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THE EFFECTS OF STRATEGY TRAINING ON L2 LEARNERS

by

Marian Jane Rossiter

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Department of Educational Psychology

Edmonton, Alberta

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This dissertation is dedicated with love to
my family.

ABSTRACT

This dissertation presents data from a classroom-based study designed to investigate the effects of strategy instruction on the oral performance of English as a second language (ESL) learners and on their perceptions of motivation. The learners were adults registered in a full-time intermediate ESL program in Canada. Two oral communication tasks were administered at pre-test, post-test, delayed post-test, and follow-up administrations over 15 weeks to three groups: a comparison group, a communication strategy instruction group, and an affective strategy instruction group.

The dissertation consists of four papers, each of which focuses on a particular aspect of the study. The first paper outlines challenges that arose during the research project. I discuss the contextual limitations imposed by intact classes, as well as complexities involved in teacher and student participation, data collection, choice of tasks, data analysis, and ethical considerations. Research manuals are examined to determine the attention directed to the second language acquisition research issues confronted in this study. Finally, additional sources of support are proposed to strengthen second language classroom-based research by novice researchers and classroom teachers.

The second paper reports results from the communication strategy (paraphrase) training study. Participants in the comparison and treatment groups performed two oral communication tasks on four occasions. Data from these tasks were used to investigate the effects of strategy training on learners' use of communication strategies, communicative effectiveness, and self-efficacy. Findings showed a direct effect of instruction on the range of communication strategies employed in the tasks.

The third paper reports the effects of affective strategy instruction (e.g., anxiety reduction, positive self-talk) on learners' second language productions (narrative descriptions and object descriptions) and their perceptions of self-efficacy. The affective nature of the ESL classroom environment is seen as the determining factor in decisions to implement affective strategy instruction.

The fourth paper reports the results of self-assessment questionnaires completed by all participants at each task administration. Learners responded to questions regarding their perceptions of self-efficacy; causal attribution; and language learning attitudes and motivation. The chapter includes an examination of the limitations of self-report instruments administered to learners from mixed language backgrounds.

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I. INTRODUCTION

The development of second language (L2) speaking proficiency is a lengthy process; although sustained motivation is essential for success, progress is slow for the many learners who lack the skills and the self-confidence to communicate in the target language outside the classroom. Over the last twenty years, as language teaching has become more learner-centred, learners have been encouraged to become more autonomous and self-directed. Strategies have been proposed as one means of enhancing learners' language learning motivation and achievement and of facilitating their second language acquisition in English-speaking settings (Cohen, 1998). Although much has been made in the teaching community of the value of strategies and of the importance of teaching second language learners to use them (e.g., Cohen, 1998; O'Malley & Chamot, 1990; Oxford, 1990), most of the research done in this area has been descriptive, based on the results of correlation analyses. Comparatively few interventions have been carried out, and findings from these have been mixed; they suggest a complex relationship between strategy instruction and second language performance. Extensive research remains to be conducted to develop our understanding of how or whether second language communication strategies are acquired and used.

Strategies are closely linked to perceptions of personal self-efficacy, or individuals' beliefs about their capabilities to perform certain tasks. When people acquire the skills and strategies they need, their perceptions of self-efficacy rise; they are more likely to set challenging goals, to expend greater effort to achieve those goals, and to

persist in the face to failure (Bandura, 1986). These behaviours facilitate successful second language learning.

This dissertation describes a teaching experiment conducted in the second language classroom to investigate the effects of strategy instruction on second language proficiency, strategy use, and self-efficacy, across tasks and over time. The participants in this study were 46 adult intermediate-level learners of English as a second language (ESL). One class of 16 to 20 learners, from a variety of language backgrounds, assessed at Canadian Language Benchmarks Level 7, was selected for each of three terms; the first was assigned to a comparison condition, the second to a communication strategy condition, and the third to an affective strategy condition.

At each administration (pre-test at Week 1, immediate post-test at Week 5, delayed post-test at Week 10, and follow-up at Week 15), learners completed two sets of oral tasks. In the first, they gave a description of an eight-frame picture story to an interlocutor, whose task was to identify the pictures described and to place them in the order in which the descriptions were given. In the second task, the interlocutor tried to identify, from among five very similar objects, the one that was described by the learner. At each administration, learners completed a language learning questionnaire that consisted of 15 statements related to language learning motivation, attitudes, and strategies. Prior to each task, they also completed a set of scales on which they indicated their perceived self-efficacy for providing accurate descriptions of the stimuli and for learning how to perform the task. At the immediate post-test, learners in the treatment condition also evaluated the usefulness of the strategy instruction in classroom activities,

in the research experiment, and in real-life interactions. The four papers presented in this dissertation each represent one aspect of the study.

The Challenges of Classroom-Based SLA Research

Several of the challenges that I encountered in conducting classroom-based research are outlined in Chapter II. Published papers seldom contain references to the effort and decision-making that are involved in research of this type. The major issues I encountered included the use of intact classes, teacher and learner participation, data collection, choice of tasks, data analysis, and ethical considerations. Because there was only one class at Canadian Language Benchmark Level 7 each term, students in the intact classes represented a wide range of proficiency within each class and between classes. The program director attempted to provide a single instructor for all three terms; ultimately, however, enrolment and staffing policies resulted in three teachers being involved in the study. Data collection in the midst of busy terms was challenging, as appointments with students often had to be re-scheduled, and suitable facilities for recording interviews were not always available. Student attrition was a problem; because approximately half of the learners were unable to complete all four sets of tasks, two separate sets of analyses had to be carried out. Data analysis also revealed the presence of task effects and the limitations of dealing with small numbers of participants. Disruptions to classroom learning were accepted by the teachers and by the students who left class for 30-40 minutes to complete each set of tasks, but efforts had to be made to reduce the inconvenience of the study without compromising research goals.

Following a discussion of the challenges that were encountered during this study, six second language acquisition manuals (Freeman, 1998; Schachter & Gass, 1996; Hatch & Lazaraton, 1991; Johnson, 1992; McDonough & McDonough, 1997; Nunan, 1992) are reviewed to determine to what extent they deal with these types of issues. Certain texts had particular strengths for specific audiences. I discuss the realities of action research, which is recommended to ESL teachers by several authors. Many teachers experience constraints (e.g., little time; lack of convenient access to professional reading; inadequate knowledge of research design, measurement, and evaluation) that make this impracticable. Alternatives are presented -- exploratory practice, collaborative action research, and interactive collaboration with external SLA researchers -- and further recommendations are provided to novice researchers for enhancing the quality of their proposed research.

Effects of Communication Strategy Instruction in the ESL Classroom

One subset of second language strategies that has been identified in previous research consists of communication strategies. Several taxonomies have been proposed (e.g., Faerch & Kasper, 1983; Paribakht, 1985; Poulisse, 1993; Tarone, 1977, 1980; Willems, 1987), and a number of studies (e.g., Berry-Bravo, 1993; Chen, 1990; Dörnyei, 1995; Haastrup & Phillipson, 1983; Oxford, 1990; Paribakht, 1985; Salamone & Marsal, 1997) have examined the teachability of communication strategies, with mixed results.

Chapter III reports the effects of communication strategy instruction on second language performance, on the use of paraphrase, and on learners' perceptions of self-efficacy. Twelve hours of instruction in communication strategies were designed by the

researcher and delivered by the regular ESL teacher. Paraphrase was chosen as the instructional focus because it is an achievement strategy (as opposed to a reduction strategy, such as message abandonment or topic avoidance) with a wide range of vocabulary and syntactic features that could easily be integrated into the regular ESL curriculum. Lessons were designed to raise student awareness of the use of paraphrase, to model the strategy for learners, and to provide opportunities for them to practice using communication strategies in classroom activities.

Fifteen learners participated in the communication strategies treatment group and fifteen were in the comparison group. The speaking tasks were administered on four occasions, and then recorded, transcribed, and coded. The data were analysed for the following: speech rate, frequency and range of communication strategy use, successful description of stimuli, instances of message abandonment, and perceptions of task self-efficacy and self-efficacy for learning. The data from a subset of learners who completed all four tasks were analysed separately. The learners in the treatment group rated the strategy instruction very favourably. The communication strategy instruction had a direct effect on the range of communication strategies used; the treatment group used a significantly greater range of communication strategies on the object description task at Time 2 than did the comparison group. There were, however, no indirect effects on the other measures of proficiency, strategy use, or self-efficacy, although both groups made significant improvements on many of these over time. The chapter concludes with a discussion of the implications of these findings for the ESL classroom.

Effects of Affective Strategy Training in the ESL Classroom

Chapter IV investigates the results of instruction in affective strategies, which are purported by many (e.g., Gardner, 1985; Krashen 1982; Horwitz & Young, 1991; Moskowitz, 1979; Oxford, 1990; Young, 1991) to enhance second language learning. To date, most studies in this area have been correlational in nature, dependent on responses to learner questionnaires related to motivation, attitudes, and anxiety. Several studies have suggested that anxiety can be facilitating or debilitating. Bailey's (1983) diary study shows that competitiveness and anxiety caused her both to work harder and, on at least one occasion, to avoid class. The majority of instructors who participated in Brandl's (1987) study (cited in Young, 1991) indicated that they deliberately induced anxiety in the classroom to intimidate learners into performing. Findings from anxiety studies conducted with learners (e.g., Price, 1991; Young, 1990), however, have suggested that a friendly, supportive, and relaxed classroom environment is more effective in reducing anxiety and in facilitating second language learning.

Several authors (e.g., Campbell & Ortiz, 1991; Crandall, 1999; Crookall and Oxford, 1991; Foss and Reitzel, 1991; Hansen, 1998; Oxford, 1990; Phillips, 1998; Rinvolucri, 1999) have provided extensive suggestions for enhancing the affective aspect of second language classrooms. Few, however, have conducted empirical studies to determine if these procedures have an impact on the learning that takes place.

This paper presents the findings of an intervention designed to examine the effects of affective strategy instruction on measures of second language proficiency (task success, speech rate, message abandonment) and of self-efficacy (task self-efficacy and self-efficacy for learning). The strategies chosen for inclusion in this study were exercises for anxiety reduction, for self-encouragement, and for monitoring emotions, three types

of affective strategies recommended by Oxford (1990) for the regulation of motivation, attitudes, and emotions in the language classroom. Twelve hours of affective strategy instruction were designed to raise learners' consciousness of their benefits, to model their use, and to give learners the opportunity to practice them and reflect on their use in class. Narrative and object description speaking tasks were administered to the students in this group, and the data were transcribed, coded, and analysed. Although the learners in the treatment group considered the instruction to have been useful (overall rating = 4.02 on a 5-point scale), the results of the analyses showed no significant difference in the second language proficiency measures or in self-efficacy in favour of the treatment condition. Analysis of the instructional data collected from the comparison group (e.g., lesson plans and tapes, observation schedules) showed that affective factors were a feature of the classroom environment in that class, manifested by the use of community building exercises, humor, music, encouragement, empathy, and positive self-talk. It is suggested that these elements are an integral part of most classes comprised of recent refugees or learners who have been out of school for many years, and are, in fact, requisite for effective second language learning in these contexts.

Effects of Strategy Instruction on Motivation and Self-Efficacy

Chapter V reports the results of motivation questionnaires that participants in the comparison group, the communication strategy condition, and the affective strategy group completed at each task administration. These included self-reports of task self-efficacy, self-efficacy for learning, causal attribution, motivation, attitudes toward language learning, and strategy use.

Before commencing each picture description task, learners gave scalar judgments of their ability to describe accurately 2, then 4, then 6, and finally 8 frames of the narrative. They also predicted how sure they were that they could learn to give excellent descriptions of such narratives. Immediately after narrating the story, they were asked to what extent each of the following had helped them in the task: ability, effort, task ease, and luck. Similarly, in the second task, learners were given a sample object to examine and were asked to indicate how sure they were that they could accurately describe 1 object, then 2 objects, 3 objects, and finally 4 objects in one minute. Again, they estimated their perception of their ability to learn to give excellent descriptions of such objects, and indicated to what extent they attributed their success to ability, effort, task ease, and luck, following completion of the task.

Prior to each task administration, the participants also provided responses to language questionnaire items focusing on second language learning motivation and attitudes. The analyses showed that although communication strategy instruction had an effect on task self-efficacy in the object description task, strategy training had few effects on the other self-report variables. The chapter concludes with an examination of the limitations of using self-report instruments in the second language classroom.

General Discussion and Conclusions

The final chapter presents the conclusions, educational implications, and limitations of this study.

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II. THE CHALLENGES OF CLASSROOM-BASED SECOND LANGUAGE ACQUISITION RESEARCH

Conducting second language acquisition (SLA) classroom research is, for even the most experienced investigator, a challenging undertaking. For the novice researcher, the potential for encountering problems in a study involving second language classes is much greater. Issues such as research design, data collection, and data analysis are fraught with complexities, and even the best plans may go awry. As Schachter and Gass (1996) note,

> Reports of research projects make it all look so simple.... There is no indication of the blood, sweat, and tears that go into getting permission to undertake the project, that go into actual data collection, that go into transcription, and so forth. (p. viii)

I will first discuss some of the challenges that I faced in carrying out classroom-oriented research on the effects of affective and communication strategy instruction. Then I will turn to a number of current SLA research resources and examine the extent to which these issues are addressed. Finally, I will suggest additional practical resources for novice researchers designing second language research projects.

Challenges Encountered

The Study

The research reported here focused on aspects of strategic competence: the use of affective and communication strategies to enhance and overcome difficulties in second language communication. I used a non-equivalent control group design to evaluate the effectiveness of direct affective and communication strategy training. The 46 participants

were adults registered in 16-week full-time English as a second language (ESL) intermediate proficiency classes in an educational institution in Canada, one of the largest providers in the community. For each treatment group I designed 12 hours of strategy instruction that were taught by the classroom instructor over a period of 4 weeks. One class was assigned to a communication strategy condition (paraphrase), a second to an affective strategy condition (e.g., risk-taking, positive self-talk), and the third class served as a comparison group (no treatment) for each of the treatment groups. Three types of communication tasks (picture narrative, object description, abstract design description) were administered four times – once before instruction and at three points after.

This particular study was influenced by contextual limitations, and some of the complications that occurred were unanticipated. The majority of the complexities in the research related to the use of intact classes, teacher and learner participation, data collection factors, the choice of tasks, data analysis, and ethical issues. As McDonough and McDonough (1997) note, "in most educational situations the list of possible confounding variables is so large, with some systematic and some unsystematic ones, that realistic and satisfactory control and counterbalance are nearly impossible" (p. 45). Consequently, it is not surprising that studies of this type often produce non-significant or ungeneneralizable results.

Intact Classes

One of the major constraints in this study was the use of intact classes. Because the institution that I had chosen for my research project had only one class at the designated proficiency level, it was necessary to spread the study over three terms.

One problem with the intact classes related to the wide range of proficiency levels within each class and across classes. Student placement entailed the use of three formal assessment tools, in addition to the Canadian Language Benchmarks Assessment (Citizenship & Immigration Canada, 1996) that each student had received prior to registration in the program. The in-house Diagnostic Test consisted of a 100-question multiple choice grammar exam on which a score was derived from subtracting the number of incorrect responses from the number of correct responses provided by each student. A grade 1-12 equivalent reading skill level was obtained from the reading comprehension subtest of the Gates-MacGinitie Reading Tests (MacGinitie, 1978). The Secondary Level English Proficiency (SLEP) test (Educational Testing Service, 1981) listening subtest, consisting of 25 multiple choice questions, was also administered. The students in this study were considered to have the overall equivalent of Canadian Language Benchmark 7. They were placed in classes that were as homogeneous as possible, on the basis of their individual scores. However, because there was only one class per term at this level of the program, there was a wide range of skill proficiency in each class. For example, some students may have been strong on the listening test, whereas others were very weak. It was problematic for this study that no formal test of speaking skills was administered at placement. Not surprisingly, learners' oral performance on the three experimental tasks varied greatly.

Teacher Participation

When arrangements were made with the director of the ESL program to undertake this research, it was agreed that, ideally, one teacher should be assigned to all three terms of

the study, in order to eliminate at least one confounding variable. A teacher with specialized TESL training and extensive experience in the ESL classroom participated in the study during Term 1. Just before Term 2 began, however, because of a decrease in program enrolment, responsibility for the Benchmark 7 class was given to another teacher who had greater seniority in the program. Fortunately, this instructor agreed to participate in the study and was able to continue into Term 3, so he delivered the instruction for both the communication strategy and affective strategy experimental classes. He was able to complete 9 of the 16 weeks in Term 3 before his scheduled holidays. This provided consistency for a critical component of the study. As trained teachers are not always available in the summer term, a substitute teacher with 1 year of English as a foreign language teaching experience, but no formal English as a second language training, was hired for the remainder of the course. The discrepancy in the qualifications of the two Term 3 teachers was a concern; however, as the role of the substitute in the study was restricted to reinforcing the affective strategy instruction that had been delivered in the first half of the course, it was decided to continue with the research. The first two teachers had volunteered to participate in the study and had demonstrated interest in the project. The third teacher, however, was new to the ESL program, was hired on a short-term contract, and had no long-term commitment to the program or interest in the research. This had a negative impact on the study, as teaching logs were not completed and audio-recording of classroom activities was minimal. It is unclear to what extent he actually reinforced the strategies, although the handouts that were provided for several activities were completed.

