

**THE IMPACT OF STRATEGIES-BASED INSTRUCTION
ON SPEAKING A FOREIGN LANGUAGE**

Research Report

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Strategies for language learning and language use have been receiving ever-growing attention in the areas of foreign language teaching and learning (Oxford 1990, Cohen 1990, O'Malley & Chamot 1990, Wenden 1991, Brown 1991, Rubin & Thompson 1994, Mendelsohn 1994, McDonough 1995). It is fair to say that language educators in many different contexts have been seeking ways to help students become more successful in their efforts to learn and communicate in foreign languages. The application of foreign language learning and use strategies is viewed as one vehicle for promoting greater success. A strategy is considered to be "effective" if it provides positive support to the students in their attempts to learn or use the foreign language.

The broad definition of *foreign language learning and use strategies* consists of the steps or actions selected by learners to improve the *learning* of a foreign language, the *use* of a foreign language, or both. This definition encompasses those actions that are clearly intended for language learning, as well as those that may well lead to learning but which do not ostensibly include learning as the primary goal. Let us now fine-tune our definition by looking more specifically at the different ways that strategies can be categorized.

Language learning strategies are used with the explicit goal of helping learners improve their knowledge and understanding of a target language. They are the conscious thoughts and behaviors used by students to facilitate language learning tasks and to personalize the language learning process. Language learning strategies have been differentiated into four distinct categories: cognitive, metacognitive, social, and affective (based on Chamot 1987, Oxford 1990). *Cognitive* strategies usually involve the identification, retention, storage, or retrieval of words, phrases, and other elements of the target language (e.g., using prior knowledge to comprehend new language material, applying grammar rules to a new context, or classifying vocabulary according to topic). *Metacognitive* strategies deal with pre-planning and self-assessment, on-line planning, monitoring and evaluation, as well as post-evaluation of language learning activities (e.g., previewing the language materials for the day's lesson, organizing one's thoughts before speaking, or reflecting on one's performance). Such strategies allow learners to control the learning process by helping them coordinate their efforts to plan, organize, and evaluate target language performance. *Social* strategies include the actions that learners select for interacting with other learners, a teacher, or with native speakers (e.g., asking questions for clarification, helping a fellow student complete a task, or cooperating with others). *Affective* strategies serve to regulate learner motivation, emotions, and attitudes (e.g., strategies for reducing anxiety, for self-encouragement, and for self-reward).

Language use strategies, in turn, include both language performance and communication strategies. *Performance* strategies include strategies for rehearsing target language structures, such as through form-focused practice. They also include strategies for simply coping in the language classroom, such as by participating in classroom tasks to look good in front of other students or the teacher. In such instances, there is no intention on the part of the student to learn or communicate any particular aspect of the target language. In the case of *communication* strategies, on the other hand, the focus is on getting a message across in the target language despite gaps in target language knowledge. For example, learners may use a new lexical item to communicate a thought in class. In the case of communication strategies, in contrast to performance strategies, the use of the language material (e.g., a new word) may purposefully be in order to learn it, as well as to communicate a thought. Thus, such language use strategies may or may not have an impact on learning.¹ The use of communication strategies can result in utterances which are simplified (e.g., through the shortening or avoidance of embedded clauses) or which are more complex (e.g., through the use of circumlocution).

In performing language tasks in and out of the classroom, language learners can employ both language learning and language use strategies across language skills. These strategies may appear at three stages in task performance. Students may select strategies to help them (1) prepare for upcoming language learning or use tasks, (2) monitor language input and output, and (3) evaluate or reflect back on the task.

A fair amount of research has been conducted to evaluate the benefits of explicitly teaching learners how to apply foreign language strategies for the skills of reading and writing (see McDonough 1995, for a recent review), and, recently, some research has also been conducted on listening comprehension (see Mendelsohn 1994). There have, however, been relatively few studies investigating the benefits of providing second language learners with formal training in the applications of strategies for *speaking*. In one study, O'Malley and Chamot (1990) compared the improvement on certain language tasks for three groups of learners, and related the learners' performance to the strategy training they had received. On the speaking task, the group given explicit training in metacognitive, cognitive, and social-affective strategies improved significantly more than the control group.

Another study that has just appeared has suggested the feasibility of training learners in the use of communication strategies (Dörnyei 1995). The researcher trained

¹See Cook (1993, Ch. 6), Ellis (1994, Ch. 12), and Towel & Hawkins (1994, Ch. 13) for recent reviews of the language strategy literature, and for discussion of the terminology appearing in that literature.

high school students in Hungary who were learning English as a foreign language to employ three communication strategies: topic avoidance and replacement, circumlocution, and fillers and hesitation devices. Assessment involved a brief talk on a topic, a description of a cartoon, and a series of Hungarian words to describe or define in English. Those who received the training showed improvement in measures related to both quality and quantity of strategy use--that is, the quality of circumlocutions and the frequency of fillers and circumlocutions. The investigator concluded that it does pay to directly teach communication strategies because "they provide the learners with a sense of security in the L2 by allowing them room to manoeuvre in times of difficulty. Rather than giving up their message, learners may decide to try and remain in the conversation and achieve their communicative goal" (80).

While the Dörnyei study was consistent with our interests in providing instruction in the use of strategies for speaking in a foreign language, it was limited to only three communication strategies. The focus of our study, in contrast, was in exploring the full range of possible strategies across skills, with an emphasis on the skill of speaking. Thus, we not only looked at communication and performance (i.e., language use) strategies, but we also emphasized a broad range of learning strategies that would contribute to students' efforts at speaking a foreign language. It was with this broad intention in mind that the current study was designed, within the framework of the Second Language Learning Strategies Project of the National Language Resource Center at the University of Minnesota.²

As detailed in Weaver and Cohen (1994), there are numerous means of providing strategy instruction for learners, such as through general study skills courses, peer tutoring, research-oriented training, videotaped mini-courses, awareness training, strategy workshops, the insertion of strategies into language textbooks, and the integration of strategies directly into the foreign language classroom. Since past experience at the University of Minnesota had indicated that various short-term interventions (e.g., periodic workshops for students on strategies for reading, learning vocabulary, speaking, etc.) had only short-term effects at best, it was determined that the most effective program would most likely be one of providing learners with a broad range of strategies as a regular feature of classroom instruction--that is, one that began with intensive teacher development and then relied on the teachers to provide strategies-based instruction for their students in the foreign language classroom.

²The NLRC is housed in the Center for Advanced Research on Language Acquisition and is funded by the Center for International Education, U.S. Department of Education.

Strategies-based instruction is a learner-centered approach to teaching that has two major components: (1) students are explicitly taught how, when, and why strategies can be used to facilitate language learning and language use tasks, and (2) strategies are integrated into everyday class materials, and may be explicitly or implicitly embedded into the language tasks. The first of these components has often stood alone as the approach when strategies are included in the language classroom. The field has referred to this approach as "strategy training," "strategies instruction," or "learner training" (cf. Chamot & Rubin 1994:771, with regard to these three terms). In a typical classroom strategy training situation, the teachers describe, model, and give examples of potentially useful strategies; they elicit additional examples from students based on the students' own learning experiences; they lead small-group/whole class discussions about strategies (e.g., the rationale behind strategy use, planning an approach to a specific activity, evaluating the effectiveness of chosen strategies); and they encourage their students to experiment with a broad range of strategies.

The second component focuses on integrating and embedding strategies into classroom language tasks. In order to do so, teachers may start with a set of strategies that they wish to focus on and design activities to introduce and/or reinforce them, start with the established course materials and then determine which strategies might be inserted, or insert strategies spontaneously into the lessons whenever it seems appropriate (e.g., to help students overcome problems with difficult material or to speed up the lesson). In all likelihood, teachers will be engaged in strategies-based instruction with an explicit focus on strategies only part of the time, while the rest of the time the strategies will be implicitly embedded into the language tasks.

The goal of this kind of instruction is to help foreign language students become more aware of the ways in which they learn most effectively, ways in which they can enhance their own comprehension and production of the target language, and ways in which they can continue to learn on their own and communicate in the target language after they leave the language classroom. In other words, strategies-based instruction aims to assist learners in becoming more responsible for their efforts in learning and using the target language. It also aims to assist them in becoming more effective learners by allowing them to individualize the language learning experience.

This study, then, set out to examine the contribution that formal strategies-based instruction might offer learners in university-level foreign language classrooms, with a particular focus on speaking. The emphasis was on speaking because this area had received such limited attention in the research literature (as noted above), although it is in many cases the most critical language skill of all. The study asked the following two research questions:

1. How does explicit instruction in language learning and use strategies affect students' speaking proficiency?
2. What is the relationship between reported frequency of strategy use and ratings of task performance on speaking tasks?
3. How do students characterize their rationale for strategy use while performing speaking tasks?

