suggested, students need to "practice the metacognitive strategy of 'evaluation' after trying out new strategies" (p. 147). By the same token, in supporting a reflective analysis of task and process, Parks (2000) suggested that "to move beyond superficial reporting, students [could] be asked to reflect more specifically as to how the strategies used contributed or failed to contribute to a satisfactory outcome" (p. 83). Stimulated-recall interviews provide learners with the opportunity to reflect on how they applied the strategies and how successful they were in helping them complete the learning task. Coupled with task performance data, stimulated-recall data may provide more comprehensive information about the learning process (e.g., strategy use) and the learning product (e.g., task performance).

The study discussed here was modest, limited in its sample size and in the narrowness of its scope including its hours of strategy instruction. The target strategies taught to the learners need to be tried with other task types (e.g., pair discussions, casual conversations), because strategy use and task type are closely linked. Notwithstanding these limitations, the present study enriches our understanding of the effects of strategy instruction on strategy use and task performance for low- and high-proficiency students. The findings, particularly those pertinent to the low-proficiency students, cast light on the implementation of strategy instruction in the junior secondary ESL oral classroom.

First, it may be desirable to help junior L2 learners, especially low-proficiency students, to develop strategic competence as a compensatory function in the language-learning experience when their linguistic competence is inadequate. This once again confirms the desirability of helping less proficient L2 speakers to rely on strategies that are of low linguistic demand in order to help them produce accurate spoken language that can permit them to operate at least at a basic level. It is generally desirable to match the cognitive/linguistic demands of strategy use with learners' proficiency level. It may also be necessary to provide low-proficiency L2 speakers with linguistic scaffolding and/or appropriate and accurate linguistic models so that they know how to use oral strategies to good effect (Lam & Wong, 2000).

Instead of encouraging low-proficiency students to adopt effective strategies favored by higher achievers in the hope that they will be become more effective users of strategies (Naiman, Fröhlich, Stern, & Todesco, 1996), it may be more desirable to help low achievers deploy their preferred strategies. In the first place, despite the apparent limitations of resourcing, for example, low-proficiency students continued to use it intensely and successfully to solve problems or to facilitate task performance in the intervention. Besides, strategies that are more effective normally have wider applications and probably require higher linguistic competence for execution. So it may not be realistic to expect low-proficiency learners to acquire them when they lack sufficient linguistic proficiency.

Resources and time permitting, we may also need to strengthen the teaching of more challenging strategies (e.g., paraphrasing, using self-correction, asking for clarification, or asking for confirmation), which require deep processing (i.e., more manipulation of the target language) or which entail higher stages of speech-processing (i.e., post-articulation monitoring) for high-proficiency students who are linguistically more ready to combine and use them alongside bedrock strategies to solve problems of resource deficits in online speech-processing. Although proficient speakers also resort to bedrock strategies, they are in a better position to combine them with other strategies not frequently and effectively used by less successful learners. In

fact, "strategies rarely function in isolation, but rather in sequences or clusters" (Cohen, 2008, p. 125). The effective deployment of combinations of strategies would enhance both quality and flexibility in strategy use by capable learners. Also, to foster a spirit of collaboration, it would be desirable to adopt mixed-ability groupings so that more able learners might have the opportunity to work with their less able classmates to facilitate learning processes such as strategy use. The importance of peer help and support in encouraging and sustaining strategy use is highlighted in a study by Lam and Wong (2000). Learners need to believe that they can receive support and input from others in order to master strategy use.

To sum up, the present study extends our understanding of strategy teaching broadly in three ways. First, it would be desirable to help low-proficiency students in particular to develop strategic competence. Second, it would be worth harnessing the strengths of high-proficiency students in enhancing the quality and flexibility of strategy use. And finally, it would be beneficial to promote peer help in strategy use by using mixed groupings so that low-proficiency learners might learn from cooperating and collaborating with their high-proficiency counterparts.

The Author

Wendy Y.K. Lam is an associate professor at the Hong Kong Institute of Education. She holds a doctorate in TESL from the University of Leeds, United Kingdom. Her teaching and research interests include second-language teaching and learning, learner strategies, oral communication, and second-language acquisition.

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