Student Participation

Other factors that influenced this project were the composition and dynamics of the classes. The participants (23 male, 23 female) represented 22 native language backgrounds and ranged in age from 19 to 59 years. The majority were immigrants and refugees; there were also two international students in the comparison group. The participants had spent between 1 month and 26 years in English-speaking Canada and had varied exposure to native speakers of English outside the classroom.

In the first term, all students in the Benchmark 7 class volunteered to participate in the research. In Term 2, five students did not participate: one had a severe hearing disability, three had been participants in the comparison group in Term 1 and were repeating the course, and one became very anxious during the pre-test and decided to withdraw from the study. This last student repeated the course in Term 3 and discouraged two members of the class from taking part in the study; one other student in Term 3 did not participate because of imminent plans to leave the country. Class dynamics changed in Term 3 when several international students from the Pacific Rim joined the class halfway through the course. Although they did not participate in the study itself, their arrival affected the nature of the class, as did the change of teacher in the course of Term 3.

Finally, student attrition had a negative impact on the study. Although the three classes were, from the beginning, quite small (19-22 students), 6 students dropped out before the third administration of tasks because of employment or travel opportunities, expiry of student visa, or transfer to another level of the program. Many learners left the

institution at the end of Benchmark 7 and were not available to complete the follow-up tasks.

Data Collection

I contacted all students and made an effort to schedule appointments to accommodate their timetables. All task administrations were planned for mid-week. Naturally, because of changes in the class plans (e.g., exams, field trips, debates, administrative matters) or student absences, appointments sometimes had to be re-scheduled. Some students who had limited contact with English on the weekends perceived that they performed poorly on Mondays; others, who shouldered academic, family, and/or employment responsibilities noted that fatigue affected their performance on tasks re-scheduled for Fridays.

During the data collection process itself, difficulties related primarily to the equipment and the physical facilities. I relied on tape recorders supplied by my university. I always brought additional equipment as, on several occasions, tape recorders or microphones failed to record clearly or even at all. Although the best setting available was chosen for administering each set of tasks, voices were sometimes drowned by environmental noises from sources such as corridors, traffic, and playgrounds. In a crowded school where a variety of school programs and community services competed for rooms on a daily basis, there was often no quiet space available. Fortunately, I took field notes on students' performances and was later able to use these to transcribe most recordings that would otherwise have been unclear.

Choice of Tasks

The communication tasks that were chosen for this study also affected the outcomes. It became apparent, for example, that the narratives did not provide the same obligation for learners to use communication strategies as did the other two tasks. Students were able to ignore certain pictures or elements of pictures that caused lexical difficulties, thereby eliminating altogether the need to use communication strategies (reminiscent of Schachter's [1974] article on avoidance). The use of multiple tasks mitigated the problem in this study, but the dangers inherent in limiting an investigation to one task became very clear.

Data Analysis

Following transcription of the audio-recordings, the data were coded. Despite examples of types of communication strategies provided by authors of earlier studies, some utterances did not conform to the existing categories; for example, strategies coded as use of all purpose words in other taxonomies (Dörnyei & Scott, 1997; Willems, 1987) included only nouns (e.g., 'thing', 'what-do-you-call-it'), although my data set showed examples of general all purpose (GAP) verbs (e.g., 'made a picture') being used in the same way (Paradis & Crago, 2000; Rice & Bode, 1993). Modifications were thus made to the category to accommodate these verbs. As other researchers (e.g., Foster, Tonkyn, & Wigglesworth, 2000; Polio & Gass, 1997) have noted, however, the ability to make comparisons between related studies is dependent upon the use of similar criteria for

coding decisions. Adjustments that had to be made might have affected the comparability of this study to some extent.

Data analysis difficulties arose as a result of the small numbers in each of the classes. In order to determine the success of the strategy instruction, I administered a series of tasks to participants: a pre-test in Week 5 of the course, an immediate post-test in Week 10, a delayed post-test in Week 15, and a follow-up five weeks later (exclusive of holidays). Because of initially small class sizes, exacerbated by attrition over the term, only 16 learners in Term 1 and 15 learners in each of Terms 2 and 3 completed the delayed post-test; many fewer completed the follow-up. Further loss of data due to technical difficulties resulted in inconsistencies in cell numbers that complicated the analysis.

Ethical Considerations

Throughout the study, I was conscious that my presence and the research I was conducting were likely to affect the daily routine of the ESL classroom. Potential negative repercussions included decreased class time and increased homework for the students, interruption of the course curriculum, and additional responsibilities for the teacher. As audio-recording of research tasks could not be satisfactorily done in the classroom, pre-scheduled appointments were made to withdraw students from class. As a result, students often had to leave class in the middle of a high interest activity (e.g., mystery video, animated group discussion); in some cases, their temporary absence prevented them from participating in follow-up activities upon return. Students who preferred not to sacrifice class time to participate in the study gave up their lunch hour or

made arrangements to stay at school later so that they could meet after class. This was inconvenient for them and often for their families, as well. Students were asked to complete learning journals and motivation graphs in addition to their assigned homework, but, as there was no incentive for them to do so, many did not. For both teacher and learners, the strategy lessons taught represented 12 hours of the prescribed curriculum that had to be condensed or cut. Discussions with the teachers were often carried out over a hurried lunch or during preparation for the next day's class. Because of the good will of the two teachers whom I knew, trusted and respected, I felt that I was received into the class as a welcome guest. When this type of relationship had not had a chance to develop with the third teacher, however, I felt that I might have been perceived as an intrusion. At all stages of the project, I tried to remain cognizant of the accommodations that were being made and sensitive to student and teacher attitudes, without compromising the goals of the research.

Faced with developing constraints related to non-equivalent groups, student and teacher participants, data collection, data analysis, task differences, and ethical considerations, the temptation for many classroom-oriented researchers in my position might be to curtail or even abandon their study. I maintain, however, that what are often perceived as <u>problems</u> by researchers are in fact the daily <u>realities</u> of the contexts in which most teachers practise. The limitations in these research settings may frustrate investigators and pose possible threats to the reliability and validity of quasi-experimental findings; they are, however, part and parcel of the classroom context. It is conceivable that, as Larsen-Freeman (1996) suggests, "When we are more comfortable with qualitative research, our attitudes will be different and [the problems that exist] will no

longer be seen as problems, but rather as interesting and challenging facets of complex situations which we must take into consideration" (p. 169). A more constructive alternative, in my view, is that there is a middle ground on the continuum, somewhere between highly-controlled experiments and qualitative studies; this middle ground offers rich opportunities for research in regular classroom environments, with potential for some generalizability. One such possibility may be the use of time-series research designs (Mellow, Reeder, & Forster, 1996), which are infrequent in the SLA research literature to date. These studies incorporate multiple pre-tests over time to determine a participant's normal pattern of development before treatment begins. Time-series designs are advantageous in that they can accommodate small numbers of participants without serious threat to internal or construct validity. Other alternatives remain to be explored. As Lazaraton (2000) asserts, "the next frontier in applied linguistics research should be developing alternatives to parametric statistics for small-scale research studies that involve limited amounts of dependent data" (p. 180). That goal, if achieved, would greatly expand the present parameters of research in the field.

How SLA Research Manuals Address These Issues

Although discussion of the types of problems I have reported above is not common in published reports, several authors have openly reflected on the pitfalls of second language acquisition research. Bailey (1983) outlined the myriad of unexpected problems she experienced during the process of collecting data in a classroom-based study of the communication between teaching assistants and their students. In the same vein, Cumming and Swain (1989) and Swain and Cumming (1989) solicited from SLA

researchers anecdotes that covered a wide range of problems -- political, technical, and conceptual -- in a variety of contexts. In his introduction to The Pear Stories, Du Bois (1980) related cultural difficulties he encountered doing research using a film to collect narratives in Guatemala. Some of the complications present in designing and implementing a normed survey instrument for ESL learners were outlined by Reid (1990), based on her own personal experience. Most research accounts, however, provide no evidence of the complexities of the studies and may in fact give readers a false impression of the research process.

Journal articles and research manuals outlining possibilities and techniques applicable to the field are two of the primary resources I consulted when designing my study. A review of six research texts published within the last 10 years (Freeman, 1998; Hatch & Lazaraton, 1991; Johnson, 1992; McDonough & McDonough, 1997; Nunan, 1992; Schachter & Gass, 1996) showed that each was particularly strong in certain areas. Some, however, made only passing mention of the difficulties I experienced in the course of my research, while others offered practical advice on how to deal with them.

Approaches to Research in Second Language Learning (Johnson, 1992) describes correlational, case study, survey, ethnographic, experimental, and multi-method approaches to research, and it presents detailed summaries of such studies conducted in a range of sociocultural and sociopolitical contexts. The author provides definitions, principles, advantages, disadvantages, and techniques characteristic of each methodology. The difficulties I experienced working with intact classes and non-equivalent groups are noted, and useful suggestions for data collection (e.g., audio- and video-recording, designing questionnaires) and analysis (e.g., inter-rater reliability, time sampling) are

made. I gleaned many useful insights from this text, although it did not provide the practical, step-by-step procedures for conducting research that I also sought.

Research Methods in Language Learning (Nunan, 1992) also covers a wide range of topics: experiments, ethnography, case study, classroom observation and research, introspection (think-alouds, diaries, retrospection), elicitation techniques, interaction analysis, and program evaluation. Nunan provides definitions and principles of the methods, along with extensive illustrative data from SLA studies.

Of particular interest to me were the tables listing problems, threats to validity and reliability, strengths and weaknesses, and/or practical issues and procedures associated with methods. The text touches on such issues as the use of intact classes, techniques to enhance data collection, task artifacts, and difficulties with interpretation of data. Each chapter contains practical closing questions and tasks that present published data to analyze and/or suggest related journal articles to critique. The final chapter cites problems commonly encountered by researchers, with references to mainstream education research manuals that discuss practical difficulties. In addition, it lists solutions to problems encountered by graduate students at various stages of the research process. One of the recurring solutions is to consult others -- supervisors, statisticians, interested students and teacher practitioners -- acknowledgement that this research manual alone is unlikely to provide sufficient guidance in all contexts; that advice, however, would be of little assistance to teachers or researchers working in isolation with no access to such support.

Research Methods for English Language Teachers (McDonough & McDonough, 1997) introduces teachers to classroom observation, diaries, experiments, questionnaires

and interviews, descriptive statistics, introspection, case studies, and multi-method studies. As well as defining the methods and discussing the underlying principles, advantages, disadvantages, and techniques for each, the authors provide useful references to research texts in mainstream education and to some authentic studies. The strength of this book lies in its description of qualitative research methods. It raises pertinent issues for me concerning experimenter bias, questionnaire design, intact classes, student participation, audio-recordings, reliability, and ethical considerations. Some material seems specifically designed for readers with "research anxiety" (e.g., examples of how research is defined in professions such as journalism and police work, a chapter on "using numbers").

Doing Teacher Research: From Inquiry to Understanding (Freeman, 1998) introduces the teacher-research cycle, illustrated by authentic second language accounts of action research. Activities are included to encourage teachers to reflect on their beliefs and teaching practices and to guide them through the process of action research design and analysis (the latter not exclusively related to language research).

Note is made of some of the issues I confronted: the need for adjusting plans due to time constraints, student absences or attrition, technical difficulties, statistical outliers, and ethical considerations. The appendices are particularly useful, as they listed procedures, suggestions, and further references for loop writing, working with videotapes, and collecting numerous types of data. Researchers other than practising teachers may consider the scope of this text too narrow, but I found the information on data collection techniques very useful in planning my study.

Second Language Classroom Research: Issues and Opportunities (Schachter & Gass, 1996) presents descriptions by external researchers of their experiences planning and conducting classroom research in collaboration with teachers in a variety of settings. The researchers discuss decisions and compromises that had to be made regarding site selection, contextual constraints, selection and collaboration of teachers, student participation, choice of linguistic focus, resources, scheduling, ethics, and reporting. The extensive work required to establish a relationship of trust with students, teachers, and administrators is particularly salient in these accounts and highlights the need for careful planning at all stages of the research process. The focus is restricted but rich in detail; this volume is highly recommended for all researchers initiating collaborative studies in unfamiliar settings.

The Research Manual: Design and Statistics for Applied Linguistics (Hatch & Lazaraton, 1991) is intended to help novice researchers develop an understanding of research design and statistics and to guide them through the research process. The text presents conventional statistical procedures for coding and describing data, comparing groups, and describing relationships in data. Both parametric and non-parametric procedures are included, and extensive reference is made to research in applied linguistics. The authors touch on difficulties I encountered regarding ethics, the use of intact classes, student participation, and data collection. Activities throughout the book reinforce concepts, and reviews of research studies are included to foster the development of critical evaluation skills. This book is very thorough in its treatment, and is aimed chiefly at researchers working within the quantitative paradigm.

The research manuals discussed above are only some of the many useful books that focus on classroom-based second language research. Other texts review research findings on classroom-related issues (e.g., turn-taking, error correction), in addition to addressing problems associated with classroom-based research. Van Lier's (1988) The Classroom and the Language Learner, for example, presents methods of ethnographic classroom research, as well as procedures of data collection and transcription. Second Language Classrooms: Research on Teaching and Learning (Chaudron, 1988) examines research methods and methodological issues involved in classroom-centred studies. A discussion of principles and procedures for conducting research projects in language classrooms is provided in Focus on the Language Classroom (Allwright & Bailey, 1990). Collaborative Action Research for English Language Teachers (Burns, 1998) and Action Research for Language Teachers (Wallace, 1998) are welcome additions to the field, with their discussion of research methods and techniques for collecting and analyzing data to enhance language teaching and learning. All of these texts are of direct relevance to language classroom researchers.

Discussion

Collectively, the research manuals examined above provide a broad overview of the complexities involved in conducting classroom research, with a considerable amount of overlap in some instances. For instance, Hatch and Lazaraton (1991), Johnson (1992), and Nunan (1992) promote the development of skills needed to understand and evaluate published SLA studies; Freeman (1998), Hatch and Lazaraton (1991), and, to a lesser extent, Nunan (1992) outline detailed procedures for developing new research projects.

For a systematic overview of the principles, advantages, and disadvantages of a variety of research methods in applied linguistics, I would recommend Johnson (1992), McDonough and McDonough (1997), Nunan (1992), and Wallace (1998). Texts by Allwright & Bailey (1990), Chaudron (1988), Freeman (1998), Johnson (1992), McDonough and McDonough (1997), Nunan (1992), van Lier (1988), and Wallace (1998) would be of particular interest to teacher-researchers. Schachter and Gass (1996) is essential reading for researchers planning collaboration in classrooms other than their own, and Hatch and Lazaraton (1991) is a key reference for statistical analysis.

Action Research

As a graduate student at a major university, I was fortunate to have had access to a wide range of resources to support my research and to resolve problems that arose. Despite these advantages, I encountered numerous challenges. The authors who promote action research (e.g., Freeman, 1998; McDonough & McDonough, 1997; Nunan, 1992) set very challenging goals for individual practising teachers, whose resources are vastly different from mine. In reality, most instructors of adult ESL learners in my community work year round in low-paying programs that offer little -- or no -- support for research activities. The majority of teachers have minimal time for course preparation and reflection and even less opportunity to read the journals or research manuals to which they might have access. Without a clear understanding of the research process and relevant literature, however, aspiring teacher-researchers chance wasting their time and energy on fruitless endeavors. As the editor of one educational research journal wrote, "As a qualitative researcher myself, I have been saddened to see reports of so many small, superficial,

'exploratory' studies on topics that have already been much explored, the territory by now well mapped" (Young, 1998, p. 249).

The average teacher who does have time to keep up with professional reading will most certainly have difficulty evaluating the findings of many published studies without some formal knowledge of statistics. Detailed manuals such as Hatch and Lazaraton (1991) may be overwhelming for many. Those who have some knowledge of measurement and evaluation may have acquired it (as did I, for the most part) in mainstream education programs where large-scale parametric studies are the norm and little attention is devoted to the non-parametric studies that are often more appropriate to second language acquisition research. In my experience, statisticians without a background in SLA are frequently unable to offer sound advice appropriate to the context. Furthermore, as classroom action research proposals implemented by teachers may not be submitted for ethical review, it is entirely possible that a poorly conceived project will prove detrimental to the participants. In sum, few language teachers have the necessary means to plan and conduct quality research. As Crookes (1997) notes,

> Because there is comparatively little SL action research going on... I do not think there are many cases where pedagogical problems faced by S/FL teachers are solved through their own investigations and concomitant use of research publications. (pp. 106-7)

Other Alternatives

Exploratory practice (Allwright & Lenzuen, 1997) is related to action research, but it differs in that it uses existing teaching practices to help teachers and learners understand

classroom events, rather than academic research methods and novel pedagogical techniques to solve classroom problems. The eight steps in exploratory practice (identifying, discussing, formulating an understanding, choosing and adapting procedures for further study, conducting the investigation, interpreting outcomes, and deciding implications) may lead to action research or to collaboration with other teachers or external researchers. Exploratory practice is designed to be relevant, sustainable, collegial, and conducive to professional development.