Research Design

Sample

The sample consisted of 55 students enrolled in intermediate-level foreign language classes (of their own choosing--not randomly assigned) at the University of Minnesota. Thirty-two students comprised the Experimental group and received strategies-based speaking instruction (seven in their sixth academic quarter of French, to be referred to as "advanced intermediate French," eleven in their fourth quarter, or "intermediate French," and fourteen in their fourth quarter of Norwegian, referred to as "intermediate Norwegian"). Twenty-three students served as a Comparison group³ (seven in advanced intermediate French, eleven in intermediate French, and five in intermediate Norwegian). Twenty-one students out of the larger group of 55 were selected on a volunteer basis from the six classrooms to provide additional data in the form of verbal report protocols regarding their strategy use and language learning (see below). These students represented three different levels of speaking ability in their respective classes, as determined by their instructors (eight from advanced intermediate French, seven from intermediate French, and six from Norwegian).

A background questionnaire was designed to determine how similar the Experimental and Comparison groups were in the following areas: previous language study; reasons for studying the target language; contact with native speakers (how, where, and why they had had contact), visits to the target culture (for work, vacation, etc.), current work schedule (part-time or full), grades in previous courses in the target language, and college grade point average (cumulative and in the major field). T-tests indicated that the two groups did not differ significantly on any of the background characteristics.

³This group is referred to as a *comparison*, rather than a *control*, group because there was no random assignment of students or of classrooms to the conditions of the study. The treatment could only be offered by teachers who had been trained to provide strategies-based instruction, and there had to be corresponding classes at the same level for the sake of comparison.

Six instructors participated in the study as well. The instructor for the *advanced intermediate* French Experimental class had lived in France for six years, had a B.S. in Education, and was working on a Ph.D. in the College of Education. The instructor for the *intermediate* French Experimental class was a native speaker of French, who was also working on a Ph.D. in the College of Education. The instructor of the advanced intermediate French Comparison group had a Ph.D. in French literature from the University of Minnesota, and the instructor of the intermediate French Comparison group had lived in France for two years, and was concurrently working on a Ph.D. in French medieval studies. The Experimental group instructor of Norwegian had lived in Norway for over two years and was doing Ph.D. work on second language acquisition in the Department of Linguistics. The instructor of the Norwegian Comparison group was raised in the U.S. as a bilingual speaker of Norwegian and English, and was working on a Ph.D. in Scandinavian literature.

These three experimental teachers had participated in a thirty-hour course designed specifically for providing strategies-based instruction in university-level foreign language classrooms. The goal of this course (entitled "Learner Training in Foreign Language Learning Strategies") was to prepare a larger group of fourteen foreign language instructors (representing a total of nine foreign languages) to provide strategies-based instruction for their students. The course consisted of lectures, readings, small-group and paired activities, and peer micro-teaching sessions. The teachers received practical training in techniques to raise awareness of individual differences and learning style preferences, introduce systematic strategy use in the classroom, integrate strategies-based activities into daily lesson plans, and facilitate discussions of strategy effectiveness.

Whereas the three instructors of the Comparison group students had not received any special training in how to conduct strategies-based instruction, the instructor of the intermediate French Comparison group indicated working with his students on strategies such as circumlocution, and the Norwegian teacher reported encouraging her students to use the strategy of preparing flash cards to assist in their learning of vocabulary. In fact, all six teachers were committed to a communicative approach to language teaching, and all were aware of the importance of supporting learners in the language classroom.⁴

⁴It must be remembered that all six teachers were responsible for preparing the learners to take the ACTFL-based language proficiency battery, which the students need to pass in order to obtain credit for the equivalent of two years of college language study. Thus, both written and oral skills were emphasized in the classes.

Instrumentation and Data Collection Procedures

Treatment

Both the Experimental and the Comparison groups followed the syllabi of their respective language departments (French and Norwegian). The students in the Experimental group not only followed the syllabus, but received instruction in a strategies-based format throughout the 10-week Fall Quarter of 1994. Rather than being presented as a separate learning task, the strategies were incorporated into the regular classroom learning activities. At times, the focus on strategies was explicit in that the instructors provided strategy training, and at other times they were implicitly embedded into the classroom activities. The learners received instruction in a broad range of foreign language learning and use strategies, but the teachers emphasize those strategies that could be applied to the skill of speaking. The teachers and students together created a list of strategies useful for the preparation, self-monitoring, and self-evaluation of students' speaking task performance (see Appendix).

The investigators also collected retrospective accounts from the Experimental teachers as to the structure and content of the treatment classes. Detailed individual and group interview sessions with the three teachers provided valuable insights used in interpreting the correlations between speaking task performance and strategy use.

Instruments

The Strategy Inventory for Language Learning (SILL)

During the first week of class, all subjects completed the 80-item Strategy Inventory for Language Learning (SILL) (Oxford 1990). This version of the SILL (for English speakers learning a new language) represents a set of strategies for language learning across skills. Some of these strategies are more general in nature (e.g., "I look for similarities and contrasts between the new language and my own") while others are more specific (e.g., "I try to notice my language errors and find out the reasons for them"). Some strategies on the list have direct relevance to the skill of speaking (e.g., "I direct the conversation to a topic for which I know the words"), while others do not (e.g., "I read without looking up every unfamiliar word"). These strategies are not linked to any specific tasks, but rather represent strategies that the learner could use throughout the language learning process. The SILL was re-administered to all of the subjects at the end of the term.

Speaking Task Battery

A Speaking Task Battery was designed and piloted, and consisted of a series of three speaking tasks. All subjects from the Experimental and Comparison groups were asked to complete the same three tasks on a pre-posttest basis to determine whether there were gains in speaking ability over the ten-week term. The data were collected in

a language laboratory in a semi-direct fashion, with the subjects audio-taping their responses to the tasks at their individual consoles, and were collected during non-classroom hours due to constraints on class time. For each of the tasks, students were allowed time to prepare what they would say before they began their individual recordings. The following are descriptions of the three speaking tasks in the battery:

Self-Description: This task required students to make use of previously-studied material. In this task, the students were prompted by a hypothetical situation where they were asked to pick someone up at the airport (a native speaker of French/Norwegian who did not speak English). The students were asked to describe themselves in the target language in order for the visitor to recognize them. Because this topic was based on content the students had already covered in their classes and it simulated an authentic language exchange, we considered the task to be the most naturalistic. This task was the first administered, to help put the students at ease.

Story Retelling: This task called upon the students to learn new material. The students were given a short reading passage (approximately 300 words) adapted from French/Norwegian folklore with some unfamiliar words or phrases. A glossary of these unfamiliar words and phrases was provided on the task sheet in order to ensure that it was more a learning and speaking task than one of reading comprehension. After reading the text, the students were asked to summarize the story orally, referring back as little as possible to the written text.

City Description: This task called for the use of both previously-learned and new vocabulary in describing a favorite city. The learners were provided with a list of target language words/phrases and their English equivalents, which they were free to use in their descriptions. They were asked to give a brief description of their favorite city and to give the reason why they had chosen to describe it. A list of 30 vocabulary items relevant for describing a city was included to stimulate the students' production.

The three speaking tasks were expected to elicit a range of learning strategies, including grammar and vocabulary retrieval strategies. Across all tasks, it was assumed that if the students did not have the linguistic ability to easily complete a particular task, they might be expected to employ a range of language use strategies.

Strategy Checklists

Immediately following the completion of each of the three tasks, the students were asked to complete a corresponding Strategy Checklist, which varied according to the nature of the particular task. These Strategy Checklists were designed to elicit data on self-reported frequency of strategy use at three points in time: before the students began the speaking task, during the task itself, and after the completion of the task (including projected strategy use beyond the testing context). The intention of the

checklist was to capture the three-stage process involved in strategy use: 1) preparation before using the language skill, 2) self-monitoring during the use of the skill, and 3) self-reflection afterwards. The subjects were asked to indicate on a five-point scale the extent to which they used each of the strategies on the Checklists. Examples of these strategies included: rehearsal, note taking, prediction of potential difficulties, self-encouragement ("positive self-talk"), word coinage or substitution, attention to grammatical forms, reflection on task performance, and plans for future learning. Specific to the individual tasks were the strategies of visualization, accessing known material, inferencing, memorization or repetition for remembering words/phrases, simplification, as well as others.

The posttest version of the Checklists also included four additional questions for self-reflection. Three of these questions dealt with the students' experiences as language learners in completing the three tasks: the extent to which the tasks had elicited their knowledge about the foreign language, whether the tasks had allowed them to demonstrate this knowledge, and how aware they were of their learning patterns and strategy use. The purpose of the fourth question was to determine whether they had become more independent language learners as a result of participating in the Fall quarter language course. This posttest checklist represented the learners' overall assessment of the tasks and their performance on them.

Verbal Report Protocols

The posttest data collection also included an extra feature for the subsample of the twenty-one students from both the Experimental and Comparison groups (representing high, medium, and low proficiency in speaking). These subjects were asked to give their reasons for the frequency-of-use ratings that they had assigned to each strategy on the checklist by providing a verbal report while completing the checklist. This involved removing the audiotape that they had used for the speaking tasks and inserting a different audiotape to record their thoughts while they were filling out each of the three Strategy Checklists. The subjects were given a demonstration of how to provide verbal report data while performing the checklist tasks. This consisted of a recorded sample of a respondent performing verbal report as she completed the checklist and an opportunity for the subjects to ask questions about the verbal report procedure.

Data Analysis Procedures

A native speaker and near-native speaker of Norwegian rated the student tapes in Norwegian and two near-native speakers of French rated the tapes in French. The raters did not know whether the responses to the three tasks which comprised each

taped sample were from the Experimental or Comparison groups, nor whether they were from pre- or posttesting.

The interrater reliability for the two raters of the French speaking tasks and for the two raters of the Norwegian tasks were highly significant ($p < .001$) using Kendall's tau ($r = .63$ on the French pretest and $.67$ on the posttest; $r = .59$ on the Norwegian pretest and $.62$ on the posttest).⁵ Given the similarity of ratings by the two pairs of raters, the average of each set of raters was used as the respondent's score.

The self-description and the city description tasks were rated according to a set of five-point, multitrait scales especially designed to assess three aspects of the spoken language that the students produced:

- (1) demonstrated **self-confidence** in delivery--namely, smoothness and uninterruptedness of speech flow, wherein pauses are clearly in order to find appropriate material rather than signaling a loss for words;
- (2) acceptability of **grammar**--namely, subject-verb agreement for person, number, and tense; correct use of negation and articles; and
- (3) control over **vocabulary**--namely, variety in word choice, contextual appropriateness, and degree of fine-tuning.

The story retelling task was rated on two scales:

- (1) identification of key story **elements**--namely, the twelve elements that native speakers⁶ had deemed essential in the Norwegian fable and the eight in the French fable; and
- (2) the appropriate **ordering** of these elements (rated on a five-point scale)--namely, the extent to which the order of the identified elements corresponded to the sequence given by native speakers.

Data obtained from the pre- and posttest Speaking Task Battery were used to determine students' improvement in speaking proficiency. The statistical method used for analyzing the data was analysis of covariance using SPSS. Posttest means were compared, adjusting for initial differences on the pretest means. Before adjusting the posttest scores of the Experimental and Comparison groups on the basis of the pretest scores on the three speaking tasks, it was determined that the data met the *homogeneity*

⁵Kendall's tau was used to compare ratings across raters because it is better able to handle the problem of tied ranks in rank-order correlation than is Spearman (Hatch & Lazaraton 1991, p. 453).

⁶Two native speakers of each language were selected to perform the story retelling task and served as the baseline for rating the nonnative subjects' performance.

of slope requirements for analysis of covariance. That is, the relationship between pre- and posttest scores was found to be similar for both groups.

Given the underlying assumption associated with the SILL, namely, that greater reported use of all of the strategies included in the questionnaire is inherently more beneficial for language learning than less reported use of them, reliability was calculated for the instrument as a whole and for the six subscales. The overall Cronbach alpha reliability for the 80-item questionnaire given as a pre-measure was .94 and .99 on the post-measure. Whereas the reliability was high for three of the subscales (*using mental processes*, n=25: .91 pre, .93 post; *organizing and evaluating learning*, n=16: .88 pre, .85 post; *learning with others*, n=9: .87 pre, .84 post), it was lower for a fourth subscale (*remembering more effectively*, n=15: .70 pre, .74 post) and appreciably lower for the remaining two (*compensating for missing knowledge*, n=8: .51 pre, -.14 post; *managing emotions*, n=7: .48 pre, .63 post).

Patterns of strategy use specific to each task were determined through the students' self-ratings of the frequency of use of different strategies, as reported on the Strategy Checklists following each task. Pre-post gains on the speaking tasks were analyzed in relation to pre-post gains in the reported use of strategies for the given tasks. In other words, the effects of increased frequency of use of a given strategy were calculated by correlating the gains in performance on task subscales (tasks 1 and 3: self-confidence, grammar, vocabulary; task 2: story elements and organization) with an increase in the reported use of the strategy. The analysis involved Pearson correlations of the gain scores for performance on task subscales with the gain scores all of the items for the Strategy Checklists. A similar analysis was run correlating pre-post gains on the three speaking tasks with pre-post gain scores for the SILL.

As indicated above, the verbal report protocols from the subsample of twenty-one learners also provided information regarding the reasons why students chose a certain frequency rating for each strategy on the checklist. The verbal report data were analyzed separately from the speaking task data, and were categorized into two sets: insights about strategy use and feedback on the strategy checklist. This verbal report feedback on the strategy checklist served as a qualitative means for determining whether the checklists were reliable and valid, and the results are reported in the Findings section below, under "Feedback on the Strategy Checklist."

Findings

Research Question #1: The Effects of Strategies-Based Instruction on Speaking Proficiency

In response to our first research question, regarding the effects of strategies-based instruction on speaking proficiency, the results of analysis of covariance showed that the Experimental group outperformed the Comparison group on the third of the three speaking tasks, the city description (see Table 1). The adjusted mean differences for the other two tasks were not significant. Thus, the explicit strategy training seems to have contributed to the students' ability to use both their own vocabulary and words from a list to describe their favorite city. When analyzing task performance by subscales, there was another significant difference, again in favor of the Experimental group. They were rated as higher in *grammar* on the posttest city description task, after adjusting for pretest differences (see Table 2). It is likely that the guidance the Experimental group received about how to plan ahead, monitor their speech, and reflect back on their performance, contributed to more grammatically accurate speech in the perception of the raters.

While there were no significant differences in overall mean performance on any of the three tasks for the advanced intermediate and intermediate French students taken together (Table 3), there was one difference in the French posttest results when breaking task performance down by subscale. The Experimental group students were rated as higher on the *vocabulary* subscale for the self-description task (Table 4). This result is consistent with the aims of the treatment since emphasis was placed on strategies for both learning and using vocabulary while speaking. There were no significant differences in overall mean performance on any of the three tasks nor by subscale within each task for the students of Norwegian.

Research Question #2: The Relationship Between Reported Strategy Use and Task Performance

In this section we will report results linking speaking performance to task-specific and more general strategy use, collected by means of the Strategy Checklists and then the SILL respectively.

Task Performance and the Strategy Checklists

We will now consider those correlations which suggested a significant relationship between task performance and strategy use on the "before," "during," and "after" checklists for each of the three tasks (see Tables 5, 6, 7).⁷

Task #1: Self-Description

1. Strategies Before Task #1

With respect to strategies before performing the self-description task, there was one strategy situations in the Experimental group data where an increase in reported use of a strategy from pre- to posttesting was related to a gain in performance on the task. "Translating specific words from English" was highly correlated with increased task performance on **grammar** ($r=.52$) (see Table 5). Those in the Experimental group who increasingly analyzed material through translation perhaps also took greater care in selecting their grammatical forms.

However, an increase in the use of this preparation strategy was also correlated with a lower rating in **self-confidence** ($r=-.40$). This finding is not consistent with expectations since mental reference to other similar tasks can be viewed as a confidence-building strategy. It might have been that those who were thinking more about other tasks that they had done were perhaps distracted from the task at hand. Thus, they were perceived by the raters as less self-confident on the posttest. Comparison group respondents who increased their use of "visualizing the airport" were also rated as having decreased in **self-confidence** ($r=-.50$) from pre to post. So perhaps the act of visualizing on this specific task made the Comparison students sound somewhat more disfluent, just as "thinking about other tasks" did for the Experimental group.

⁷Table 5 shows significant correlations of .40 or above between increased use of a strategy and the gain in performance on each of the three scales as determined by the raters. The table lists the strategies by task (before, during, and after), and pre-post correlations are reported for the Experimental and Comparison groups by scale. Statistically significant correlations below .40 were not included because they were deemed low enough to be questionable with regard to their psychological meaningfulness.

2. Strategies During Task #1

Those in the Comparison group who paid increasing attention to pronunciation were also rated as increasingly more **grammatical** ($r=.46$) and as improving in their **vocabulary** rating as well ($r=.46$). A logical interpretation would be that paying greater attention to the pronunciation of specific sounds reflects a form of monitoring that would also extend to the monitoring and selection of appropriate vocabulary items and grammatical forms. In contrast, those Experimental students who reported an increase in "working quickly without paying attention to the task" were also perceived by raters as lower in **vocabulary** ($r=-.41$). Hence, there seems to be some real benefit in attending to the output, shaping it, and monitoring it.

Comparison students who increased in their "use of notes written before performing the task" also increased in their **self-confidence** and **grammar** ratings ($r=.48$, $r=.44$). These findings are logical since the use of notes can enhance self-confidence, as well as make speakers sound more grammatical. This finding would seem to suggest that a task-performance strategy, namely, referring to notes taken while preparing to perform a language task, can provide positive support to students in a testing situation.