Collaborative action research can promote beneficial communication with students and with colleagues in a wide range of contexts, and Wallace (1998) endorses it as a means of overcoming the professional isolation in which many teacher researchers find themselves. Burns (1998) points out that collaboration with others to solve problems was the original aim of action research. She promotes research initiated by groups of teachers with common interests, and provides extensive accounts of second language action researchers working with adult immigrants in Australia.

Interactive collaboration with external SLA researchers can be very beneficial in a variety of ways. This group is more apt to have the time and expertise to undertake the literature review, to write applications for ethics review, to carry out formal analyses, and to disseminate results. Teachers can play a more central role in formulating questions, helping to design the research project, providing instruction, and interpreting findings from the classroom perspective. This approach, which might include both quantitative and qualitative data collection procedures, offers a solid foundation for academic research inquiry. Such collaboration is also likely to enhance the profile of research in the teaching community. I initiated my study as an outside researcher; unfortunately, I know of very

few instances in my community in which a teacher has initiated a collaborative research project with an external SLA researcher.

Conclusion

None of the research manuals that I reviewed, for classroom teachers or for external researchers, provides a truly comprehensive treatment of the many complexities of the research process. SLA research texts need to reflect the wide range of realities of the contexts in which our research is conducted. None of the texts discussed in this paper deal with all of the difficulties I encountered: non-equivalent classes; lack of teacher commitment; limited numbers of participants; changes in student dynamics; equipment failure and poor recording facilities; insufficient coding guidelines; task inconsistencies, and data analysis constraints. The SLA field has matured to the point where a truly comprehensive research handbook is not only viable but indispensable. Such a manual would ideally cover both the theoretical and practical aspects of research in a variety of SLA contexts. Eventually, I hope, research manuals will also offer suggestions for reconciling the dilemmas that we face in working with the intact classes so prevalent in our field.

In the meanwhile, the best assurance of quality research design, implementation, and analysis for novice classroom-based researchers must include the following: numerous research manuals in both SLA and mainstream education; texts that focus on specific research methods (e.g., surveys, interviews); pertinent published research reports; extensive pilot testing of research; and consultations with colleagues and seasoned researchers, in collaboration, in class, or on-line (e.g., the TESOL Research

Interest Section discussion list). Even with the most meticulous preparation, however, constraints such as intact classes cannot always be circumvented. For investigators like me, it may be precisely those concomitant complexities that make classroom-based research such an exciting challenge.

Note

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III. EFFECTS OF COMMUNICATION STRATEGY INSTRUCTION IN THE ESL CLASSROOM

Communication Strategy Research

For many years, teachers and researchers have been interested in "good language learner" behaviours and what they might be able to contribute to the process of helping poor language learners become more effective. Many of the studies that have been carried out to identify useful strategies both for learning and using a second language have resulted in the development of taxonomies of second language strategies (e.g., Naiman, Fröhlich, Stern, & Todesco, 1978; O'Malley & Chamot, 1990; Politzer, 1983; Politzer & McGroarty, 1985; Prokop, 1989; Rubin, 1975). Over time, based on this bank of research, an increasing number of learner and teacher resources have provided suggestions for learner strategy training (e.g., Brown, 1989; Chamot, 1996; Ellis & Sinclair, 1989; Gill & Hartmann, 1993; James, 1993; Oxford, 1990; Rubin & Thompson, 1994; Weaver & Cohen, 1997; Willing, 1989).

One subset of second language strategies identified by researchers over the past quarter of a century is the category of communication strategies. The term 'communication strategy' (CS) was first coined by Selinker in 1972 in his discussion of learner interlanguage. A number of definitions were subsequently proposed, the broadest being that of Canale (1983; Canale & Swain, 1980), who defined strategic competence, one of the four components of communicative competence, as

> mastery of verbal and non-verbal communication strategies that may be called into action for two main reasons: (a) to compensate for breakdowns in communication due to limiting conditions in actual communication (e.g.

> momentary inability to recall an idea or grammatical form) or to insufficient competence in one or more of the other areas of communicative competence [i.e., grammatical, sociolinguistic, and/or discourse competence]; and (b) to enhance the effectiveness of communication.... (Canale, 1983, p. 11)

Several taxonomies of communication strategies have emerged over the years (e.g., Bialystok, 1983, 1990; Dörnyei & Scott, 1995; Faerch & Kasper, 1983; Paribakht, 1985; Poulisse, 1993; Tarone, 1977; Willems, 1987; for an overview, see Dörnyei & Scott, 1997). Despite differences in terminology and rationale for classification, there are many similarities among them. Most communication strategy work to date has focused on 'achievement' or compensatory strategies (e.g., paraphrase, word coinage, appeals for assistance, conscious transfer) rather than 'reduction' or avoidance strategies (e.g., simplification, topic avoidance, message abandonment).

As Guillot (1999) has noted, communication strategies "involve an interplay of available resources which is part and parcel of verbal exchange (for learners as for native speakers), yet is only selectively incorporated into teaching" (p. 43). Many communication strategies, such as paraphrase, are universal; Kellerman (1991) argues that communication strategies that are present in the learner's L1 should transfer to the L2, and that learners have no need for instruction in skills they have already acquired. Other researchers contend, however, that "learners must be shown how such a strategy can be implemented in the second language... Furthermore, learners must be encouraged to use such strategies (rather than remain silent...) and must be given the opportunity to use them" (Canale, 1983, p. 11). Numerous researchers have examined the 'teachability'

of communication strategies (e.g., Chen, 1990; Dörnyei, 1995; Faerch & Kasper, 1983, 1986; Haastrup & Phillipson, 1983; Paribakht, 1985; Salamone & Marsal, 1997; Scullen & Jourdain, 2000; Tarone, 1984; Tarone & Yule, 1989; Willems, 1987). Others have investigated relationships between communication strategy use and cognitive style (Littlemore, 1998), communication strategy use and proficiency level (e.g., Bialystok, 1983; Liskin-Gasparro, 1996; Paribakht, 1985; Poulisse & Schils, 1989), and communication strategy use by native speakers versus non-native speakers (Jourdain, 2000; Poulisse, 1990).

Recent interventionist studies of the effects of communication strategy instruction have been conducted by Dörnyei (1995), Salamone and Marsal (1997), Cohen, Weaver, and Li (1998), and Scullen and Jourdain (2000). Dörnyei (1995) conducted a quasi-experimental study in secondary school EFL classes in Hungary, in which three types of strategies were taught to learners in the treatment group: circumlocution, fillers and hesitation devices, and topic avoidance and replacement. In one control group, students received the regular instruction defined by the EFL curriculum; in the second, these lessons were supplemented by special conversational instruction (e.g., oral communication tasks). The oral pre- and post-tests included (a) a 3-minute monologue on an abstract topic; (b) a description of a 3- to 4-frame cartoon; and (c) five Hungarian terms to be defined or explained in English. Results of analyses showed significant between-group differences in favour of the treatment group in quality of definitions in the third task, but not in overall frequency of circumlocutions or speech rate. The quality of definition task appeared to be very similar to the type of task that the students practiced during the instructional period.

Two intact intermediate university French classes of 12 students each participated in a study by Salamone and Marsal (1997) to investigate the effects of communication strategy instruction. The classes, one of which functioned as a control group, completed pre-tests and a post-test that elicited explanations of eleven concrete nouns, five abstract nouns, and four shapes. The descriptions were rated for quality on a 4-point scale. The experimental class received an informational handout and practice in circumlocution; in addition, they were encouraged to use the strategies whenever they encountered lexical difficulties. Both groups showed significant improvement over time, but there were no significant statistical differences between the two groups on the post-test. Qualitative analyses revealed that, although the treatment group used greater precision in their descriptions, the comparison group benefited from a greater willingness to offer opinions, value judgments, and creative guesses.

Cohen, Weaver, and Li (1998) conducted a quasi-experimental study with 55 university students in six French and Norwegian intermediate level foreign language classes. Teachers of the treatment groups, who had been trained to provide strategy-based instruction for foreign language teaching, followed the regular French or Norwegian language syllabus for 10 weeks using strategy-based lesson plans. A list of strategies considered useful for speaking activities (including circumlocution) was compiled by teachers and students at the end of the experiment (Cohen, Weaver, & Li, 1998, pp.153-156). It is unclear, however, to what extent all these strategies were included in the classroom activities of each treatment group. Pre- and post-test tasks consisted of a physical self-description, an oral summary of a folktale presented to the learners in written form, and a description of the learner's favourite city. Students also completed

strategy checklists (using a 5-point scale) to identify the extent to which they employed specific strategies before, during, and after each speaking task. The learner version of the Strategy Inventory for Language Learning (Oxford, 1990) was included in the pre- and post-tests; think-aloud protocols were also elicited from a subset of learners as they completed the post-test checklists. Analyses showed that the overall speaking scores of participants in the experimental group were significantly higher for the city description task, and their grammar on the city description task was significantly superior to that of the comparison group; in addition, the authors report that the French learners in the experimental group received significantly higher ratings on vocabulary in the self-description task than did the French learners in the comparison group. It is difficult to determine, however, to what extent these last two differences can be attributed to the strategy instruction, as some teachers may have placed more emphasis on vocabulary and grammar in their classes than others.

Scullen and Jourdain (2000) investigated the effects of 45 hours of explicit teaching of circumlocution. Participants in both the control and experimental groups of French as a foreign language students completed a pre-test, three practice sessions and post-tests. The experimental group was given explicit training in the use of superordination, analogy, and function and description, before the first, second, and third practice session, respectively. Students role-played placing catalogue telephone orders with their peers for four items in the pre-test and four different items in the post-test. Results showed that both the experimental and control groups made significant gains in successful identification over time, but the between-group difference on the post-test was non-significant.

Findings from studies such as those described above suggest that the relationship between communication strategy instruction and second language performance is complex, and that more studies must be conducted before we can feel confident that we have a clear understanding of how or whether second language communication strategies are acquired and used and, ultimately, whether they are effective in facilitating communicative competence.

Self-Efficacy Research

Motivation is crucial for learning success; one theory of motivation that supports strategy instruction and is of particular relevance to the second language context is self-efficacy. A social cognition concept, self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). Appraisals of personal self-efficacy influence motivation in several ways: they determine the goals people set, the effort they expend to achieve those goals, their persistence, and their resistance to failure (Bandura, 1986); these, in turn, affect achievement (Locke, 1996; Pintrich & De Groot, 1990; Schunk, 1984, 1991; Schunk & Gunn, 1985). When people acquire the skills and strategies they need, their perceptions of self-efficacy rise; they are more likely to set challenging goals, expend greater effort to achieve those goals, persist longer, and show greater resilience to failure. These behaviours are requisite for successful second language learning. Despite calls for expansion of the concept of motivation in second language acquisition (Crookes & Schmidt, 1991; Dörnyei, 1994a, 1994b; Oxford & Shearin, 1994; Tremblay &

Gardner, 1995) and advances in the theory and application of language learning strategies, few longitudinal empirical studies have been carried out.

Self-efficacy alone will not lead to communicative competence. Learners must have the necessary skills (Schunk, 1996) for effective communication, and the search for the most effective ways of teaching these skills is of continuing interest to ESL practitioners. Although much is made in the teaching community of the value of strategies and of the importance of teaching ESL students to use them, research findings from the CS studies that have been carried out to date have produced somewhat mixed results. Some of these inconsistencies have been attributed in part to the following limitations: use of varying taxonomies (see Dörnyei & Scott, 1997) and retrospective measures (see Cohen, 1994); inadequate training periods; isolation of strategy training from regular classroom curriculum; lack of perceived relevance of CS instruction; and adverse effects of learners' "dysfunctional attitudes and beliefs" (Oxford, Crookall, Cohen, Lavine, Hyikos, & Sutter, 1990, p. 200). Others include disruption of regular classes to assign learners to treatment groups, inconsistency in measures used across studies, instruction by an outside researcher in place of the regular classroom teacher, overriding cultural preferences of learners, lack of longitudinal data, varying levels of proficiency, and inattention to motivation and personality factors (McDonough, 1995).

The research reported here comes from a larger study I conducted, and it describes a teaching experiment that addresses many of the issues mentioned above, in order to clarify the role of strategy instruction in the second language classroom. I was interested in investigating the effects of communication strategy training across tasks (narrative and object description) and over time (at Weeks 1, 5, 10, and 15).

Paraphrase was chosen as the focus for instruction because it is an achievement (goal-attainment) strategy with extensive lexical and syntactic elements that could be integrated into the communicative curriculum. Paraphrase can involve circumlocution, the use of an example, description, or illustration of the properties or characteristics of a concept for which the word or phrase in the target language is unknown (Dörnyei & Scott, 1997) (e.g., 'loveseat': 'a small sofa for two people'); it may also include approximation or superordination (e.g., 'moose' or 'animal' for 'deer').

Research Questions

The following questions formed the basis for this research:

1. Does communication strategy training lead to greater use of communication strategies?
2. Does communication strategy training lead to improved L2 performance?
3. Does communication strategy training lead to a greater sense of self-efficacy?

Method

Participants

ESL Students

Thirty adult students (13 male, 17 female) of intermediate ESL proficiency participated in this study. They were placed in intermediate English classes on the basis of a composite score derived from an in-house diagnostic grammar test, a Gates-MacGinitie Reading Test (MacGinitie, 1978), the Secondary Level English Proficiency listening subtest (Educational Testing Service, 1981), and an informal interview. The groups were

very similar in composition. The learners ranged in age from 19 to 59 years, with a mean age of 35 years. Twelve students had attended post-secondary studies, 14 had a high school education, and 4 had less than high school equivalence. Their mean length of residence in English-speaking Canada was 4 years (range 1 month - 26 years). Students had varied opportunities for contact with native speakers (NSs) of English. When asked how often they conversed for more than 10 minutes with NSs outside the classroom, 9 indicated 'never', 13 reported 'less than once a day', and 7 responded that they did so once a day or more (1 missing case).

Data were collected from the students in the comparison condition in Term 1. Fifteen students participated in the pre-test, and the immediate and delayed post-tests; seven of these also completed the follow-up interview. In Term 2, data were collected from the communication strategies treatment group; fifteen participants completed the pre-test, and the immediate and delayed post-tests, and nine the follow-up interview. One student in the treatment group was excluded from the study because of a severe hearing disability, and three others were not included because they had participated in the study during the previous term.

Teachers

The comparison group (Term 1) was taught by a teacher with 5 years' experience teaching ESL/EFL. She had completed a post-graduate Diploma in Applied Linguistics and was enrolled in a TESL M.Ed. degree program when she participated in this study. Because of scheduling changes, the communication strategies group (Term 2) was

instructed by a second teacher, with a B.A. in TESL, an M.Ed. degree in Instructional Technology with a TESL focus, and 13 years' experience teaching ESL/EFL.

At the beginning of each term, I met with the teacher to explain her/his role in the study. The teacher of the comparison group (Term 1) was given a brief explanation of the study, with no mention of the focus of the experiment, in order to discourage experimental treatment diffusion. With the teacher of the treatment condition, I discussed the nature and objectives of the study, provided some background reading in the area (Brown, 1979; Weaver & Cohen, 1997), and answered any questions he had. We also discussed the importance of ensuring treatment fidelity.

Classroom observations of the teachers were conducted before and on a weekly basis during the study using the Communicative Orientation of Language Teaching (COLT) Observation Scheme (Spada & Fröhlich, 1995) to determine the type of activities that students were engaged in during the classes. Over the duration of the study, the researcher observed 12 hours of classes of the comparison condition (Term 1) and 18 hours of the communication strategy condition (Term 2). Both teachers demonstrated a communicative approach to teaching, followed a common curriculum, and used the same core textbooks in each course. The teachers were provided with a mini-tape recorder, batteries, and cassette tapes. They were asked to record the instructional and whole-class portion of their lessons, but were told that they could omit taping group activities in which there was likely to be a lot of background noise. In the comparative condition (Term 1), the instructor recorded 8 hours of general classroom instruction and provided a copy of all daily lesson plans; these provided a framework for incorporating strategy instruction into the regular curriculum for the communication strategy treatment group. In

the treatment condition (Term 2), the instructor tape-recorded 15 hours of strategy and general class instruction. Throughout the communication strategy instruction period, the instructor kept a log indicating the date and length of each lesson, the involvement level of the students (on a scale from 1 'very low' to 5 'very high'), problems encountered, and related comments. The researcher kept in close contact with the instructor during this period by telephone and by email, in addition to weekly visits.