There were also three instances where the Comparison group students' increased use of certain communication strategies appeared to be to their detriment. First, an increase in substituting a word they could not remember with another word or phrase correlated with a lower **vocabulary** rating ($r=-.44$). Likewise, an increase in skipping parts of a description altogether when they could not remember the words correlated significantly with a poorer rating not only in **vocabulary** but in **grammar** as well ($r=-.47$, $r=-.42$). A plausible interpretation would be that since this group was *not* receiving systematic guidance in how to apply communication strategies for gaps in vocabulary or grammar, their performance suffered. The ratings that they received on these task scales would suggest that this was the case.

3. Strategies After Task #1

The Experimental students who increased in not giving their performance much thought while filling out the checklist were the ones who were *increasingly* rated as more **self-confident** on the task ($r=.43$). It would appear that the more self-confident students did not rely on these types of metacognitive strategies, such as reflecting on upcoming language tasks and previous language performance.

The Comparison group students who reported learning more in posttesting about the target language than they had in the pretest were rated *higher* in **grammar** ($r=.45$). The difference here could be explained in that those Comparison group students who contributed to the significance of this correlation were perhaps learning

something more about target-language grammar during the posttest, and thus received higher ratings.

Task #2: Story Retelling

1. Strategies Before Task #2

The Experimental group findings on the story retelling task seem to show the positive effects of the treatment in terms of advanced preparation for language tasks. An increase from pre- to posttest in "drawing pictures to help remember the story" correlated significantly with increased ability to correctly **order** the elements of the story ($r=.40$) (see Table 6). During the treatment, this planning strategy of visualization (in this case, on paper) was reinforced through several different learning activities. Since this strategy can serve as a means to plan and organize one's thoughts before a task, as in the case of retelling a story with a plot, one likely benefit of this form of preparation is being able to better order the elements of a story.

In addition, it was found that those Experimental students who reported an increase in "practicing the pronunciation of specific words" were also found to improve in their identification of the **elements** in the story ($r=.42$). Once again we see that a heightened degree of preparation (in this case, focusing on the pronunciation of specific words) correlated with increased language performance (in this case, discriminating the key elements of a story).

An increase among the Comparison group students in translating the story to help summarize it related significantly to doing a *poorer* job of **ordering** the elements in the story ($r=-.55$). It appears, therefore, that the use of translation might not have been a productive strategy for retelling a story orally in this context.

2. Strategies During Task #2

Those Experimental students reporting greater "attention to pronunciation" during the story retelling task in the posttest were also those more likely to identify the key **elements** of the story. Although the link between attending to pronunciation and identifying key story elements may not appear evident, the positive correlation between these two analytical behaviors would suggest that they both represent forms of monitoring--one at the level of phonemes and the other at the level of discourse.

For the Comparison group students, an increased ability to find the key **elements** in the story correlated negatively in posttesting with an effort to "purposely use new vocabulary from the story" ($r=-.42$). It would appear that the students producing this negative correlation were perhaps focusing on the vocabulary of the story rather than on the key elements. Whether through a lack of training in strategy use or some other

reason, these students were less able to use new vocabulary and focus on the key elements at the same time.

3. Strategies After Task #2

The Comparison students were seen in posttesting to have greater use of two strategies which related positively to a more successful **ordering** of elements in the story: "thinking about what they could do differently next time" ($r=.44$) and the intention to "discuss the task with fellow classmates" ($r=.51$). These two metacognitive strategies both deal in some way with organizing the learning effort. The first organizing strategy, thinking about future performance, is individual in nature, while the second, utilizing others as learning resources, is social. Therefore, increased use of both of these organizational strategies might be expected to correlate with an increase in the correct ordering of story elements.

Task #3: City Description

1. Strategies Before Task #3

Those Experimental students who "thought more about similar tasks they had done in class" were also rated higher in **vocabulary** in describing their favorite city ($r=.41$) (see Table 7). As with Task #1, these students were improving the likelihood of better preparation by reflecting on similar tasks that they had done.

An increase in "writing out the description in full sentences ahead of time" correlated with increased **self-confidence** ratings ($r=.42$) for the Experimental students. It would appear that the process of writing down the sentences before recording their speaking gave the respondents an air of confidence. In addition, they sounded more grammatical if they had written out notes in advance. While this strategy proved successful for preparing themselves for the given task, it is usually not practical in many speaking situations to write everything out in advance. However, students can prepare by writing down key words that they might use during a speaking task.

Another additional preparation strategy is to practice the pronunciation of specific words before speaking. Those Experimental students who indicated an increase in this strategy before tape recording their city description were also rated as increasingly **self-confident** and **grammatical** ($r=.43$, $r=.50$). For Comparison group students, an increase in such pronunciation practice was related to a *decreased* rating in **vocabulary** ($r=-.42$). Those Comparison students who increasingly focused on the *sounds* of the words may have become distracted from the use of varied and contextually appropriate vocabulary. After all, these students were without the benefit of systematic training and practice in the use of rehearsal strategies.

2. Strategies During Task #3

For Experimental students who indicated an increase in "their use of information learned out of class," their **grammar** rating on the task also improved ($r=.49$). This finding points to the notion that use of the language out of class may contribute to grammatical control. In other words, the more language input and opportunities for practice students seek, the better the chance that grammatical forms will be successfully reinforced.

There were also significant correlations for the Comparison group on this task. Students who increased their positive self-talk were also rated as more **self-confident** ($r=.43$). Whereas it is often assumed that one variable influences another, in this case the influence was most likely reciprocal: positive self-talk can enhance self-confidence *and* increased self-confidence may lead to more positive self-talk.

In addition, for the Comparison group students, an increased use of a mental picture of the favorite city while speaking correlated positively with a higher **vocabulary** rating ($r=.46$). Thus, using the strategy of visualization here seems to have helped the students focus on the task at hand.

Furthermore, for the Comparison group, an increase in "substituting another word" when not knowing the exact word correlated significantly with an increase in both **self-confidence** ($r=.62$) and **vocabulary** ($r=.48$). Likewise, an increase in the strategy of "making up a word" correlated significantly with higher **self-confidence** ($r=.68$), **grammar** ($r=.59$), and **vocabulary** ($r=.56$) ratings. What these results indicate is that learners who increase their use of communication strategies (such as paraphrase or substitution) can also improve their ratings on task performance. In these instances, we would have expected the Experimental students to have had these positive correlations rather than the Comparison group since these were strategies stressed in the treatment. The finding would suggest that even without extensive strategy instruction, some resourceful learners can and do utilize strategies effectively--whether as a result of their own insights about language learning, suggestions provided to them by their teachers or peers, or insights provided in the textbooks.

3. Strategies After Task #3

There was only one positive for this category: those Comparison students who increasingly reported that they started filling out the Strategy Checklist as soon as they finished speaking were also those perceived as more **self-confident** ($r=.51$). As with the finding for the Experimental students after Task #1, it would appear that the more self-confident Comparison students did not tend to reflect back on their language performance in this instance.

Task Performance and the SILL

While the primary instrument for assessing pre-post strategy use in this study was the Strategy Checklist, we also measured frequency of strategy use by means of the SILL. According to Oxford (Personal Communication, May 17, 1995), this is the first time that this instrument has been linked specifically to a series of tasks on a pre-posttest basis. For the purpose of this discussion, we will focus on those strategies from the SILL that seem to be the most relevant to speaking, and compare the results for the Experimental group with those for the Comparison group (Table 8). It is important to point out that the SILL was not designed for use as an instrument specifically linked to given tasks. In any event, since it was not administered immediately following the completion of the three tasks, it cannot be expected to have tapped such differences in the way that the Strategy Checklist did.

There were several significant positive correlations that only appeared in the Experimental group data. For instance, an increase in ratings for **vocabulary** on the self-description task from pre- to posttesting correlated with an increase in reported use of idioms or other routines (item #21) ($r=.46$). If these students truly relied on well-learned language routines, such as appropriate vocabulary phrases for describing oneself, and also prepared themselves for the task by focusing on well-known vocabulary, it seems logical that they would be perceived as having used descriptive vocabulary more appropriately during the task. An increase in ratings on the **grammar** scale correlated with an increase in reported "previewing the language lesson to get a general idea of what it is about, how it is organized, and how it relates to what is already known" (item #49) ($r=.44$). It would appear that those students who reported themselves increasing their desire to preview a lesson before getting into it were also those who were increasingly careful about their use of grammar in speaking, perhaps increasing their monitoring of it.

There was a negative correlation just for the Experimental group between a reported increase in attention to the language itself (e.g., how natives pronounce it) (#51) and a lower rating in **self-confidence** ($r=-.40$) on the city description posttest. In other words, those who were perceived by the raters as gaining in self-confidence were also those reporting less attention to language on the posttest. Although correlation does not imply causation, it might be conjectured that it was a gain in self-confidence which led to less need to attend to the form of the language. In addition, those Experimental students who decreased in their use of the strategy of "trying to understand without translating word-for-word into the native language" (#37) improved in their identification of **story elements** ($r=-.41$) on the story retelling task

from pre to posttesting. Thus, it would appear that some word-for-word translation, in fact, may have facilitated the students' identification of story elements.