Interlocutor

The interlocutor who worked with participants in the pre- and post- dyadic tasks over all three terms was a female graduate student in the M.Ed. program with specialized TESL training and ESL teaching experience. She was younger than the mean age of the participants, had native speaker proficiency, and quickly established rapport with the students. The principal researcher was always present as an observer.

Strategy Instruction

The researcher discussed in advance with the teacher the 12 hours of communication strategy lessons he would deliver to the treatment group. Lessons were designed or adapted by the researcher for use in the communication strategies condition. Training included raising learners' awareness of the potential usefulness of paraphrase, modeling the strategy, and providing explicit instruction and practice. The latter included activities such as inkblot interpretation (e.g., Keller & Warner, 1979), communication crosswords (e.g., Woodeson, 1982), odd one out (e.g., Ur, 1981), "same or different?" (e.g., Klippel, 1984), classification (e.g., McEldowney, 1982), and riddles (e.g., Hadfield & Hadfield,

1990). Each lesson was given to the teacher ahead of time, with accompanying handouts, overheads, and materials for the class activity.

In order not to bias reaction to the lessons, the strategy instruction was scheduled and delivered by the regular classroom teacher and embedded within the curriculum; the researcher was not present for any of the strategy instruction. All students in the communication condition, whether they were participants in the study or not, received strategy instruction as part of their regular program.

Speaking Tasks

The pre- and post-test speaking tasks differed in type from the practice tasks in the instructional phase of the study; this was to determine if strategies taught in class would transfer to other task types in contexts outside the classroom. At the pre-test administration, participants described one picture story and three objects. At the immediate post-test, they told a new picture story and described four objects (one repeated, three new). At the delayed post-test, learners narrated two new picture stories and described five objects (one repeated from each previous administration, three new). At the follow-up administration, participants described two picture stories (one repeated from the first administration, one new) and six objects (one repeated from each previous administration, three new). These tasks are described in detail below.

Picture Stories

In all, five picture stories were used in this study. In order to ascertain that they were of comparable difficulty, an independent class of 18 ESL learners at the same intermediate level of proficiency as the comparison and experimental groups (Canadian Language

Benchmark 7) rated each of them on a 5-point scale (1 = 'very easy', 5 = 'very difficult'). There was no significant difference in narrative difficulty; mean ratings ranged from 2.1 to 2.7.

At the first administration, participants received a set of instructions. These were read aloud to the learners as they followed them in writing: "You will receive a set of eight pictures. They tell a story about a man and woman who left the city to live in the country. Look at the pictures. You will have 1 minute to do this.... Then tell the story to your listener, using the pictures. Try to give as much information about the pictures as possible. Your listener has the same pictures, but in a different order. As you tell the story, your listener will try to put the pictures in the correct order."

The first picture story used (Rollet & Tremblay, 1975) shows a couple who move to the country, fail to adapt to the physical demands of rural life, and decide to return to an easier life in the city. The second (Munro & Derwing, 1994) is a story of two men who go hunting, fail to find any game, return to find deer looking into their car, and end up shooting photos of the animals. The third set of pictures (Munro & Derwing, 1998, see Appendix A) is the story of a man and a woman who collide on a busy street corner, drop their matching suitcases, and arrive at their destinations to find that each of them had picked up the wrong piece of luggage. The fourth picture story (Heyer, 1997) shows a man who wins the lottery, realizes that he has accidentally thrown away his ticket, and searches the garbage dump with his friends until the ticket is found. The final narrative, consisting of selected frames from a children's story (Mayer, 1969), depicts a boy's loss of and eventual reunion with his pet frog. All tasks administered to the comparison and treatment groups were audio-taped and transcribed by the researcher. Field notes taken by

the researcher during task administrations were used to assist in the transcription and analysis when difficulties arose.

Real-World Objects

Students received one sample object and the following instructions for the object description task: "You will receive four objects to describe, one by one. Look at each object carefully. Try to give as much information about the object as possible. Your listener has several similar objects. As you describe your objects, the listener will try to identify them." The real-world objects selected for description were such that naming the object alone (e.g., a button) would not suffice to identify it, as the interlocutor had one identical and four similar objects.

Self-Report Instruments

Self-Efficacy Scales

After the participants had examined each communication task (picture story, sample object), they estimated their perception of self-efficacy for providing accurate descriptions of the stimuli (see Appendix B), using a scale that ranged from 0% to 100% (Locke, Fredrick, Lee & Bobko, 1984; Pintrich & De Groot, 1990). In the same way, they estimated their self-efficacy for learning to perform that task (Schunk, 1996).

Usefulness of Strategy Instruction

At the end of the immediate post-test administration, students in the communication strategy treatment condition completed an evaluation of the usefulness of the strategy

instruction they had received in the classroom. Using a 5-point scale from 1 'not at all' to 5 'a lot', they assessed the extent to which practice in paraphrase had helped them in three contexts: in classroom activities, in the research experiment, and in real life.

Procedure

Each participant was interviewed a minimum of three times (at Weeks 1, 5, and 10); the majority of participants who completed the tasks at the follow-up session (Week 15) were continuing students in ESL courses or other programs in the college. Students in the ESL program left their classroom one at a time for sessions of 30 to 40 minutes conducted in another room of the school. For the follow-up administration, those students who had transferred to programs at a different campus were interviewed in a quiet room there between classes. In all cases, the students were seated at a table face-to-face in dialogue condition with the interlocutor, separated by a low barrier that permitted eye contact. In front of the participant was a flat conference microphone; although a unidirectional microphone might have provided clearer audio-tapes, the omni-directional microphone was considered less intimidating. The researcher sat to one end of the table, where she operated the tape recorder and gave instructions and passed the stimuli to the students. Feedback from the interlocutor to the participant was limited to a few utterances such as: "Can you tell me a little more?" or "Is it this one?" In addition to audiotaping the sessions, the researcher made note of students' comments, paralinguistic behaviours, and words that were difficult to hear and thus might not have been recorded clearly.

Data Analysis

Learners' productions on the narratives were transcribed and timed. For each narrative, I counted the number of words and calculated the speech rate in words per minute. Fillers such as "uh" or "um" were excluded from the word count. I coded and counted communication strategies used (e.g., approximation, superordination, analogy, circumlocution). Instances of message abandonment ("I can't say this.") were also coded and counted; these consisted of abandonment of specific features within a particular task. For example, faced with communication difficulty, learners might abandon one feature (e.g., the shape of an object) and subsequently switch to another (e.g., length) in order to maintain their chances of completing the task successfully.

I collected narrative baseline data from nine native speakers and two native-like speakers (see Derwing, 1989). Three NSs identified in writing the information that they considered most important in each frame of the five narratives; the others audiotaped their descriptions of the picture stories for analysis. Once these data were compiled, the most pivotal or most salient elements named by the vast majority of all participants were determined to be essential to each frame (see Tomlin, 1984). Success was then calculated for the learner narratives. Each essential element described in a frame merited 1 point; an additional 5 points were awarded for having understood the overall intention or gist of the story (see Appendix C). The success scores were then transformed to percentages.

The object descriptions were transcribed and timed to the point of successful identification (or the end of the description, if the interlocutor had not been able to make an accurate identification). Words were counted to the point of identification, and communication strategies were coded and counted, as in the narratives. At each

administration, three new objects were presented; an overall success score was derived for each administration, based on the total number of items correctly identified by the interlocutor.

Results

Statistical Analyses

The object of this study was to determine the effects of communication strategy instruction on the use of communication strategies, on L2 performance, and on learner self-efficacy. A summary of findings is shown in Table 3-1. It was expected that the measure on which instruction would have the most direct effect would be the number of types (range) of communication strategies used to complete the tasks. Data from one participant in the comparison group was eliminated when the learner's score was identified as the sole outlier in the range of communication strategies data obtained from the object description task. As parametric tests were not appropriate for the frequency data (Hatch & Lazaraton, 1991, p. 237), Friedman tests were performed for each group to determine the statistical significance of changes over time in frequency of strategy use and message abandonment. Wilcoxon Signed-Ranks tests were used to identify where significant within-group differences occurred. Mann-Whitney U tests for two independent samples were used to detect between-group differences in frequency of strategy use and message abandonment gain scores.

Analyses of variance (ANOVA) for repeated measures were conducted to determine differences over time and between groups at Times 1, 2, and 3 in success, speech rate, task self-efficacy, and self-efficacy for learning. Paired-samples t-tests were

carried out to determine where significant within-group differences occurred in success, speech rate, task self-efficacy, and self-efficacy for learning responses.

Friedman tests were conducted to determine differences over time for the subsets of participants in each group (7 in the comparison condition and 9 in the treatment condition) who completed all four sets of tasks. Because of the small numbers, nonparametric procedures were used for all analyses in these groups. Wilcoxon Signed-Ranks tests were used to locate significant within-group differences. Mann-Whitney U tests were carried out to determine significant between-group differences.

The Bonferroni procedure is normally conducted to control Type 1 error when more than one analysis is carried out on specific data. In order to afford maximum opportunity for effects of strategy instruction to be shown, Bonferroni adjustments were not made in either the parametric or the nonparametric tests; therefore, actual p values are reported for each of the analyses.

Whole Group Results

Usefulness of Communication Strategy Instruction, T2

At the immediate post-test, all learners in the treatment condition evaluated the usefulness of the strategy instruction on a 5-point scale. The mean rating for usefulness of communication strategy instruction for classroom activities was 4.27 (mode = 5; s.d. = .80); for the experiment, the mean rating was 3.93 (mode = 5; s.d. = 1.33), and for real life purposes, the mean was 3.60 (mode = 5; s.d. = 1.30).

Table 3-1

Mean Scores for Each Group Across Time

	Comparison Group n=15			Treatment Group n=15		
Narratives	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Strategy use (tokens)	2.80	6.27**	2.87	1.87	5.53**	2.13
Success (%)	58.07	80.67*	77.53*	74.00	83.00	87.17
Message abandonment	.67	.47	.30	.73	.40	.07**
Speech rate (wpm)	64.52	72.32**	81.78**	75.27	77.42	85.69**
Task self-efficacy (%)	58.80	66.27	69.33	64.07	66.47	63.08
Self-efficacy for learning (%)	63.67	70.67	69.67	70.67	69.33	62.33
Objects	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Strategy use (tokens)	5.47	8.13**	10.44**	5.22	8.00**	9.91**
Strategy use (types)	8.87	8.87	10.13*	7.87	9.40**	10.60**
Success (%)	82.24	77.78	82.22	80.00	86.67	84.44
Message abandonment	.47	.20	.13	.47	.47	.20
Speech rate (wpm)	68.78	64.82	67.63	53.84	59.62	64.40
Task self-efficacy (%)	50.45	57.99	65.11*	42.21	58.67*	64.23*
Self-efficacy for learning(%)	72.67	72.00	68.00	52.67	68.67*	61.33

Note: Significant within-group differences between Times 1 and 2, and between Times 1 and 3 are indicated by *$p<.05$, **$p<.01$. No comparisons are made between Times 2 and 3.

Effects of Strategy Instruction on Communication Strategy Use

Strategy tokens, T1-3

Friedman tests were conducted to determine significant differences over Times 1, 2, and 3 in the number of communication strategy tokens used on the narrative task; the results were significant for both the comparison group (χ^2 [2, n = 15] = 9.552, p = .008) and the treatment group (χ^2 [2, n = 15] = 14.982, p = .001). A Wilcoxon Signed-Ranks test was carried out to determine differences in the average number of tokens of communication strategies used by each group at Times 1, 2, and 3. Analyses revealed that learners in the comparison (z = 2.614, p = .009) and the treatment (z = 3.025, p = .002) groups used significantly more communication strategies in the narratives at Time 2; there was a non-significant difference in use of strategies between Time 1 and Time 3 in both conditions. Results of Mann-Whitney tests performed on strategy use post-test gains were not significant at Time 2 or Time 3 on the narrative task.

Friedman tests showed that there was a significant difference over Times 1, 2, and 3 in the average number of tokens of strategies used in the object descriptions by the comparison group (χ^2 [2, n = 30] = 22.068, p = .000) and the treatment group (χ^2 [2, n = 15] = 19.559, p = .000). Wilcoxon Signed-Ranks tests showed a significant increase in strategy tokens employed between Times 1 and 2 for both the comparison and communication strategy groups (z = 3.049, p = .002 and z = 3.070, p = .002, respectively), and also between Time 1 and Time 3 (z = 3.354, p = .001, and z = 3.298, p = .001, respectively). Mann-Whitney U analyses of strategy use gain scores on the object description task were non-significant at Time 2 and Time 3.

Strategy range, T1-3

An analysis was carried out on the number of types of strategies (e.g., analogy, superordination, approximation, use, spatial dimensions) that were used to describe each set of new objects at Time 1, Time 2, and Time 3. Friedman tests revealed a significant difference over time in the range of strategies used by the treatment group (χ^2 [2, n = 15] = 17.094, p = .000), but not by the comparison group. Wilcoxon Signed-Ranks tests showed that the comparison group used a significantly greater number of types of strategies at Time 3 than at Time 1 (z = 2.160, p = .031), although there was no difference between Times 1 and 2. The treatment group showed a significant increase in range of strategies between Times 1 and 2 (z = 2.439, p = .015) and between Times 1 and 3 (z = 3.316, p = .001). Mann-Whitney U analyses of between-group differences on gain scores of the number of categories of strategies used in the object description task were significant at Time 2 (χ^2 = 57, p = .020), and there was a trend toward significance (χ^2 = 67, p = .056) at Time 3, also in favour of the communication strategies group.

Effects of Communication Strategy Instruction on L2 Performance

Success, T1-3

An analysis of variance for repeated measures revealed significant effects of time (F [2, 56] = 10.694, p = .000), but no significant interaction and no significant between-group differences on the narrative task. Paired sample t-tests of mean narrative success scores showed significant increases for participants in the comparison group from Time 1 to Time 2 (t [14] = 3.395, p = .004) and from Time 1 to Time 3 (t [14] = 3.175, p = .007). Participants in the treatment group made non-significant gains over time, although there

was a trend toward significance between Times 1 and 3 (t [14] = 2.120, p = .052). An ANOVA conducted on the object description success scores revealed non-significant effects for time, no significant interaction, and no significant between-group differences.

Message Abandonment, T1-3

The instances of message abandonment in each group were low. The Friedman test revealed a trend toward significance in instances of message abandonment over time on the narrative task by the treatment group (χ^2 [2, n = 15] = 5.515, p = .063). Although both the comparison and the treatment groups showed a consistent decrease at Time 2 and between Times 1 and 3, Wilcoxon Signed-Rank tests showed this decrease was significant only for the communication strategy group between Time 1 and Time 3 (z = 2.558, p = .011). Results of Mann-Whitney U analyses of between-group differences performed on the message abandonment frequency gain scores were non-significant on the narrative task.

Friedman analyses of message abandonment in the object descriptions over time were not significant, and the Mann-Whitney U tests showed no significant between-group differences on this measure.

Speech rate, T1-3

A repeated measures ANOVA showed significant effects of time (F [2, 56] = 12.521, p = .000), but no interaction and no between-group differences on speech rate in the narrative task. Paired-samples t-tests showed a significant increase for the comparison group at Time 2 and between Time 1 and Time 3, (t [14] = 2.973, p = .010, and t [14] = 3.692, p =

.002, respectively). T–tests also revealed significant gains in speech rate on the narrative productions between Time 1 and Time 3 for the treatment group (t [14] = 2.578, p = .022).

On the object description speech rate, an ANOVA for repeated measures found no significant effects of time, no interaction, and no between-group differences.

Effects of Communication Strategy Instruction on Self-Efficacy

Task self-efficacy, T1-3

An ANOVA for repeated measures found no significant effect of time, no significant interaction, and no significant between-group differences in narrative task self-efficacy. A repeated measures ANOVA on the object description task found significant effects of time (F [2, 56] = 9.760, p = .000), but no significant interaction and no significant between-group differences. Paired t-tests showed a significant increase in perception of self-efficacy for the comparison group between Time 1 and Time 3 (t [14] = 2.553, p = .023), and also for the treatment group at Time 2 (t [14] = 2.618, p = .020) and between Times 1 and 3 (t [14] = 2.968, p = .010). There were no significant differences for the comparison group between Times 1 and 2.

Self-efficacy for learning, T1-3

A repeated-measures analysis of variance on perceptions of self-efficacy for learning revealed non-significant effects of time, no significant interaction, and no significant between-group differences on the narrative task. On the object description task, there was

a trend toward significance in between-group differences (F [1, 28] = 3.751, p = .063), but no significant differences over time and no interaction.