While an increase in the reported use of the strategy of "giving oneself a tangible reward when something is done well" (item #68) among Experimental group students was negatively correlated with increased **self-confidence** on the city description ($r=-.44$), the correlation was positive for the Comparison group ($r=.44$). The results on this item would suggest that for the Experimental group the more self-confident the learners, the less likely they would be to seek external rewards.

On the city description task, increased avoidance of the use of translation (item #37) correlated negatively with increased ratings on **vocabulary** for the Experimental group and on all three scales for the Comparison group (**self-confidence**: $r=-.46C$; **grammar**: $r=-.43C$; **vocabulary**: $r=-.52E$, $r=-.48C$). In addition, the Experimental and Comparison groups had negative correlations between an increased **self-confidence** rating on the city description task and an increase in "making up new words" (item #47) ($r=-.43E$, $r=-.44C$). In other words, the more self-confidence, the less need to make up new words. For the Comparison group, an increased **self-confidence** rating on the city description task also correlated negatively with "remembering a new word by making a clear mental image or by drawing a picture" (item #6) ($r=-.42C$) and "using idioms and other routines in the new language" (item #21) ($r=-.42C$).

With regard to monitoring for grammatical errors, an increase among Comparison group students in "trying to notice language errors and find out reasons for them" (item #62) correlated significantly with a gain on the **grammar** scale for the self-description task ($r=.48C$). This finding would suggest that as learners pay increasing attention to their grammar errors, they may also be perceived as more grammatical by outside raters. On the other hand, increased use of this strategy of noticing errors worked against both groups of students on their **vocabulary** ratings for the city description task ($r=-.50E$, $r=-.43C$). Perhaps the monitoring for language errors in this case was conducted at the expense of appropriate vocabulary in their descriptions.

With respect to affective strategies, results for the Experimental and Comparison groups were largely similar. For example, an increase in "trying to relax whenever anxious about using the new language" (item #65) correlated significantly with gains on the **grammar** scale for the self-description ($r=.42E$, $r=.56C$). As another example, an increase in "giving yourself a tangible reward when something is done well" (item #68) correlated significantly with a gain on the **grammar** scale for both groups on the self-description task ($r=.59E$, $r=.62C$). Further, the strategy Aactively encouraging oneself to take wise risks in language learningA (item #67) showed the two groups improving their performance on both **self-confidence** ($r=.50E$, $r=.52C$) and **grammar** ($r=.42E$,

$r=.42C$). Increases in **self-confidence** and **grammar** ratings also correlated similarly for both groups with items #47 ("making up new words") ($r=.50E$, $r=.53C$ and $r=.40E$, $r=.48C$, respectively) and #48 ("directing the conversation to a topic for which one knows the words") ($r=.57E$, $r=.60C$ and $r=.52E$, $r=.56C$, respectively). The interpretation for this finding could be that affective strategies (such as trying to relax when performing language tasks, giving oneself tangible rewards, and taking risks), as well as certain communication strategies, do indeed help students to speak more grammatically and increase their self-confidence when speaking.

Research Question #3: Student Rationale for Strategy Use

Verbal reports collected from the sub-sample of students as they filled out the Strategy Checklists on the posttest was intended to get at the students' rationale for strategy use before, during, and after performing the three tasks. Actually, the verbal report protocols yielded two types of data--namely, insights about students' strategy use, as well as feedback on the Checklist as a data gathering instrument. The data also yielded a few comments on the four self-reflective questions added to the Strategy Checklists in the posttesting. Comments on specific items from the Strategy Checklists (before, during, and after performing the speaking tasks) and on the self-reflective items are presented in Figures 1 and 2.

Insights about Strategy Use

Experimental Group

Before the self-description task, one of the Experimental students reported having practiced it a total of three times, including two recordings. With regard to trying to use new vocabulary words, another student commented, "I didn't want to use new words that were uncomfortable." This is an instance of how learners often pass judgment on the vocabulary that they come into contact with. The data also included an instance of paraphrase at work. On the item 'When I couldn't remember a word, I substituted it with another word or phrase I knew,' a student reported, "I improvised--I couldn't remember how to say 'I **wore** something,' so I just said '**and** tennis shoes.'" On the story retelling task, one student indicated using a strategy in order to sound more fluent: "I felt awkward pausing for thoughts so I tried to speak without pauses."

Students from the Experimental group seemed to have some valuable insights about the performance of language tasks, about the target language, and about their language learning. The following are some examples:

- 'learned from task' - "I was able to read and understand from context words that I didn't know."

- 'learned about language' - "It can be more descriptive than English. Norwegian is more precise."
- 'learned about my language learning' - "I learned I need to relax myself a little more to be able to do the tasks easier with more comprehension."
- 'extent that became independent learner' - "I learned how to learn to speak."

Comparison Group

One student indicated translating all of what he wanted to say to English "to get [his] mind thinking in French." In general, the strategy of complete translation as preparation for speaking was seen to be counterproductive, as it was both time-consuming and likely to create unnecessary negative transfer problems. Another student did not translate because it "would have called for two translations--French to English to French" on the story retelling task. A third student considered that practice by writing down what she would say "seems like cheating--a negative skills."

Another student shared an experience that those rating someone's taped speech might be oblivious to, namely, the effects of hearing his accent as he recorded in the language laboratory console, using earphones: "I was unnerved by hearing my own voice. Pronunciation problems resulted in a bad attitude. It altered my story retelling. I spoke with disruption, improper breaks. I altered the way it was read by pronunciation problems." A second student indicated that paying attention to her pronunciation "caused [her] to lose track of what [she] was doing." Still another student reacting to the items of paying attention to/correcting pronunciation said, "I find that if I worry too much about it, I won't be able to say anything."

After performing the story retelling, one frustrated student gave the following verbal report responses as he rated the following two items on the five-point scale:

- 'learned something useful about the language' - "My tuition dollars would have been best spent on a semester abroad."
- 'Learned something useful about my language learning' - "How bad my language skills are."

Feedback on the Strategy Checklist

The feedback from the Experimental and Comparison groups regarding the Checklist was relatively similar (see Figure 2), with one major exception. The four items for self-reflection at the end of the posttest checklist were more comprehensible to those who had been in the treatment since they could better relate to items such as "To what extent did you intentionally use what you know about yourself as a foreign language

learner during the tasks?' and 'To what extent have you become a more independent language learner as a result of your language class this quarter?' These items in particular were addressed to the Experimental group whose language learning awareness had been enhanced.

There were, however, other items that were found to be confusing to all respondents. One reason was a lack of adequate understanding of the terminology. For example, several respondents did not fully understand what *positive self-talk*, *mental image*, *elicit*, and *made up a word* meant. In the last case, for example, a Comparison group student remarked as follows: "For me 'made up' words were those that translated exactly but that might not be a correct meaning of the term." However, some students may have interpreted this not as making up or changing the meanings of existing words, but actually coining new, non-existent words. As an example of another type of item confusion, the item 'I just worked quickly and didn't pay much attention to what I was saying' was problematic for some. As one respondent commented in his verbal report, "I am trying to work quickly **and** pay attention."

The verbal report also brought up the issue of how the instrument itself can have reactive effects on student performance. On the checklist for strategies before doing the story retelling task, one subject responded to the item 'I thought about similar stories I have read' with: "Not until this question!" We also got an insight into the effects of doing test-retest, rather than using alternative forms of the same instrument. As one Experimental subject put it, "I tried to predict some from difficulties last time. For example, I wrote less, talked more." Another student reinforced this point with "I remember these are the same tasks as the beginning of the quarter exactly and they do seem easier at this time."

There were also problems with the scale itself. Sometimes the descriptions at points along the scale did not agree grammatically with the wording of a given strategy item. For example, for those strategy items beginning with 'I learned something...' (strategies **after** performing the city description task), an Experimental student commented, "The wording on the scale (4 - a lot, 5 - extensively) made it harder to say 'extensively learned a lot.' I prefer a 1 to 3 scale." And perhaps a more serious problem was that at times respondents were not necessarily ticking the scale point that best reflected their actual frequency of use of the given strategy. So, for example, on the checklist for strategies during the city description, 'When I couldn't remember a word, I 'made up' a word,' an Experimental student responded, "No, I didn't." Yet, he rated his frequency of use of the item with "3" ("part of the time"), which suggests that he and perhaps others were not using the five scale points as intended.

Discussion

Recapping the Major Findings

In this study, 55 intermediate learners of foreign language at the University of Minnesota were either participants in a strategies-based instructional treatment or were Comparison students receiving the regular ten-week language course. Both groups filled out a pre-treatment questionnaire and then performed a series of three speaking tasks on a pre-post basis, along with the SILL and the Strategy Checklists filled out after performing each of the three tasks. Twenty-one of the Experimental and Comparison group students also provided verbal report data while they filled out the posttest Strategy Checklists--indicating their rationale for their responses to certain items, as well as their reactions to the instrument itself. With regard to the question of whether strategies-based instruction makes a difference in speaking performance, the finding was positive: the Experimental group outperformed the Comparison group on the third task, city description, in the posttest, after adjusting for pretest differences. In addition, while there were no significant differences in overall mean performance on any of the three tasks for the advanced intermediate and intermediate French students grouped together, there was one difference in looking at the French posttest task performance by scale. The Experimental group students were rated as higher on the **vocabulary** scale for the self-description task.