Results for Subset, Times 1-4

Friedman tests were carried out to determine significant within-group changes in productions for strategy use, success, message abandonment, speech rate, task self-efficacy, and self-efficacy for learning by students in the comparison group (n = 7) and those in the treatment group (n = 9) who completed all four sets of tasks. Wilcoxon Signed-Ranks tests were used to locate within-group differences. Gain scores were calculated; Mann-Whitney U tests were conducted to detect between-group differences on gain scores for strategy use, success, message abandonment, speech rate, task self-efficacy, and self-efficacy for learning. The results that follow describe the within- and between-group differences of these two smaller groups at Times 1, 2, 3, and 4.

Effects of Strategy Instruction on Communication Strategy Use (Subset)

Strategy tokens, T1-4

Friedman tests of strategy use were non-significant over time for the comparison group. Strategy use in the narrative task differed significantly for the treatment group over time (χ^2 [3, n = 9] = 10.866, p = .012). Wilcoxon Signed-Ranks tests showed a significant increase in strategy use (from 2.67 to 6.67) at Time 2 (z = 2.194, p = .028). Mann-Whitney U tests of between-group differences in strategy use on the narrative task were not significant at Times 2, 3, or 4.

Friedman tests showed significant differences over time in number of communication strategies used on the object description task by the treatment group (χ^2 [3, $\underline{n}$ = 9] = 21.472, df = 3, p = .000). According to Wilcoxon Signed-Ranks tests, the use of communication strategies by the communication strategy condition increased significantly at Time 2 ($\underline{z}$ = 2.666, $\underline{p}$ = .008), between Times 1 and 3 ($\underline{z}$ = 2.201, $\underline{p}$ = .028), and between Times 1 and 4 ($\underline{z}$ = 2.692, $\underline{p}$ = .007). Friedman tests also showed significant differences in number of strategies used in the object description task by the comparison group over time (χ^2 [3, $\underline{n}$ = 7] = 10.826, df = 3, p = .013); Wilcoxon Signed-Ranks tests showed significant increases between Times 1 and 3 ($\underline{z}$ = 2.201, $\underline{p}$ = .028) and between Times 1 and 4 ($\underline{z}$ = 2.371, $\underline{p}$ = .018). Mann-Whitney $\underline{U}$ tests detected no significant between-group differences on the object description task gain scores over time.

Strategy range, T1-4

Friedman tests on the range of communication strategies used in the object description task were significant for the treatment group (χ^2 [3, n = 9] = 13.444, p = .004), but not for the comparison group. Wilcoxon Signed-Ranks tests showed significant increases between Times 1 and 2 ($\underline{z}$ = 2.279, $\underline{p}$ = .023), Times 1 and 3 ($\underline{z}$ = 2.552, $\underline{p}$ = .011), and Times 1 and 4 ($\underline{z}$ = 2.552, $\underline{p}$ = .011). Mann-Whitney $\underline{U}$ tests showed significant between-group differences in gain scores only at Time 2 (χ^2 = 12.5, $\underline{p}$ = .042), in favour of the treatment group.

Effects of Communication Strategy Instruction on L2 Performance (Subset)

Success, T1-4

Friedman tests of narrative success rates were non-significant for both the comparison and the treatment group over time. Mann-Whitney U tests of between-group differences in success gain scores for the narrative task were significant at Time 2 ($\chi^2 = 12.5$, $p = .044$) and at Time 3 ($\chi^2 = 8.5$, $p = .015$) in favour of the comparison group.

Friedman tests of object description task success showed no significant change over time for either the comparison or the treatment group.

Message abandonment, T1-4

Friedman tests showed significant differences in narrative message abandonment in the treatment group (χ^2 [3, $n = 9$] = 12.517, $p = .006$). Wilcoxon Signed-Ranks tests showed significant decreases between Times 1 and 3 ($z = 2.456$, $p = .016$) and between Times 1 and 4 ($z = 2.342$, $p = .019$) on the narrative task. Within-group differences in message abandonment on the narrative task were non-significant for the comparison group. Mann-Whitney U tests of between- group differences in narrative message abandonment were non-significant and approached significance only at Time 3 ($\chi^2 = 17$, $p = .056$). Friedman tests of differences in message abandonment on the object description task were not significant over the four time periods for either group.

Speech rate, T1-4

Friedman tests of speech rate changes were significant only in the narratives of the treatment group over time (χ^2 [3, $n = 9$] = 8.657, $p = .034$). Wilcoxon Signed-Ranks tests

showed significant increases in narrative speech rate between Times 1 and 3 ($z = 2.380$, $p = .038$). Friedman tests showed significant differences in the narrative speech rate of the comparison group; Wilcoxon Signed-Ranks tests revealed significant increases at Time 2 ($z = 2.197$, $p = .028$), between Times 1 and 3 ($z = 2.197$, $p = .028$), and between Times 1 and 4 ($z = 2.028$, $p = .043$). Mann-Whitney U tests of between-group differences in narrative speech rate gain scores were not significant.

Friedman tests of within-group differences in speech rate on the object description task were non-significant over time for both conditions.

Effects of Communication Strategy Instruction on Self-Efficacy (Subset)

Task self-efficacy, T1-4

Friedman tests of differences in the narrative task self-efficacy were not significant over time for either the comparison or the treatment group.

Friedman tests revealed significant differences in object description task self-efficacy only for the treatment group (χ^2 [3, $n = 9$] = 13.107, $p = .004$). Wilcoxon Signed-Ranks tests showed significant increases for the treatment group at Time 2 ($z = 2.666$, $p = .008$), between Times 1 and 3 ($z = 2.547$, $p = .011$), and between Times 1 and 4 ($z = 2.431$, $p = .015$). There were no significant within-group differences for the comparison group over the same time periods. Mann-Whitney U tests of between-group differences in object description task self-efficacy gain scores were significant at Times 2 and 3 ($\chi^2 = 9$, $p = .017$ and $\chi^2 = 8.5$, $p = .015$ respectively), in favour of the communication strategy group.

Self-efficacy for learning, T1-4

Friedman tests of differences in self-efficacy for learning were not significant for the comparison or the communication strategy group on the narrative task. Mann-Whitney U tests revealed significant differences in gain scores in favour of the comparison condition on the narrative task at Times 3 (χ^2 =13, p = .049) and at Time 4 (χ^2 = 11, p = .029). There were no within-group differences for either group on the object description task over time.

Discussion

I will discuss each measure separately, with particular attention to differences dependent on task.

Whole Group Results

Usefulness of Communication Strategy Instruction, T2

Results of the scalar judgments regarding the usefulness of the communication strategy instruction suggest that the students perceived a need for communication strategies in the classroom, where they participated in focused activities designed to provide opportunities for practice. It appears that fewer students, however, recognized the possibility of transferring the training to the tasks in the experiment. The mean for usefulness of strategies in real life situations was even lower; this finding is not entirely surprising, given the lack of opportunity that over half of the learners had to engage in conversation with native speakers of English for any significant length of time.

Effects of Strategy Instruction on Communication Strategy Use

Strategy tokens, T1-3

In the narrative task, the significant increase in tokens of communication strategies used by both groups between Times 1 and 2 declined sharply between Times 1 and 3. Strategy use seems to have increased over the period of instruction but was not maintained over the next 5 weeks in either condition. This may reflect the effects of the regular classroom ESL instruction that was delivered to both classes between Weeks 1 and 5 of the study. An illustration of this can be seen in the Move to the country narrative, for example, which was administered at Time 1 and Time 4. In this excerpt, from one of the participants in the treatment group, we see lexical gains at Time 4 that would clearly have limited the need for message abandonment or communication strategy use:

(a) (P41, Time 1) The husband has to paint the house, but he has some trouble painting. I think he fell from... I dunno.

(P41, Time 4) Mr. Johnson put a ladder to paint the walls, but he fell.

(b) (P58, Time 1) And the lady is taking water from the... I don't know how to say... water from outside to... to the hous- inside to the house to use.

(P58, Time 4) ...his wife is uh... taking the water from the well to the house.

As learners' language proficiency increases, their need for communication strategies to prevent communication breakdown appears to decline. The narrative picture frames contained a number of essential elements that would successfully distinguish one from another. Learners were able to avoid describing one aspect of a frame by identifying

another element for which the language was known (see Schachter, 1974). Clearly, different tasks elicit the use of different strategies; it follows, therefore, that multiple task types should be used in the classroom if a variety of communication strategies are to be taught.

The number of tokens of strategies used on the object description task increased significantly at both times for both groups, possibly because of task familiarity. Circumlocution strategies were task-essential (see Loshkey & Bley-Vroman, 1993) in the object description task, rather than an option for task completion, as was the case in the narrative task. All learners were required to provide very specific details in order to identify the objects successfully. As they also received feedback from the interlocutor in their attempts to identify the object, they were able to monitor their progress and were thus perhaps motivated to persist to the point of identification.

Strategy range, T1-3

What is noteworthy, however, is that there was a significant increase in the number of types of strategies used over time only by the communication strategy group. This reflects a direct effect of communication strategy instruction on the immediate post-test performance of the treatment group in the object description task. This finding suggests that although, as Kellerman (1991) proposes, communication strategy use may be transferred from L1 to L2, the range of communication strategies available to L2 learners may be enhanced by specific instruction.

Effects of Communication Strategy Instruction on L2 Performance

Success, T1-3

Success increased on the narrative task for the comparative group between Times 1 and 2 and between Times 1 and 3. The treatment group made consistent gains; however, because their success scores were much higher at Time 1, they had less room for improvement.

On the object description task, success for both groups was initially higher than in the narrative task. This may be due in large part to the particular nature of the object description task. The picture stories tended to elicit monologues; the learner simply told the story and the interlocutor ordered the narrative frames that were described. The object description task, on the other hand, was much more interactive. When learners had provided what they considered to be sufficient information to identify the stimulus, the interlocutor would hold up one of her five similar objects and ask, "Is it this one?" Interaction tended to encourage learners to persist; the interlocutor's question generally triggered a response and a further description from the learner, until the item was correctly identified.

Message abandonment, T1-3

Message abandonment is a reduction strategy that second language users sometimes resort to in the face of communication difficulty. The treatment group showed a trend toward a significant decrease in message abandonment on the narrative task between Times 1 and 3, suggesting that the strategy instruction had a delayed beneficial effect here. As the narratives differed at Times 1, 2, and 3, there is no comparative evidence of

strategy use on the same picture story between Times 1 and 2 or Times 1 and 3. The significant decrease in narrative message abandonment for the communication strategy group suggests that these learners were able to communicate their message more successfully as a result of both general ESL and strategy instruction.

The lack of significant within- and between-group differences in message abandonment on the object description task is surprising, given that the treatment group had received instruction in circumlocution, which was considered to be essential for completion of this task. However, the learners' mean rates of message abandonment at Time 1 in the object description task was much lower than in the narrative task. Consequently, there was less room for improvement and, when improvement did occur in both groups, it was non-significant.

Speech rate, T1-3

Increases in narrative speech rate in both the comparison and strategy groups are likely due to the fact that the learners were spending 20 hours per week in a communicative learning environment. The differences were significant for both groups at Time 3, at which point the learners would have had extensive oral practice in classroom activities.

The lack of between-group differences on the object description task is not altogether surprising. Providing descriptions of the objects was a cognitively more demanding task than describing global events in the picture stories. The detail necessary to achieve success in the object description task would have left fewer attentional resources available for fluency. This may have resulted in trade-off effects between fluency and complexity (Skehan, 1998).

Effects of Communication Strategy Instruction on Self-Efficacy

Task self-efficacy, T1-3

The lack of significant differences in narrative task self-efficacy over time and between groups is not entirely surprising; the likelihood of increased familiarity effects was smaller here than in the object description task, where the items presented each time had common attributes that could be exploited for identification (e.g., shape, color, use, spatial dimensions). Also, the use of communication strategies in the narrative task was not essential; learners could simply avoid describing elements in the story for which they did not have the required vocabulary.

The use of circumlocution was essential for successful completion of the object description task, however, and the same types of descriptors (function, colour, size, etc.) were applicable to the majority of the objects. This task effect may explain, in part, the significant increases in object description self-efficacy for the comparison group at Time 3; it is likely that the significant increases in self-efficacy on both the immediate- and delayed post-tests for the treatment group can be attributed to the communication strategy instruction they received, as well as to task familiarity.

Self-efficacy for learning, T1-3

The lack of significant differences in self-efficacy for learning on the narrative task were not surprising, as learners did not receive instruction in this type of activity and therefore would not have had reason to revise their assessments.

The trend toward significance in self-efficacy for learning on the object description task, in favour of the communication strategy group, is likely a reflection of increased learner confidence following the 12 hours of strategy instruction of this nature that the treatment group had just received. Interestingly, this level of self-efficacy was not maintained to the same degree at the delayed post-test, when there was no longer a primary instructional focus on these strategies.

Results for Subset (Times 1- 4)

The small number of learners that participated in all four task administrations makes it difficult to discuss these findings with any certainty. For the treatment group, it appears that the significant improvements in narrative message abandonment, number of communication strategies used in the narrative task, tokens and types of communication strategies used in the object description task, and object description task self-efficacy scores between Times 1 and 3 were sustained at Time 4. As the instruction that this group received was focused directly on the types of strategies that learners would need to complete the object description tasks, it is not surprising that their strategy use and self-efficacy were high across times. The significant speech rate improvement on the narrative task made by the comparison group over time was maintained at Time 4. This group spent all of its time on the regular ESL curriculum, of which fluency activities were an integral part; they did not lose class time to communication strategy instruction. The significant gain in tokens of strategies employed on the object description task by the comparison group between Times 1 and 3 was also maintained at Time 4, perhaps in part as a result of task familiarity.

Conclusion

This paper outlines the results of a study undertaken to investigate the effects of communication strategy instruction on the strategy use, L2 performance, and self-efficacy of adult intermediate ESL learners over time and across tasks. Results showed significant between-group differences in favour of the treatment group in the range of communication strategies used in the object description task, which was most effective in eliciting the type of communication strategies presented in the instructional component of the study. There was also a trend toward significance in self-efficacy for learning in the object description task for the communication strategy condition. In addition, both groups made some significant improvements over time on a number of measures, including strategy use, speech rate, and task self-efficacy. These findings are convergent with several of the curriculum objectives (development of vocabulary, fluency, self-confidence) that guided the regular ESL instruction in this program.

Twelve hours of classroom time were cut from the usual ESL classroom curriculum in order to deliver this communication strategy instruction to the treatment group. To determine learners' engagement in the activities, the instructor was asked to rate his perception of learners' interest in the lessons on a 5-point scale. The average rating on the 12 lessons was 4.0 (range 3-5), which suggests that the lessons were generally well received by the learners. The overall findings of this study, however, do not provide a strong argument for the inclusion of this type of strategy instruction in ESL classrooms. Despite the fact that there were significant between-group effects on the range of communication strategies used in the object description task, no significant

between-group differences in favour of the treatment group were shown for success, rate of message abandonment, speech rate, task self-efficacy, or self-efficacy for learning.

Second, strategy instruction does not necessarily transfer to all task types (e.g., narrative tasks). Task effects have clearly played a role here. Communication strategies, although potentially useful, were not essential for successful completion of the narrative description task, but the object description task could not be completed without them. It is on the latter task that the treatment group made the greatest gains. This is reminiscent of Dörnyei's (1995) study in which the frequency of circumlocutions in the topic description and cartoon description tasks was low; it was only in the task-essential circumlocutions of the definition task that significant (qualitative) differences in circumlocution were found.

Finally, as shown in the examples above (from the Move to the country narrative), the need for communication strategies to compensate for unknown words or phrases decreases with development of the target language vocabulary. In a communicative curriculum, it is likely that additional time focused on vocabulary instruction would also yield direct benefits for learners. Communication strategies are only one means of achieving successful second language communication.

One of the limitations of this study is that the participants had varying language and cultural backgrounds, personalities, attitudes towards language learning, cognitive styles, oral proficiency (which was not a formal placement factor), language aptitude, language learning beliefs, and motivation, which may have clouded the findings. They were, however, representative of adult ESL classrooms in most regions of Canada. Perhaps, as J. H. Schumann (personal communication, March 13, 2000) has suggested,

classroom interventions are much like medical interventions: they are effective for some, are neutral for others, and may even have negative consequences for the rest.

Studies conducted in more homogeneous classes, or over a longer period of time, might have produced more positive effects. However, even learners with similar backgrounds have individual preferences. Wenden (1987) reports that learners who are concerned with using the language tend to prefer communication strategies, whereas those who are focused on learning about the language report using more cognitive strategies. No single profile exists of either the good or the poor language learner (Stevick, 1989; Vann & Abraham, 1990; Wong-Fillmore, 1983). Qualitative research (e.g., Vann & Abraham, 1990) indicates that both types of learners can deploy similar numbers and choices of strategies.