Since the checklists for strategies used before, during, and after each speaking task contained strategies that were, at least to some extent, designed specifically for the given task, the intention was to make a fine-tuned link between strategies and their use on specific language tasks. Such a link had been missing from previous research which reported strategy use in broad terms but not necessarily linked to specific tasks. The relationship between reported frequency of strategy use (pre-post) and ratings of task performance (pre-post) was complex. An increase in the use of certain strategies included on the Strategy Checklist was linked to an improvement in task performance for the Experimental group, in other instances only for the Comparison group, and in some cases for both groups. Furthermore, there were other strategies which could be considered less supportive to the students on the given speaking tasks. Some of these were more frequently reported by the Comparison group students, who did not benefit from having received the treatment.

For the Experimental group, it was seen that an increase in certain preparatory strategies (e.g., translating specific words, writing out sentences, and practicing the pronunciation of words) and monitoring strategies (e.g., monitoring for grammar, paying attention to the pronunciation of words, and analyzing a story for its key

elements) related to an increase on one or more of the rating scales--self-confidence, grammar, vocabulary, and identifying and ordering elements in a story. For the Comparison group, an increase in the use of certain strategies during the self-description and city description tasks was positively related to an increase in ratings on task performance. Of the fifteen total positive correlations for the Comparison group across tasks, eleven of these involved strategies from the "During" part of the Checklist on tasks #1 and #3. These included communication strategies, as well as learning strategies.

We note that the Strategy Checklist as a research instrument seemed to capture the dynamics of strategy use--namely, that strategies are linked to specific tasks. This point is underscored when a comparison is made between the results from the Checklist and from the SILL. While the Strategy Checklist proved itself effective as an instrument for linking task-specific strategies with improved task performance, the SILL performed more as a general measure of the patterns of strategy use, in keeping with its intended purpose. Nonetheless, the results of the data analysis suggested certain items on the SILL (e.g., the use of idioms, previewing lessons, attention to language form, word-for-word translation, avoiding the use of translation, and remembering words by their image) were sensitive enough to correlate significantly with increases on ratings scales for the various tasks.

With regard to insights from the verbal report data collected along with the Strategy Checklist, it was the case that at least one Experimental subject conducted multiple practices before recording a particular response. In addition, the students reported avoiding new words they were not yet comfortable with, paraphrasing when they lacked a precise word, and sometimes avoiding pauses so as to sound more fluent. Students also reported having learned certain things about themselves as language learners, such as recognizing the benefits of relaxing more while performing language tasks.

With respect to the Comparison group, the use of translation into the native language mostly came up as a counterproductive activity, but one student reported using it as a way to get his mind thinking in the target language. Another student saw it as "cheating" to write out a response to an oral task ahead of time. Finally, there were students who voiced frustration at their limited language skills, something that did not come up in the Experimental group verbal report data.

The verbal report data also provided some useful insights as to weaknesses in the Strategy Checklist itself, insights which could be put to good use in follow-up research (see below).

Limitations of the Study

As with all studies of this magnitude, there are various limitations. The very fact that the study was intended to be of an applied nature meant that certain controls possible in a laboratory environment were not possible in this case. Yet the factors operating in this study seemed more reflective of genuine classroom situations.

As indicated under the "Research Design" above (in footnote #3), the treatment could only be offered by teachers who had been trained to provide strategies-based instruction, and there had to be corresponding classes at the same level for the sake of comparison. This constraint produced the rather modest sample size of 55, with which the numerous statistical analyses were conducted. In addition, the students were not randomly assigned to the experimental or to the comparison group because of scheduling constraints. The very small sample size for the Norwegian students helps to explain the nonsignificant result regarding the effects of the treatment (research question #1).

With regard to the background of the teachers participating in the Experimental group in the study, it is not surprising that two of those teachers who had volunteered to participate in the seminar on strategies-based instruction (and were subsequently eligible to teach the Experimental group classes) were doing their doctorates in education and in applied linguistics respectively, while one of the teachers of the Comparison group had her doctorate in literature and the other two were doing theirs in literature as well. It could be argued that perhaps those who were studying about language learning and teaching processes were also likely to do a better job of supporting their students in their language learning efforts, and in the use of speaking strategies in particular. To counter that claim, it could be pointed out that all foreign language teachers at the University of Minnesota receive rather intensive training and are provided in-service workshops and support in the latest methods of language instruction. Hence, we would like to think that the main difference between groups was the special training that the Experimental students received over the course of the quarter in how to use speaking strategies to their advantage.

Another limitation of the study was its emphasis on the **frequency** of use of a strategy rather than on **successful** use. The concern is that repeated use of a strategy may just be a sign that the learner is continuing to use a given strategy unsuccessfully. On the other hand, it may mean that the learner has found the strategy useful. This study did not have a direct measure of how successfully the learners used the strategies, but an indirect measure was the correlation between an increase in the frequency of use of a strategy and an increase in task performance. What enhanced this link was the fact that the strategy checklist was constructed with those three specific tasks in mind. Since

students use strategies but often use them inconsistently or in an uninformed way, one goal of the treatment was to help the students use the strategies more systematically and purposefully.

With regard to the statistical findings, and especially those involving correlations between gains in task performance and changes in frequency of use of given strategies, we need to remember that correlation does not imply causality. Rather, such correlations simply indicate that increased strategy use was **related to** gains in task performance. All the same, the statistical findings are suggestive of possible trends in the data.

Another artifact of correlating strategy use with task performance on a pre-post basis was the focus it put on only those students for whom there was some significant change in frequency of strategy use or performance. Therefore, those students whose task ratings remained constant from pre to post (i.e., at the top or bottom of the scales) were not well represented in the statistical analyses. Their performance would limit the distribution of scores and thus depress the correlations coefficients.

Suggestions for Further Research

The somewhat limited sample size in this study meant that certain kinds of investigation were impossible. One was that of determining whether the increase of strategy use was related to a similar increase in task performance for **both** the more and less proficient learners. Unfortunately the sample size was too small to further divide it along the lines of proficiency. So there is a need to run a similar but larger study so as to be able to run analyses according to the proficiency level of the students and other factors.

Another area for investigation would be to document through videotape and other means the nature of the treatment. It would be useful to spell out just what strategies-based instruction can look like in different classrooms throughout a language course. In this study we relied primarily on retrospective reports from the three Experimental group teachers.

Another suggestion for further research would be to assess the extent to which the learners transfer their strategy training from this experiment to performance in subsequent language classes. Was the advantage of the Experimental group in this study just simply an artifact of the experiment, or was speaking genuinely enhanced by strategies that will be accessible for future language study and for speaking situations beyond the framework of the classroom.

Finally, it would be beneficial to pay greater attention to the wording of entries in checklists such as those used in this study, to make sure that all the terminology is clear

to the respondents. In addition, it would be valuable to make sure there are no conflicting elements in the same checklist entry, such as "working quickly" vs. "paying attention." Also, there may be value in having respondents do practice exercises in the use of a five-point scale, in order to assure a greater homogeneity of interpretation regarding what a "3" or a "1" means in such a scale.

Pedagogical Implications

The study was undertaken to determine whether strategies-based instruction should have a role in the foreign-language classroom. It would seem that the results of this study speak in favor of such a role. If instructors systematically introduce and reinforce strategies that can help students speak the target language more effectively, their students may well improve their performance on language tasks. The findings of the study would also suggest that explicitly describing, discussing, and reinforcing strategies in the classroom can have a direct payoff on student outcomes.

The study also seems to endorse the notion of integrating strategy training directly into the classroom instructional plan and embedding strategies into daily language tasks. In this way, the students get accustomed to having the teacher teach both the language content and the language learning and use strategies at the same time. Such an approach calls for training the teachers in how to deliver strategies-based instruction so that the strategies become an integral part of the fiber of the course, while preserving the explicit and overt nature of the strategy training. In this manner, the students should be better able to consciously transfer specific strategies to new contexts.

Conclusions

While there is no doubt about the need to conduct further studies as to the efficacy of strategies-based foreign language instruction, and especially to pursue the empirical study of strategies-based speaking instruction that is focused on improving speaking skills, this study should already provide suggestions for instructional changes in the classroom. It would appear beneficial to engage learners in discussions of speaking strategies, having them review checklists of possible strategies (such as those appearing in the Appendix), and practice those strategies in class. The students should be the ones who finalize their working lists, and they need to make their own choices as to the strategies that they will use in different language learning and using situations.

This study went beyond studies such as that of Dörnyei (1995) which limited itself to a select few strategies (three in his case) in order to conduct a "neat" study. It also went beyond the O'Malley and Chamot (1990) study which lacked the direct link between task performance and reports of specific strategy use on a pre-posttest basis.