Issues surrounding communication strategy use are complex, and a great deal of work remains to be done before a clearer picture emerges. In this study, only the increase in range of communication strategies employed by the treatment group in the object description task was significantly superior to that of the comparison group; there were no indirect effects on learner performance in the tasks employed here. It is probable that the improvements within groups and across time on strategy use, success, message abandonment, and speech rate, as evidenced by gain scores in learner productions, were due to the full-time communicative ESL instruction that the classes in this study received. Perhaps, as Bialystok (1990) has claimed, "What one must teach students of a language is not strategy, but language" (p. 147).

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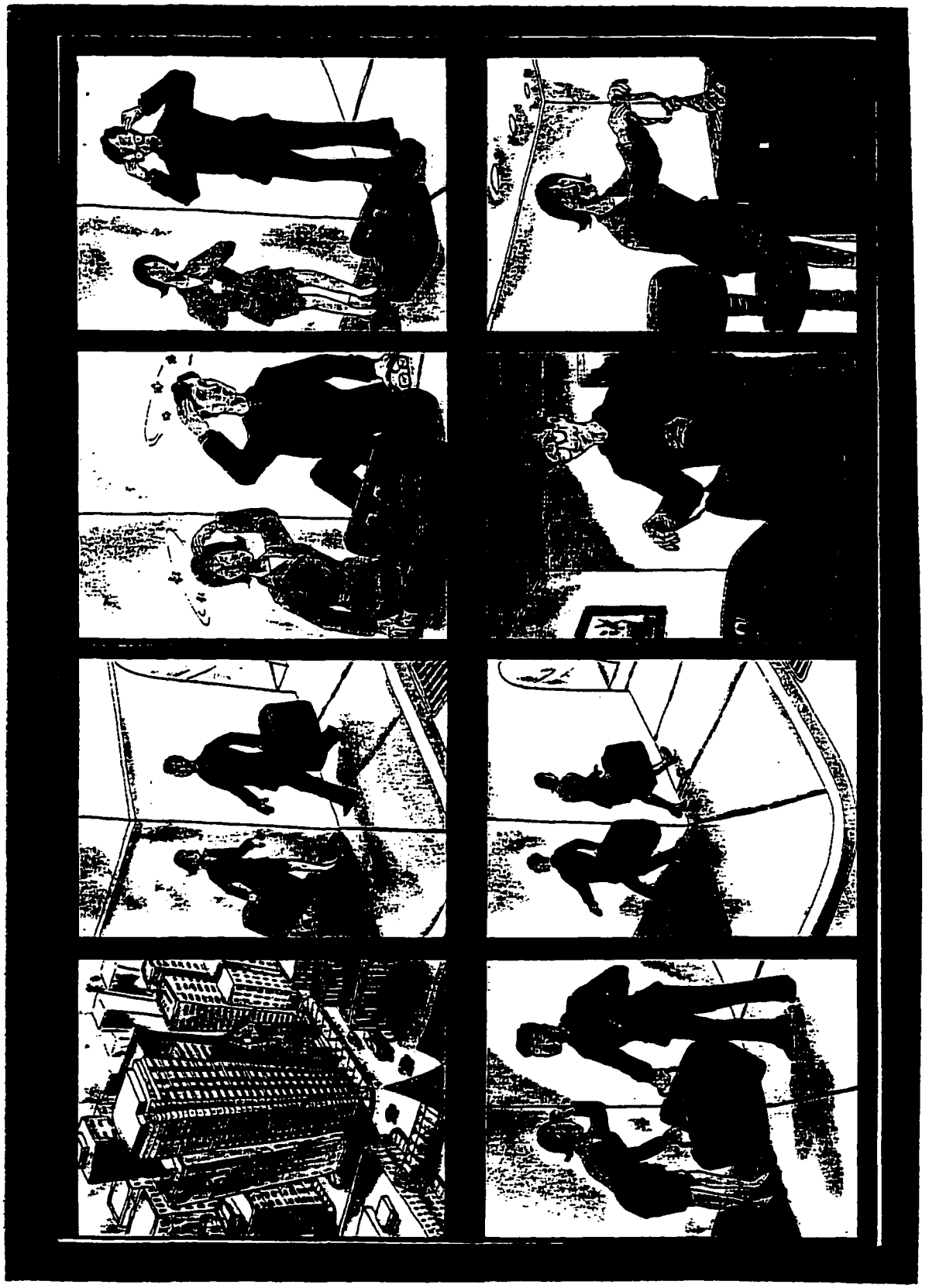
Appendix A: Narrative 3 Stimuli



PICTURE STORY

Instructions:
Read the statements below.
Circle the number that expresses your opinion. Please answer *all* the questions.

How sure are you that you can accurately describe *in detail*...

	Not at all sure										Completely sure
2 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
4 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
6 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
8 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
How sure are you that you could learn to give *excellent* descriptions of stories like this?	0	10	20	30	40	50	60	70	80	90	100%

Appendix C: Narrative 1 Success Rating Scale

Frame	Element (1 point each)	Points
1	couple buys a house	
2	husband falls off ladder	
2	while painting	
3	husband digs in garden	
3	hard work (anywhere in frames 2-6)	
4	wife carries water to the house	
4	from the well	
5	they need firewood	
5	for the fireplace	
6	husband hurts his knee	
6	breaking branches/kindling	
7	they don't like country living	
8	they move back to the city	
	Subtotal (/13)	
	Gist (0 or 5 points)	
	Total (/18)	
	Success rate (%)	

IV. EFFECTS OF AFFECTIVE STRATEGY TRAINING IN THE ESL CLASSROOM

The Role of Affect in Second Language Learning

Differential success in second or foreign language learning has been attributed to individual differences in factors such as intelligence, aptitude, personality, attitudes, motivation, and anxiety. With the advent of humanism in the 1960s, attention turned from a focus on cognitive factors to a more balanced, holistic approach to learners, which took into consideration the influence of their emotions and feelings. Maslow (1971), for instance, posited that cognitive and aesthetic goals leading to self-actualization could not be achieved unless human physiological (e.g., food, water) needs, the need for safety and security, the need for belonging, and the need for self-esteem had been satisfied. (These needs are especially pertinent to refugees and recent immigrants in a second language environment.) Rogers (1969), another strong proponent of humanism, argued that learning should be experiential and convergent with learner goals, and that it should take place in a supportive environment.

This psychological approach to learning manifested itself in second language acquisition (SLA) through approaches such as Community Language Learning (Curran, 1972) and Suggestopedia (Lozanov, 1979). Another pioneer in the application of humanist psychology to second language learning and teaching was Stevick (1980), who argued that "...[language learning] success depends less on materials, techniques and linguistic analyses, and more on what goes on inside and between the people in the classroom" (p. 4). Krashen's (1982) Monitor Model included the 'affective filter hypothesis', which posited the existence of a barrier that rose and interfered with second

language acquisition when learners were anxious or bored. Informed by recent developments in cognition research (Damasio, 1994; LeDoux, 1996), Schumann (1997) argued that the psychology and neurobiology of stimulus appraisal (based on novelty, pleasantness, goal/need significance, coping potential, and self and social image) determine the extent to which second language learning is achieved. These theories have resonated strongly with the intuitions of many second and foreign language teachers.

SLA Research on Affect

Over the past three decades, research in second language acquisition has confirmed hypotheses that language learning is indeed enhanced by attention to affect. Gardner and colleagues (Gardner, 1985; Gardner & Clément, 1990; Gardner & Lambert, 1982; Gardner & MacIntyre, 1993) made extensive investigations of the role of attitudes and motivation in language learning success; other studies (Horwitz, Horwitz, & Cope, 1986; Horwitz & Young, 1991; MacIntyre & Gardner, 1989, 1991b) examined the construct of language anxiety. The majority of studies used self-report questionnaires or interviews to explore the relationship between affect and second language performance (e.g., Gardner, 1985; Gardner, Moorcroft, & MacIntyre, 1987; MacIntyre & Gardner, 1989; Madsen, Brown, & Jones, 1991; Price, 1991; Young, 1991); however, several laboratory experiments were also conducted in this area (e.g., Gardner, Day, & MacIntyre, 1992; MacIntyre & Gardner, 1991a, 1994a, 1994b; Steinberg & Horwitz, 1986; Stevick, 1999).

Few experimental classroom studies of affect have been documented. A series of experiments conducted by Moskowitz (1981, 1999) with high school second and foreign language students found consistent positive correlations between the use of humanistic

exercises and students' attitudes towards language learning, their classmates, and themselves. Results of questionnaires administered to the teachers in this study also showed improved attitudes toward their classes and enhanced self-concept and self-awareness. Cohen, Weaver, and Li (1998) investigated the effects of a range of speaking strategies on three tasks performed by university foreign language students: a self-description, a story retelling, and a description of a favourite city. Some of the many strategies considered by teachers and students in the three experimental classes to be useful for the oral tasks were affective: deep breathing, positive self-talk, visualization exercises, relaxation techniques, taking one's emotional temperature, self-rewards, persistence, and risk-taking. Superior results in overall speaking performance shown by the experimental group on the city description task were attributed to the use of strategies, some of which were affective; the effect of the affective strategy component alone, however, could not be partialed out.

Teachers' perceptions of effective strategies for enhancing learner motivation were explored in a study by Dörnyei and Csizer (1998). Two hundred English as a foreign language (EFL) teachers in Hungary ranked 51 strategies according to their 'importance' or their 'frequency of use' in the classroom. To control for the possibility of importance ratings influencing the practice ratings, 116 respondents completed the 'importance' survey and 84 others completed the 'frequency' survey. Results showed that the following were among the top five strategies used by teachers to motivate EFL learners: (a) create a pleasant, relaxed atmosphere in the classroom, (b) develop a good relationship with the learners, and (c) increase the learners' linguistic self-confidence. Although there was no corresponding survey of the students themselves to determine if

these macro-strategies were effective from their perspectives, these strategies were rated very high on both the 'importance' scale and the 'frequency of use' scale. As the authors noted, experimental research is needed to determine the effectiveness of the proposed 'ten commandments' for motivating EFL learners. Nonetheless, these variables were perceived by the teachers surveyed to be important components of the EFL classroom.

Anxiety can have facilitating or debilitating effects on learners. Bailey's (1983) diary of her French classroom experience indicated that the competitiveness and the anxiety that she experienced motivated her both to work harder on some occasions (facilitating anxiety) and to avoid class on others (debilitating anxiety). Young (1991) cited a study by Brandl (1987) in which the majority of instructors indicated that they deliberately induced anxiety in order to intimidate students into performing. Price (1991) interviewed learners who reported debilitating anxiety caused by instructors who criticized their pronunciation or focused on classroom performance rather than learning. As Young (1991) explains,

> Instructors who believe their role is to correct students constantly when they make any error, who feel that they cannot have students working in pairs because the class may get out of control, who believe that the teacher should be doing most of the talking and teaching, and who think their role is more like a drill sergeant's than a facilitator's may be contributing to learner language anxiety. The social context that the instructor sets up in the classroom can have tremendous ramifications for the learners. (p. 428)

Young's (1990) research with language learners suggested that teachers who used humor and created a friendly, supportive, and relaxed classroom atmosphere that encouraged risk-taking were most helpful in alleviating foreign language anxiety.

Learner/Teacher Resources

Horwitz, Horwitz, and Cope (1986) suggested that teachers may respond to foreign language classroom anxiety in two ways: by reducing the level of anxiety in the classroom and/or by teaching learners strategies to deal with the anxiety. An increasing number of teaching materials have emerged over the years to support the inclusion of affective factors in second language classrooms. Moskowitz' (1978) Caring and Sharing in the Foreign Language Class was one of the first teacher resources to promote humanistic techniques in the second language classroom. Numerous authors (e.g., Campbell & Ortiz, 1991; Crandall, 1999; Crookall and Oxford, 1991; Foss and Reitzel, 1991; Hansen, 1998; Oxford, 1990; Phillips, 1998; Rinvolucri, 1999) have described other activities for enhancing L2 learners' cognitive and affective experiences, such as discussion of the ideal language learner, cooperative learning activities, an 'agony column' (in which learners reply to letters expressing language learning difficulties), use of learner anxiety graphs, visualization, cartoon story telling, and rhythmic breathing exercises.

Affective strategies comprise one of six categories of language learning strategies in Oxford's (1990) taxonomy. Oxford delineates three types of affective strategies that can be used to regulate learner attitudes, motivation, and emotions: exercises for anxiety reduction (using progressive relaxation and deep breathing exercises, music, and

laughter), for self-encouragement (making positive statements, taking risks wisely, and administering self-rewards), and for monitoring emotions (listening to the body, completing a checklist, writing a language learning diary, and discussing feelings with peers). It was partly in response to these suggestions that this study was undertaken, to investigate the effects that affective strategy instruction might have on learner performance and self-perception in speaking tasks.

Research Questions

The following questions formed the basis for this research:

1. Does affective strategy training lead to improved L2 performance?
2. Does affective strategy training lead to a greater sense of self-efficacy?

Method

Participants

ESL Students

The participants in this study were registered as full-time intermediate-level ESL students in a post-secondary institution in Alberta. In the comparison condition, 16 students (7 males, 9 females, aged 19 to 59) completed the pre-test, and the immediate and delayed post-tests; 9 of these participated in the follow-up interview. When asked to indicate the highest level of education they had attained, 7 reported 'university', 8 'high school', and 1 'less than high school'. Asked how often they had a conversation of 10 minutes or more with a native speaker of English, six replied 'never', four reported doing so '1-3 times a week', one responded '4-6 times a week', and four reported doing so 'several times a

day' (missing information for one participant). In the affective strategies condition, 15 participants (9 males, 6 females, aged 21 to 56) completed the pre-test and the immediate and delayed post-tests; 8 participated in the follow-up interview. In this group, the highest level of education achieved by four was 'less than high school', six had attended high school, and five had a post-secondary education. Four participants never spoke with a native speaker of English for 10 minutes or more, four did so 1-3 times a week, two '4-6 times a week', and five learners 'several times a day'. It appears that, overall, the comparison group had a higher level of education, but less contact with native speakers of English than did the affective treatment group.

Interlocutor

The interlocutor who participated in the speaking tasks with the students over both terms was a trained ESL teacher and M.Ed. graduate student with ESL teaching experience and native speaker proficiency in English.

Teachers

The teacher of the comparison group was a trained ESL instructor registered in a TESL Master's program, and she had taught ESL/EFL for 5 years. She had agreed to teach both the comparison group in Term 1 and the treatment group in a subsequent term, as there was only one class at this level in the program. However, because of scheduling changes necessitated by fluctuating student enrolment, the treatment group was taught by a second instructor who had 13 years of ESL/EFL teaching experience, a B.A. in TESL, and an M.Ed. in Instructional Technology with a TESL focus. This teacher, unfortunately, was

unable to teach for the entirety of the final term due to pre-scheduled annual holidays. Because of the increase in ESL classes in the city in the summer, finding qualified, experienced ESL instructors for the summer term is always a challenge. However, as the regular full-time instructor had completed the affective strategy instruction, it was simply a matter of having a substitute teacher reinforce what had been taught, based on material that I provided. The remaining 7 weeks of the term were taught by a substitute instructor who had completed an M.Ed. in Educational Policy Studies, as well as a short non-credit TEFL training course. He had taught math and science for 5 years in the provincial school system, and EFL for 1 year overseas.

I used the Communicative Orientation of Language Teaching (COLT) Observation Scheme (Spada & Fröhlich, 1995) to observe the primary teachers of the comparison and treatment groups at the beginning of term and weekly thereafter. In all, I observed 12 hours of the comparison classes, 12 hours of the affective strategy condition with the principal instructor, and 9 hours of the affective strategy condition with the substitute teacher. The course content was consistent over both terms, as the teachers used the same communicative curriculum and core materials for each group.

I provided the teacher of the comparison group with an overview of the research project before her course began, but I did not identify the type of strategies to be covered in the following term, in order to discourage experimental treatment diffusion. I discussed the treatment in full with the teacher of the affective strategies group prior to the beginning of his course. I also provided him with some background reading (Dörnyei & Malderez, 1997; Oxford, 1990; Scarcella & Oxford, 1992), and answered questions. In addition to an explanation of the study and background reading, the substitute teacher

who taught the last half of the affective strategies group received a summary and handouts of the affective strategy lessons that had been presented earlier in the term. He was given a weekly calendar listing the strategies to be reinforced in each of the weeks to follow. I suggested that he examine his lesson plans at the beginning of each week, decide which strategies would best complement which lesson, incorporate the strategy reinforcement, and note the date on which this was done. The instructor received all the necessary handouts for the group discussions and other activities to be completed in class.

The comparison group instructor recorded 8 hours of general classroom instruction and provided a copy of all daily lesson plans; these provided a framework for integrating the strategy instruction into the regular curriculum for the treatment group. In the affective strategy treatment condition, the principal instructor audio-taped 10 hours of strategy and general class instruction; the substitute teacher taped 1 hour of strategy reinforcement. During the affective strategy training, the instructor provided details outlining the date and length of each lesson, the engagement of the students (on a 5-point scale ranging from 'very low' to 'very high'), difficulties encountered, and other comments. I kept in close contact with the instructor during this period by telephone and by electronic mail. The substitute teacher did not record the reinforcement of designated strategies in the chart provided for this purpose, but all of the handouts provided for classroom activities were completed according to schedule and returned to me.

Strategy Instruction

I discussed in advance with the teacher of the treatment condition the twelve 1-hour affective strategy lessons to be taught. The affective strategy instruction included

consciousness-raising activities and training in the use of relaxation (e.g., Moskowitz, 1978), visualization (e.g., Arnold, 1999), positive self-talk (e.g., Oxford, 1990), humor (e.g., videos), risk-taking, and self-rewards to enhance second language learning. The instructor received the lesson plans, overhead transparencies, and handouts in advance and discussed them with me. The lessons were integrated into the course and delivered by the regular classroom instructor. In order not to bias response to the lessons, I was not present during any of these lessons.

Speaking Tasks

Learner descriptions of picture stories and objects were collected at pre-test, immediate post-test, delayed post-test, and follow-up task administrations. At Time 1, the participants described one picture story and three objects; at Time 2, they were given a new picture story, a repeated object, and three new objects. At Time 3, they described two new picture stories, one object repeated from each past administration, and three new objects. At Time 4, the first picture story was described again, in addition to a new picture story, one object repeated from each of the three past administrations, and three new objects.

Picture Stories

The participants received oral and written instructions before each narrative administration. They were told that they would receive a set of eight pictures to describe. They were given a minute to examine the picture story, and were then asked to tell the story to the listener. I explained that the listener had the same pictures, in a different order. I asked the learners to describe the pictures as fully as possible so that the listener

could put them in the correct order.

The first (and again the fifth) picture story presented (Rollet & Tremblay, 1975) shows a man and a woman who moved to the country, became overwhelmed by the physical demands of rural life, and eventually returned to a less difficult life in the city. The second (see Munro & Derwing, 1994) was the story of two unsuccessful hunters who went looking for deer in a forest. The third narrative (Munro & Derwing, 1998) depicted the misadventures of two travelers who mistakenly exchanged suitcases (see Appendix D). The fourth picture story (Heyer, 1997) was about a lottery winner who recruited friends to recover his lost ticket. The final story, which consisted of eight frames from a children's book (Mayer, 1969), described a child's loss and eventual recovery of his pet frog.

Real-World Objects

At each administration of the object description task, the participants were asked to examine and to describe each object as fully as possible in order that the listener, who had four other very similar objects (e.g., combs), would be able to identify it (see Yule, 1997).

Self-Report Instruments

Self-Efficacy Scales

Learners examined each picture story or sample object carefully and then used a scale ranging from 0% to 100% to rate their self-efficacy for accurately completing each set of

tasks (see Appendix E). They also estimated their perception of self-efficacy for learning to perform the task well (see Schunk, 1996).

Usefulness of Strategy Instruction Scales

At the end of the immediate post-test administration, learners in the affective strategies condition assessed the value of the strategy instruction that they had received. On a 5-point scale (ranging from 1 = 'not at all' to 5 = 'a lot'), they indicated the degree to which affective strategy practice had helped them in classroom activities, in the experiment, and in real life situations.

Procedure

Data was collected from all the participants at Weeks 1, 5, and 10 of the study. Learners left their classroom one by one for a period of 30-40 minutes to complete the speaking tasks in a quiet room in the school. A number of these participants were available in the following term for the follow-up administration at Week 15. Those who had transferred to a different campus were interviewed there between classes. At each taping, the learner and the interlocutor were seated at a table, facing each other and separated by a low barrier that permitted eye contact between them. An unobtrusive omni-directional microphone was placed in front of the student. The interlocutor's responses to the student were limited to such questions as "Can you tell me more?" or "Is it this one?" From my position at one end of the table, I gave instructions, operated the tape recorder, passed stimuli to the participant, and made notes of students' comments, non-verbal behaviour, and words that might not have recorded clearly.

Data Analysis

I transcribed the data and calculated speech rate in words per minute (excluding fillers such as "um" or "er") for both tasks. Success for the narrative was calculated using baseline data collected from nine native speakers and two native-like speakers (see Derwing, 1989). Their renditions of the picture story were used to identify the most pivotal elements in each frame of each picture story (see Tomlin, 1984). I awarded participants one point for each essential element of a narrative frame that they mentioned; in addition, they received five points for communicating their understanding of the overall intention or gist of the narrative (see Appendix F). The success scores were then transformed to percentages.

In the object description task, I counted the number of words to the point of successful identification by the interlocutor, or to the end of the description if the listener was unable to identify the object. A success score (1 or 0) was awarded for each of the three new objects presented at a given administration, and an overall success score (%) was calculated for each set of objects.

Results

Statistical Analyses

Analyses of variance (ANOVA) for repeated measures were conducted to test for differences over time and between groups in success, speech rate, task self-efficacy, and self-efficacy for learning responses. Paired-samples t-tests were used to determine where significant differences occurred.

As parametric procedures are not appropriate for frequency data (see Hatch & Lazaraton, 1991), the Friedman test was used to detect significant differences in frequency of message abandonment for each group over Times 1, 2, and 3. The Wilcoxon signed-ranks procedure was conducted to determine where these differences over time occurred. Between-group differences in the data were examined using Mann-Whitney U tests.

Because the subset of learners who completed all four task administrations was very small in number, these data were analysed separately using nonparametric procedures. Friedman tests were used to detect within-group differences. Wilcoxon Signed-Ranks tests were conducted to determine where significant differences occurred, and Mann-Whitney U tests were used to identify between-group differences.

In order to maximize the opportunity for affective strategy instruction to reveal between-group effects, Bonferroni adjustments to control Type 1 error were not conducted; therefore, actual p values are reported for the reader in each of the analyses.

Whole Group Results

Teacher Evaluation of Student Response to Instruction

The 12 hours of affective strategy lessons that were taught by the teacher were generally well received by the students. The mean rating of learner involvement indicated by the instructor was 4.1 (mode = 5) on a 5-point scale. The students were reported to have been less engaged (mean = 2.3) in the relaxation and visualization exercises.

Usefulness of Affective Strategy Instruction, T2

During the immediate post-test following the affective strategy instruction, participants were asked to evaluate how helpful they perceived the affective strategies to be in classroom activities, in the experimental tasks, and in real life, using a scale ranging from 1 ('not at all') to 5 ('a lot'). The mean score for usefulness of affective strategy instruction for classroom activities was 4.20 (mode = 5); for the experiment, the mean was 3.73 (mode = 3); and for real life purposes, it was 4.13 (mode = 5).

Effects of Affective Strategy Instruction on L2 Performance

The results of the analyses are shown in Table 4-1.

Success, T1-3

A repeated measures ANOVA of narrative success, with time (pre-test, immediate post-test, delayed post-test) as the within variable and group as the between variable, revealed significant effects of time (F [2, 58] = 13.471, p = .000), but no significant interaction and no significant between-group differences. Paired-samples t-tests showed significant increases in success rates for the comparison group on the narrative task between Times 1 and 2 (t [15] = 3.747, p = .002) and between Times 1 and 3 (t [15] = 3.532, p = .003). The affective strategy treatment group showed significant improvement only between Times 1 and 3 (t [14] = 3.591, p = .003) on the narrative, according to paired-samples t-tests. There were no significant differences over time or between groups for success on the object description task, and no significant interaction.

Table 4-1

Mean Scores for Each Group Across Time

Variable	Comparison Group n=16			Affective Group n=15		
Narratives	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Success (%)	57.56	81.25**	78.34**	69.27	75.33	82.73*
Message abandonment	.63	.44	.28	.27	.20	.20
Speech rate (wpm)	63.56	72.43**	80.20**	70.75	78.34**	80.50*
Task self-efficacy (%)	61.38	64.94	69.16	66.73	80.87*	76.60
Self-efficacy for learning (%)	65.31	69.38	69.69	71.33	74.00	75.33
Objects	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Success (%)	83.35	79.17	81.25	95.24	91.11	95.56
Message abandonment	.44	.19	.25	.60	.47	.53
Speech rate (wpm)	67.08	64.13	66.55	55.54	61.52	55.07
Task self-efficacy (%)	50.42	56.86	64.58*	60.67	70.44*	68.67
Self-efficacy for learning (%)	73.12	73.75	68.12	64.67	63.33	70.67

Note: Significant within-group differences between Times 1 and 2, and between Times 1 and 3 are indicated by *$p<.05$, **$p<.01$. No comparisons are made between Times 2 and 3.

Speech rate, T1-3

An ANOVA for repeated measures showed significant effects of time (F [2, 58] = 16.396, p = .000), but no significant interaction and no significant between-group differences. Paired-samples t-tests for speech rate revealed significant increases for both the comparison group and the affective strategy group on the narrative task between Times 1 and 2 (t [15] = 3.760, p = .002, and t [14] = 3.3130, p = .007, respectively) and between Times 1 and 3 (t [15] = 3.769, p = .002, and t [14] = 2.945, p = .011, respectively). There were no significant differences in speech rate on the object description task over time or between groups, and no significant interaction.

Message abandonment, T1-3

Friedman tests showed no significant differences in message abandonment for either group over time on both the narrative task and the object description task.

Effects of Affective Strategy Instruction on Self-Efficacy

Task self-efficacy, T1-3

A repeated measures ANOVA on narrative task self-efficacy at Times 1, 2, and 3 revealed significant effects of time (F [2, 58] = 4.711, p = .013) but no significant interaction and no significant between-group differences. Paired-samples t-tests showed that there were no significant differences across times for the comparison group. There was, however, significant improvement in narrative self-efficacy by the affective strategy group between Times 1 and 2 (t [14] = 2.964, p = .010), and a trend toward significance between Times 1 and 3 (t [14] = 1.981, p = .068).

An ANOVA of repeated measures for differences in object description task self-efficacy showed significant effects of time (F [2, 58] = 4.972, p = .010), but no significant interaction and no significant between-group difference. Paired-samples t-tests found a significant improvement in object description task self-efficacy for the comparison group between Times 1 and 3 (t [15] = 2.625, p = .019), and for the treatment group at Time 2 (t [14] = 2.188, p = .046).

Self-efficacy for learning, T1-3

A repeated measures ANOVA on self-efficacy for learning showed no significant effects of time, no significant interaction, and no significant between-group differences on both the narrative and the object description tasks.

Results for Subset, Times 1-4

Analyses were conducted on the data of the 8 learners in the affective strategies group and the 8 learners in the comparison group who completed all four sets of tasks over 15 weeks. Friedman tests detected no significant differences over time for the treatment group on the narrative task on any of the variables measured. For the comparison group, Friedman analyses revealed significant differences in narrative speech rate (χ^2 [3, n = 8] = 7.800, p = .050); Wilcoxon Signed-Ranks tests found significant differences between Times 1 and 2 (z = 2.380, p = .017), Times 1 and 3 (z = 2.380, p = .017), and Times 1 and 4 (z = 1.960, p = .050). Mann-Whitney U tests of between-group differences in speech rate gain scores on the narrative task were found at Time 3 (χ^2 = 13, p = .046) and Time 4 (χ^2 = 12, p = .036), in favour of the comparison group.

Friedman tests showed a trend toward significance in narrative success for the comparison group (χ^2 [3, n = 8] = 7.350, p = .062); Wilcoxon Signed-Ranks analyses revealed significant differences between Times 1 and 4 (z = 1.960, p = .050). There was a trend toward between-group significance in narrative success at Time 3 (χ^2 = 14, p = .058), also in favour of the comparison group. The results of Friedman tests were non-significant for both the comparison and the communication strategy groups on the object description task on all variables examined.

Discussion

Whole Group Results

Teacher Evaluation of Student Response to Instruction

The instructor noted no problems with delivery of the majority of the affective strategy lessons. Some of the students, however, found it difficult to become fully engaged in the relaxation and visualization exercises. These were novel activities to many of the students, and they may have felt varying degrees of discomfort in closing their eyes and trying to relax and use their imagination in a formal classroom setting. These particular activities would perhaps also not have appealed to learners from all cultures.

Usefulness of Affective Strategy Instruction, T2

The learners found the affective strategy instruction most beneficial in classroom activities and for real life purposes. The mean for the experimental tasks (narrative and object descriptions) was lower. It could be that by the second administration of the experimental tasks, learners felt more comfortable with the interlocutor, the researcher,

and the context, and that their familiarity with the set procedures and the lack of time pressure imposed lessened their need for affective strategies for overcoming anxiety.

Effects of Affective Strategy Instruction on L2 Performance

Success, T1-3

Both the comparison and treatment groups made significant improvement in success over time on the narrative task, which is not entirely surprising, as they were in full-time ESL classes with a focus on communicative language learning. The consistent increase in success for the affective strategy participants was significant at Time 3, but their mean score at Time 1 was higher than that of the comparison group, affording less opportunity for improvement.

The success rates on the object description task were much higher initially than those on the narrative task, resulting in a ceiling effect for both groups. This may be a result of the nature of the task. Whereas the picture stories tended to elicit monologues, the object description task was much more interactive. When learners had provided what they thought was adequate information for item identification, they received a response from the interlocutor, which, in most cases, prompted further description from the learners and led them to persist to the point of successful identification.

Speech rate, T1-3

The significant improvements in narrative speech rate for both groups over time could again be a reflection of the regular ESL instruction that they were both receiving. The curriculum that was being used placed an emphasis on fluency as well as accuracy

objectives. Learners frequently participated in pair and small group work, and they had extensive exposure to communicative activities that fostered global fluency development. The lack of significant differences in speech rate over time on the object description task is not entirely surprising, as this particular task was cognitively more demanding than the narrative task. Learners would have had to divert more attention to problem-solving in the object description, where very specific details had to be provided in order to complete the task. This would have resulted in trade-off effects between fluency and complexity (Skehan, 1998).

Message abandonment, T1-3

It was anticipated that affective strategy instruction might result in fewer instances of message abandonment in the narrative and object description tasks at the immediate post-test. As the initial rate of message abandonment on the narrative task was much lower in the affective strategy group than in the comparison group (.27 and .63, respectively), there was less room for improvement; not surprisingly then, no significant changes were found in the experimental group.

In the object description task, however, although the initial rate of message abandonment at Time 1 was higher in the treatment group than in the comparison group (.60 and .44, respectively), the affective strategy condition showed no significant improvement over time.

Effects of Affective Strategy Instruction on Self-Efficacy

Task self-efficacy, T1-3

The significant gains in narrative self-efficacy made by the treatment group over time may be due to the combination of affective strategy instruction and regular ESL instruction. It is possible that task familiarity accounted for the significant improvement in self-efficacy by both groups on the object description task.

Self-efficacy for learning, T1-3

The lack of significant between-group differences in self-efficacy is noteworthy. Instruction in relaxation techniques, positive self-talk, the use of humour, risk-taking, and self-rewards had no significant effects on the treatment group's perceptions of self-efficacy for learning to give excellent descriptions of picture stories or objects. It is possible that learners' appraisals of self-efficacy for learning are relatively stable; unless they receive pertinent informational feedback to change those appraisals, these ratings are likely to remain relatively fixed.

Results for Subset, Times 1-4

This set of analyses was conducted to determine if significant improvements in any of the variables measured were maintained at or delayed until Time 4 by the subset of learners who completed this set of tasks. The significant gains in narrative speech rate made by the comparison group at Times 2 and 3 were maintained at Time 4. Between-group differences in narrative speech rate gain scores in favour of the subset of learners in the comparison group were significant at Time 3 and maintained at Time 4. Significant gains in narrative success for the comparison subset appeared at Time 4.

The lack of significant results for the groups on the object description task is surprising. There was a ceiling effect on success scores for the affective group in particular. The lack of significant between-group differences for the affective strategy group on the object description task is interesting. Improvement over time on perceptions of object description task self-efficacy in the larger comparison and affective strategy groups was not reflected in the scores of the subsets.