Applied linguistic research that attempts to reflect and draw upon a more authentic classroom environment must draw on a far larger set of strategies--in fact, all those that may have a role in performing given classroom tasks. In this study, learners were free to choose those strategies that they, along with their teachers, had identified as relevant to speaking in a foreign language. The innovation in this study was to make a direct link between the frequency of use of a given strategy and performance on the speaking task for which that strategy was chosen. In addition, the verbal report data provided insights into both students' strategy use and the design of instruments to use in strategy research.

Table 1

*Overall Speaking Performance by Task -
Posttest Means Adjusted by Pretest Using ANCOVA*

	Task 1 Self- Description	Task 2 Story Retelling	Task 3 City Description
Experimental Group (N=32)	3.95	4.24	3.73*
Comparison Group (N=23)	3.82	3.69	3.34

*p < .05

Table 2

*Speaking Task Performance by Scales -
Posttest Means Adjusted by Pretest Using ANCOVA*

Key: SC = self-confidence E = elements of story
G = grammar O = organization of elements
V = vocabulary

	Task 1 Self-Description			Task 2 Story Retelling		Task 3 City Description		
	SC	G	V	E	O	SC	G	V
Experimental Group (N=32)	4.23	3.94	3.67	4.69	3.79	4.00	3.63†	3.59
Comparison Group (N=23)	4.35	3.69	3.43	4.15	3.23	3.66	3.12	3.20

†p < .01

Table 3

*French Overall Speaking Performance by Task -
Posttest Means Adjusted by Pretest Using ANCOVA*

	Task 1 Self-Description	Task 2 Story Retelling	Task 3 City Description
Experimental Group (N=18)	4.16	3.59	3.91
Comparison Group (N=18)	3.98	3.16	3.47

Table 4

*French Speaking Task Performance by Scales -
Posttest Means Adjusted by Pretest Using ANCOVA*

	Task 1 Self-Description			Task 2 Story Retelling		Task 3 City Description		
	SC	G	V	E	O	SC	G	V
Experimental Group (N=18)	4.40	4.16	3.99*	3.80	3.43	4.16	3.71	3.87
Comparison Group (N=18)	4.52	3.84	3.57	3.18	3.10	3.78	3.26	3.33

*p < .05

Table 5

Gain in Task Performance Correlated with Change in Reported Strategy Use (Pre-Post)

Key: E = Experimental Group (N = 32) C = Comparison Group (N = 23)

Task 1: Self-Description for Airport Meeting

	Self-Confidence	Grammar	Vocabulary
<u>BEFORE</u>			
3. translated specific words from English.		E .52*	
9. tried to visualize airport.	C -.50*		
10. thought about similar tasks that has done.	E -.40*		
<u>DURING</u>			
3. paid attention to pronunciation.		C .46*	C .46*
5. when couldn't remember word, substituted it with another word/phrase.			C -.44*
7. when couldn't remember word, just skipped that part of description.		C -.42*	C -.47*
9. used notes that had written before task.	C .48*	C .44*	
14. just worked quickly and didn't pay much attention to what was saying.			E -.41*
<u>AFTER</u>			
5. learned something new/useful about target language during task.		C .45*	
8. immediately started filling out checklist without giving own performance much thought.	E .43*		

* p < .05

Table 6

Gain in Task Performance Correlated with Change in Reported Strategy Use (Pre-Post)

Key: E = Experimental Group (N = 32) C = Comparison Group (N = 23)

Task 2: Story Retelling

	Elements	Organization
<u>BEFORE</u>		
2. drew pictures to help remember story.		E .40*
5. tried to translate story to help summarize it.		C -.55*
9. practiced pronunciation of specific words before began recording.	E .42*	
<u>DURING</u>		
4. purposely tried to use new vocabulary words from story.	C -.42*	
<u>AFTER</u>		
1. will discuss task with other participants in project.		C .51*
5. before started checklist, thought about what could do differently next time.		C .44*
8. immediately started filling out checklist when finished speaking.		C -.42*

* p < .05

Table 7***Gain in Task Performance Correlated with Change in Reported Strategy Use (Pre-Post)***

Key: E = Experimental Group (N = 32) C = Comparison Group (N = 23)

Task 3: City Description

	Self- Confidence	Grammar	Vocabulary
<u>BEFORE</u>			
3. wrote out what would say in full sentences before began	E .42*		
10. practiced pronunciation of specific words before began recording	E .43*	E .50*	C -.42*
11. thought about similar tasks that had done in class.			E .41*
<u>DURING</u>			
3. tried to encourage self through positive self-talk.	C .43*		
4. used information that had learned outside of class.		E .49*	
5. used a mental picture of favorite city while speaking.			C .46*
6. when couldn't remember word, substituted it with another word	C .62†		C .48*
11. when couldn't remember word, "made up" word.	C .68†	C .59†	C .56†
<u>AFTER</u>			
8. immediately started filling out checklist when finished speaking.	C .51*		

* p < .05 † p < .01

Table 8
Gain in Task Performance (Pre-Post) Correlated with Reported Strategy Use on the SILL (Pre-Post)

Key: S= self-confidence E= story elements E= experimental group
 G= grammar O= story organization C= control group (N=23)
 V= vocabulary

	Task 1 Self-Description			Task 2 Story Retelling		Task 3 City Description		
	S	G	V	E	O	S	G	V
	6. I remember [a new] word by making a clear mental image of it or by drawing a picture						C -.42*	
16. I say or write new expressions repeatedly to practice them	E .56† C .59*							
17. I imitate the way native speakers talk		C .48*	E -.44*		E -.46† C -.44*			
18. I read a story or dialogue several times until I can understand it		E .50† C .50*						
20. I practice the sounds or alphabet of the new language		E .56† C .58†						
21. I use idioms or other routines in the new language			E .46†			C -.42*		
30. I seek specific details in what I hear or read			E -.61† C -.50*					
31. I use reference materials such as glossaries or dictionaries to help me use the new language					E -.47† C -.55†			
33. I make summaries of new language material			E .49† C .52*					
37. I try to understand what I have heard or read without translating it word-for-word into my own language			E -.42*	E -.41				E -.52†
46. When I cannot think of the correct expression to say or write, I find a different way to express the idea		E .52† C .58†						E .53† C .52*
47. I make up new words if I do not know the right ones	E .50† C .53†	E .40* C .48*				E -.43* C -.44*		

	Task 1 Self-Description			Task 2 Story Retelling		Task 3 City Description		
	S	G	V	E	O	S	G	V
48. I direct the conversation to a topic for which I know the words	E .57† C .60†	E .52† C .56†						
49. I preview the language lesson to get a general idea of what it is about, how it is organized, and how it relates to what I already know		E .44*						
51. I decide in advance to pay special attention to specific language aspects – e.g., focusing on the way native speakers pronounce certain sounds		E .52† C .57†				E -.40*		
59. I clearly identify the purpose of the language activity; e.g., in a listening task I might need to listen for the general idea or for specific facts				E .44* C .43*	E -.42*			
62. I try to notice my language errors and find out reasons for them		C .48*						E-.50† C -.43*
63. I learn from my mistakes in using the new language					E -.42* C -.56†			
65. I try to relax whenever I feel anxious about using the new language		E .42* C .56†						
67. I actively encourage myself to take wise risks in language learning, such as guessing meanings or trying to speak, even though I might make some mistakes	E .50† C .52*	E .42* C .42*						
68. I give myself a tangible reward when I have done something well in my language learning		E .59† C .62†				E -.44* C .44*		
71. I talk to someone I trust about my attitudes and feelings concerning the language learning process				C .45*				
75. I work with other language	E .56†							

Figure 1

INSIGHTS ABOUT STRATEGY USE

Based on Verbal Report Data from 21 Learners Responding to Posttest Strategy Checklists

Experimental Group

Task #1: Self-description

Before

- 'practiced everything before recording' -
"Twice and then I recorded over the first time, so there were three practices."
"I wrote out what I was going to say and practiced it a couple of times."
- 'tried to use new vocabulary words'
"I didn't want to use new words that were uncomfortable."

During

- 'when couldn't remember word, substituted another word'
"Improvised--I couldn't remember how to say 'I **wore** something,' so I just said '**and** tennis shoes.'"

After

- 'learned about my language learning'
"I can always use more practice."
- 'will discuss task with other participants in project'
"Look at this as very much an individual effort."

Task #2: Story retelling

During

- 'referred back to story'
"Once because "I had a 'mind blank'."
"I felt awkward pausing for thoughts so I tried to speak without pauses."

After

- 'learned from task'
"Able to read and understand from context words that didn't know"
- 'learned about language'
"It can be more descriptive than English. Norwegian is more precise."
- 'learned about my language learning'
"Learned I need to relax myself a little more to be able to do the tasks easier with more comprehension."

Task #3: City Description

During

- 'paid attention to grammar'
"If I was in the correct tense."
- 'tried to correct pronunciation'
"Only if it changed total meaning."

Overall Questions

- 'extent that became independent learner'
"I learned how to learn to speak."

Comparison Group

Task #1: Self-description

Before

- 'translated all of what would say from English'
"To get my mind thinking in French."

During

- 'attention to/correcting pronunciation'
"Find that if I worry too much about it, I won't be able to say anything."

After

- 'learned about my language learning during task'
"Preparation is good--writing it down helps."

Task #2: Story retelling

Before

- 'translating story to summarize it'
"No. It would have called for two translations: French to English to French."

During

- 'tried to correct grammar as speaking'
"Attempted to but got confused and didn't."
"Pronunciation problems resulted in a bad attitude. It altered my story retelling. I spoke with disruption, improper breaks. I altered the way it was read by pronunciation problems."
- 'positive self-talk'
"Not getting down on myself."

After

- 'learned something useful about the language'
"My tuition dollars would have been best spent on a semester abroad."
- 'learned something useful about my language learning'
"How bad my language skills are."
"I'm trying to show you what comes naturally to me. My point in language learning is to try to get so I can speak it without writing out sentences and things like that, which I think are counter-productive."

Task #3: City description

Before

"I wanted to see how well I could do it without practice--without writing down. Writing seems like cheating--negative skill."

During

- 'paid attention to my pronunciation'
"Caused me to lose track of what I was doing."
- 'positive self-talk'
"Encouragement helps to get through it better."

Overall Questions

"I do feel, now that I've done these three tasks, that I have learned a lot this quarter, though going into the tasks I felt I hadn't progressed at all. I remember this is the same tasks as the beginning of the quarter exactly and they do seem easier at this time."

Figure 2

**FEEDBACK ON THE STRATEGY CHECKLIST
Based on Verbal Report Data from 21 Learners
Responding to Posttest Strategy Checklists**

Experimental Group

Self-description:

During

- problem with having "working quickly" and "not paying attention to what I was saying" together.

"I don't understand *positive self-talk*."

This respondent indicated that he tried to work quickly but **did** pay attention. He rated this item a '2' but indicated "not sure what to put."

- mental image of self while speaking
"Don't know what *mental image* is."

After

- 'before started checklist, reflected on overall performance--thought about what would do differently'

"As I go **through** the checklist, I do this--not **before**."

Task #2: Story retelling

Before

- 'thought about similar stories'
"Not until this question!"

- 'translated parts of the story to help summarize it.'

"I tried to predict some from difficulties last time. For example, I wrote less, talked more."

"The story was hard to read because it was not factual. It was far-fetched."

During

- 'positive self-talk'
"Sounds kinda corny."
"Not real clear on that idea."

Task #3: City Description

Before

- 'visualizing favorite city before recording'
"I did a lot of it last time. I was more confident. I didn't need to prepare as much."
- 'I translated other words I would need from English.'
"Don't know what this is referring to."

During

- 'making up word'

"No, I didn't." [Note that he rated his frequency of use of the item with "3" ("part of the time"), which suggests that he and perhaps others were not using the five scale points as intended.]

After

- 'I learned something...'

"The wording on the scale (4 - a lot, 5 - extensively) made it harder to say 'extensively learned a lot.' I prefer a 1 to 3 scale."

Overall Questions

"Not clear what 'independent language learner' meant but the study was good practice. The teacher gave strategies for language learning."

- 'extent to which the three tasks elicit what you know in French'

"I don't know what *elicit* means here."

- 'intentionally using what you know about yourself as a language learner'

"I have difficulty dealing with this question."

Comparison Group

Task #1: Self-description

Before

- 'Didn't do any special preparation'

"Yes, I did extensively."

- 'Thought about similar tasks I have done'

"I thought about the last time when this was done."

During

- "'made up" word'

"For me 'made up' words were those that translated exactly but that might not be a correct meaning of the term."

"I was unnerved by hearing my own voice."

After

"Hearing how I sound is not ideal – hearing my own voice is disturbing but insightful."

Comment

"I wanted a bit more direction as to what the goal was for the task."

Task #2: Story retelling:

During

- 'I just worked quickly and didn't pay much attention to what I was saying.'
"I am trying to work quickly **and** pay attention."

Task # 3: City description

Before

- 'translated all of what I would say from English'
"1'--not sure what this means."

During

- 'Encourage through positive self-talk'
"I don't understand the question."

Comments on tasks

"The last task was the most fun. Then the first. It's easier to talk about something you like are familiar with. The story telling task was hard and I **didn't** like it. Neither did the people I talked to."

Overall Questions

- 'extent intentionally used what know about self as a foreign language learner'
"Weird question--well, I had to know correct pronunciation, vocabulary, grammar."
- 'To what extent used what know about self as language learner'
"Don't have a clue as to what you mean by this question."

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APPENDIX

SPEAKING STRATEGIES

[Compiled by C. Alcaya, K. Lybeck, & P. Mougel, teachers in the Experimental sections of the Speaking Strategies Experiment, NLRC/CARLA, Univ. of Minnesota, November 1994]

1) **Before You Speak**

lower your anxiety

- deep breathing
- positive self-talk
- visualize yourself succeeding
- relaxation techniques
- feel prepared
- other anxiety-lowering techniques?

prepare and plan

- Identify the goal and purpose of the task: what is it you are to learn/ demonstrate in this exercise?
- Ask for clarification of the task if you are unsure of its goal, purpose, or how you are to do it.
- Activate background knowledge; what do you already know about this situation/task?
- Relate the task to a similar situation; make associations.
- Predict what is going to happen:
 - Predict the vocabulary you will need. Make word maps, groupings.
 - Think of how you might circumlocute for vocabulary you do not know. Think of synonyms, antonyms, explanations, or nonverbal communication that can substitute.
 - Translate from English to French any words you predict you will need that you do not already know.
 - Predict the structures (grammar) you will need.
 - Review similar tasks in your textbook.

- Transfer sounds and structures from previously learned material to the new situation.
- Predict the difficulties you might encounter.
- Plan your responses and contributions:
 - Organize your thoughts.
 - Prepare a general "outline" (use notes, keywords, draw pictures).
 - Predict what the other party is going to say.
 - Rehearse (practice silently, act out in front of a mirror, record yourself and listen).
 - Cooperate in all areas if it is a group task.
 - Encourage yourself to speak out, even though you might make some mistakes.

2) While You Are Speaking

feeling in control

- Take your emotional temperature. If you find you are tense, try to relax, funnel your energy to your brain rather than your body (laugh, breathe deeply).
- Concentrate on the task, do not let what is going on around you distract you.
- Use your prepared materials (when allowed).
- Ask for clarification ("Is this what I am supposed to do?"), help (ask someone for a word, let others know when you need help), or verification (ask someone to correct pronunciation).
- Delay speaking. It's OK to take time to think out your response.
- Don't give up. Don't let your mistakes stop you. If you talk yourself into a corner or become frustrated, back up, ask for time, and start over in another direction.
- Think in the target language.
- Encourage yourself (use positive self-talk).

be involved in the conversation

- Direct your thoughts away from the situation (e.g., test!) and concentrate on the conversation.

- Listen to your conversation partner. Often you will be able to use the structure or vocabulary they use in your own response.
- Cooperate to negotiate meaning and to complete the task.
- Anticipate what the other person is going to say based on what has been said so far.
- Empathize with your partner. Try to be supportive and helpful.
- Take reasonable risks. Don't guess wildly, but use your good judgment to go ahead and speak when it is appropriate, rather than keeping silent for fear of making a mistake.

monitor your performance

- Monitor your speech by paying attention to your vocabulary, grammar, and pronunciation while speaking.
- Self-correct. If you hear yourself making a mistake, back up and fix it.
- Activate your new vocabulary. Try not to rely only on familiar words.
- Imitate the way native speakers talk.
- Compensate by using strategies such as circumlocution, synonyms, guessing which word to use, getting help, using cognates, making up words, using gestures.
- Adjust or approximate your message. If you can't communicate the complexity of your idea, communicate it simply. Through a progression of questions and answers, you are likely to get your point across, rather than shutting down for a lack of ability to relate the first idea.
- Switch (when possible) to a topic for which you know the words. (Do not do this to avoid practicing new material, however!)

3) After You Speak

evaluate your performance

- Reward yourself with positive self-talk for completing the task. Give yourself a personally meaningful reward for a particularly good performance.

- Evaluate how well the activity was accomplished (Did you complete the task, achieve the purpose, accomplish the goal? If not, what will you do differently next time?)
- Identify the problem areas.
- Share with peers and instructors (ask for and give feedback, share learning strategies).
- Be aware of others' thoughts and feelings.

plan for future tasks

- Plan for how you will improve for the next time.
- Look up vocabulary and grammar forms you had difficulty remembering.
- Review the strategies checklist to see what you might have forgotten.
- Ask for help or correction.
- Work with proficient users of the target language.
- Keep a learning log (document strategies used and task outcomes, find out what works for you).