Conclusion

The results of this research show that affective strategy instruction provided no significant benefit to the treatment group in L2 performance or perceptions of self-efficacy measured in the narrative task or in the object description task. This finding can, I believe, be attributed in large part to the particular nature of the ESL classes in this study. Most of the participants were recent refugees to Canada and/or had been out of school for many years; furthermore, they spent 25 hours a week with the same teacher and the same peers. In order to create an effective learning environment, the teachers of both conditions strove to develop a sense of community, to lower anxiety, and to encourage learners to achieve their linguistic goals. I reviewed one third of the lesson tapes provided by the comparison group teacher, as well as all of the instructor's lesson plans and the classroom observation notes I had made. The former showed affective factors that were part and parcel of her regular ESL classes: humor (joke of the day, entertaining videos, humorous quotes), music (weekly songs, gesture and music to reinforce vocabulary), encouragement, positive self-talk ("Stand up and pat yourself on the back. Tell yourself, "You're doing a good job! Keep it up!"), empathy, and the

development of strong group cohesion (rotating group membership, coffee and cake sessions). These factors were also present in the strategy treatment class in the five weeks prior to instruction. Moreover, in both groups, the communicative nature of the courses and the incorporation of small group and pair activities encouraged cooperation and the development of a sense of community that doubtless contributed further to a positive learning setting. It is likely that the relaxed and encouraging atmosphere established in the two groups provided an optimal affective environment for learning. The new affective strategies (e.g., relaxation, risk-taking, self-rewards) that were introduced to the treatment group may have served to raise learners' consciousness and to reinforce the positive affective threshold that already existed in that class, but they did not offer significant additional benefits to learners in terms of second language speaking performance and self-efficacy.

Perhaps if this study had been conducted with a comparison class taught by an adult ESL instructor with little or no concern for the social context and instructor-learner interactions, affective strategy training might have had significant effects on the speaking tasks. I believe, however, that I would have been hard pressed to find such an instructor in my community. Many ESL programs across Canada offer federally-funded Language Instruction for Newcomers to Canada (LINC) classes; one of the primary goals of these classes is to facilitate learners' integration into Canadian society. As a result, most programs aim to promote not only second language learning but also the social-emotional growth of their learners, and this is naturally carried over into other ESL classes being offered. In contrast to the findings of Brandl (1987), this attention to affect, I believe, is

representative of ESL classes in that institution, in the community at large, and throughout the country.

As noted above, most of the research on affective strategies consists of theoretical or correlational studies based solely on learners' perceptions; very few interventions have been documented. Recommendations (e.g., Ellis & Sinclair, 1989; Oxford, 1990) that extensive strategy instruction be conducted in ESL classes need to be reconsidered in light of the results of this study. Teachers should not use valuable class time for affective strategy instruction; rather, once strong group cohesion and a positive, supportive learning environment have been firmly established, they should focus on teaching meaningful language and content in response to learners' needs and interests. Classrooms that combine these elements offer both affective -- and effective -- learning experiences to second language learners.

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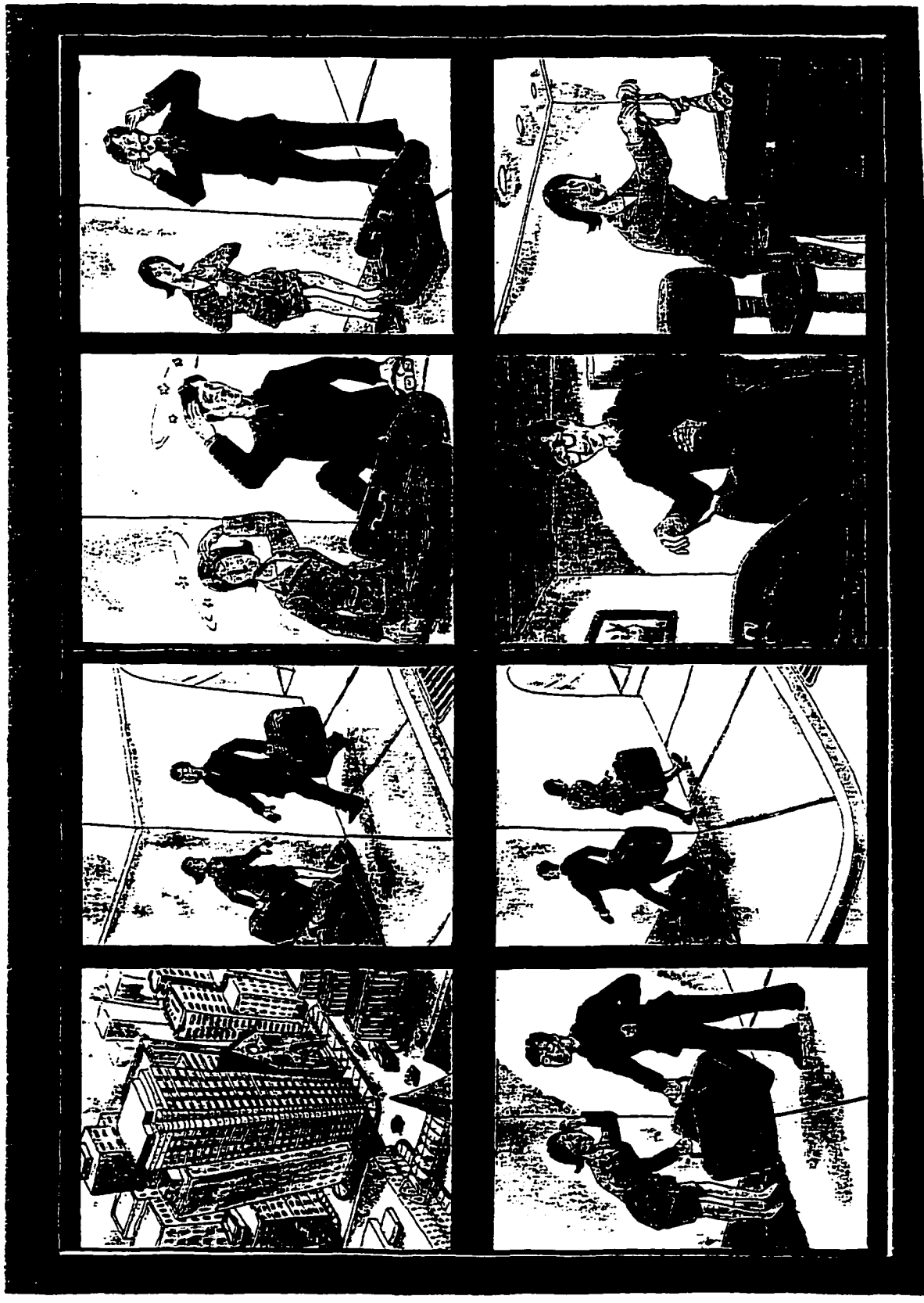
Appendix D: Narrative 3 Stimuli



PICTURE STORY

Instructions:
Read the statements below.
Circle the number that expresses your opinion. Please answer *all* the questions.

How sure are you that you can accurately describe *in detail*...

	***Not at all* sure**										***Completely* sure**
2 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
4 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
6 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
8 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
How sure are you that you could learn to give *excellent* descriptions of stories like this?	0	10	20	30	40	50	60	70	80	90	100%

Appendix F: Narrative 2 Success Rating Scale

Frame	Element (1 point each)	Points
1	a man kisses his wife good-bye	
2	drives to the country	
2	it's raining/snowing (anywhere in frames 2-7)	
3	he and his friend get out of the car	
3	they go into the forest	
4	they see footprints of deer	
5	they start a fire	
5	to eat / warm up	
6	one man stops his friend	
6	from shooting a bird	
7	they see two deer	
7	at the side of their car	
7	the sun comes out	
8	one man takes photos of the deer	
8	the other laughs	
	Subtotal (/15)	
	Gist (0 or 5 points)	
	Total (/20)	
	Success rate (%)	

V. THE EFFECTS OF STRATEGY INSTRUCTION ON MOTIVATION

Theoretical Background

Motivation denotes the goals people set and the effort and persistence that they are willing to exert to achieve those goals. Oxford and Shearin (1996) contend that

> Motivation is important because it directly influences how often students use L2 learning strategies, how much students interact with native speakers, how much input they receive in the language being learned..., how well they do on curriculum-related achievement tests, how high their general proficiency level becomes, and how long they persevere and maintain L2 skills after language study is over. (p. 121)

Second language acquisition (SLA) researchers have been engaged for many decades in extensive investigations of the social psychological aspects of motivation (e.g., Gardner, 1985; Gardner & Lambert, 1972). Most studies of motivation to date have been based primarily on self-report questionnaires and correlational analyses. More recent discussions in the field of SLA have urged that the scope of motivation be broadened to include findings from other disciplines, such as psychology and education, on constructs such as self-efficacy, attribution theory, and goal-setting (Crookes & Schmidt, 1991; Dörnyei, 1994a, 1994b, 2001; Oxford, 1996; Oxford & Shearin, 1994; Tremblay & Gardner, 1995; Williams & Burden, 1997).

This quasi-experimental study is a response to the call to expand both the framework and the methodologies of motivation research in second language acquisition. Motivation is a complex, multifaceted construct. Two aspects of motivation that are

important to language learning are self-efficacy and attribution theory. However, as has been shown by the elaborate models of second language acquisition that have been constructed (e.g., Dörnyei & Ottó, 1998; Gardner, 1985; Tremblay & Gardner, 1995), motivation is far more complex than either of these alone would indicate.

Self-Efficacy

Self-efficacy is a social cognitive concept defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). Motivation is affected by perceptions of self-efficacy: they determine the goals individuals set, the effort they expend to achieve those goals, and their willingness to persist in the face of failure (Bandura, 1986); these, in turn, influence achievement (Locke, 1996; Pintrich & De Groot, 1990; Schunk, 1984, 1991; Schunk & Gunn, 1985).

Observational learning through modeling of new behaviors (Bandura, 1977) is the result of four component processes: attention, retention, production, and motivation. Attention is necessary for meaningful perception, and this can be gained through accentuation of task features, use of competent models, or demonstration of the value of the information to be presented. Retention is achieved through the encoding and transformation of modeled information into memory in verbal or imaginal form and through rehearsal. The production process translates information into behaviors through practice and with the provision of corrective feedback. Motivation is a critical part of observational learning; unless the information is valued, learners are unlikely to attend to, retain, and produce the modeled behaviors. Learner motivation is influenced by outcome

expectations, "judgments or beliefs regarding the contingency between a person's behavior and the anticipated outcome" (Pintrich & Schunk, 1996, p. 89). These expectations usually, but not always, correlate positively with self-efficacy beliefs.

Perceptions of self-efficacy vary in generality, in certainty, and in level (Bandura, 1977). People may perceive themselves to be self-efficacious in a limited variety of contexts, or they may feel that they are generally efficacious across a wide range of situations and tasks. People who perceive themselves as efficacious set challenging goals for themselves, persist in the attainment of their goals, increase and continue their efforts in the face of setbacks, attribute success to the effort and skills that they put into achieving their goals, and meet challenging situations with confidence. Those with a weaker sense of efficacy attribute failure to internal ability, avoid challenging situations, show lack of commitment to goals, and are more susceptible to anxiety and depression. Self-percept of efficacy therefore has a powerful influence on human behaviour. Perceived self-efficacy does not always lead to action, however; performance will not result if the necessary resources or incentives are lacking, or if the outcomes associated with an action are not valued (Schunk, 1996).

According to Bandura (1986), there are four main sources of self-efficacy appraisals: actual performance, vicarious experiences, verbal persuasion, and physiological states. The most influential source of information regarding self-efficacy is actual performance. Repeated successful performances raise perceptions of self-efficacy; repeated failures lower them, especially if they occur before a strong sense of self-efficacy has been established. After self-efficacy has been developed, however, periodic failures do not radically influence judgment of one's capabilities; they may, in fact,

strengthen personal appraisals by demonstrating that temporary setbacks can be overcome with continued persistence. In occasional cases of failure, people are more inclined to blame situational factors, such as lack of effort or inappropriate arousal, than lack of ability. This leads them to believe that with adequate preparation and effort, they will once again be able to achieve their performance goals. Appraisal of self-efficacy is influenced by the timing and the overall pattern of successes and failures. The choice of appropriate tasks is, therefore, an important feature of any course of instruction. Vicarious experiences also affect self-percepts of efficacy. Models are used to teach viewers how to use effective techniques and strategies for mastering tasks of moderate difficulty, thereby raising their efficacy expectations.

Social persuasion is the third method of increasing people's belief in their capabilities. Learners who are encouraged verbally and convinced of their ability to achieve certain goals tend to exert more effort and to persist longer in the pursuit of those goals. This is the principle upon which many 'hope' and 'self-esteem' programs are predicated. The greater the belief in the persuasion, the greater the response in terms of sustained effort. If, however, personal experiences contradict verbal assessments, performers may become skeptical and discouraged. The persuaders play an important role in the process of altering personal appraisals of self-efficacy; if they simply flatter the individual, are not sincere in their praise, or lack knowledge of the capabilities required for success, the information given will have less impact on performance. Frequent informational feedback on performance and progress following tasks is critical for the maintenance of motivation in long-term endeavours such as language learning.

Information provided by physiological cues can also affect self-efficacy appraisals. Judgments of one's efficacy are made on the basis of the level of arousal, past experiences of how arousal affected performance, judged sources of arousal, and the context in which the arousal occurs (Bandura, 1986). A moderate amount of arousal can be facilitative, but too much or too little tends to become debilitating to performance (see Bailey, 1983). Those who misread physiological cues (e.g., fatigue, anxiety) as signs of excessive task difficulty will experience a corresponding decrease in perceptions of self-efficacy. Strategies for dealing with language anxiety can be beneficial to the development of language proficiency (Horwitz & Young, 1991).

Information from the above four sources - performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal - is cognitively processed, weighted, and synthesized. Cognitive appraisal takes into account perceived ability, task difficulty, the amount of effort expended, the amount of external aid or guidance received, and the overall pattern of successes and failures (Bandura, 1982). Because of the complexity of this process, one source of information can sometimes be heeded to the neglect of other, more important cues, resulting in a faulty percept of self-efficacy. According to Bandura (1982),

> Discrepancies may arise because of faulty self-knowledge, misjudgment of task requirements, unforeseen situational constraints on action, disincentives to act on one's self-percepts of efficacy, ill-defined global measures of perceived self-efficacy or inadequate assessments of performance, and new experiences that prompt reappraisals of self-efficacy in the time elapsing between probes of self-efficacy and action. (p. 129)

Attribution Theory

Attributions are an important determinant of self-efficacy. Whereas efficacy beliefs focus on future expectations, attribution ascriptions are made to past events (Graham, 1991). Causal attribution theory is based on the naïve analysis of action (Heider, 1958), which attempts to explain how individuals view the causes of specific events in their lives. Later refinement elaborated the distinction between external and internal locus of control dimensions of causality: external control ascribes outcomes to luck, chance, fate, or the control of others, whereas belief in internal control is the perception that a given outcome is a result of one's own behavior or unalterable characteristic (Rotter, 1966). Weiner expanded this model to formulate an attribution theory that included two additional dimensions, stability (Weiner et al., 1971) and controllability (Weiner, 1979). In an achievement context, causes of success or failure may be internal (aptitude, skills/knowledge, temporary or situational effort, long-term effort) or external (objective task characteristics, chance), stable (aptitude, long-term effort, objective task characteristics) or unstable (skills/knowledge, temporary or situational effort, chance), and controllable (skills/knowledge, temporary or situational effort, long-term effort) or uncontrollable (aptitude, health, mood, ease/difficulty of course requirements, chance) (Weiner, 1986).

Self-regulation of attributions facilitates the development of strategic competence in learning contexts (Schunk, 1996). Language learning strategy training is claimed increase learners' sense of control over performance outcomes (Oxford, 1990) by expanding their skills and knowledge. Furthermore, it is purported to enhance self-

efficacy and motivation for learning, which in turn increase learners' expectations of success (Zimmerman & Pons, 1986). The development of metacognitive awareness enables learners to choose appropriate strategies for a given task, to recognize similarities in performance tasks, and to predict success when the appropriate strategies are deployed (Paris & Winograd, 1990).

Culture

Second language learners' perceptions are also affected by culture. Weiner (1986) maintained that the fundamental elements of causality are common to all cultures, although individual cultures can affect specific causal ascriptions. An investigation of the concepts of ability and effort in American and Japanese cultures by Holloway (1988), for example, suggested that ability is considered to be the greater influence on achievement in the United States, where children tend to regard high effort as an indicator of low ability. Effort is the more important determinant of academic success in Japan, where there seems to be a greater emphasis on cooperation and group activity. Although findings from studies generally support the conceptual framework of Weiner's attribution model in cross-cultural contexts (Pintrich & Schunk, 1996), further research remains to be done.

Different cultural backgrounds give rise to different value systems, and self-disclosure may be based on differing cultural norms (Anderson, 1982). In Anderson's study, learners from the Far East rated themselves much lower, those from the Middle East much higher, and those from South America only slightly lower than did both their instructors and their TOEFL results. Other studies (e.g., Ferguson, 1978; LeBlanc &

Painchaud, 1985), too, indicate that, on the whole, more proficient learners tend to underrate their linguistic abilities, perhaps in recognition of all that remains for them to learn; less proficient learners tend to overestimate their competence, perhaps as a reflection of having reached a plateau and perceiving no need for improvement (Blanche, 1988; Ferguson, 1978).

Language Learning Strategies

Over the past twenty years, as second language teaching has become more learner-centred, students have been encouraged to become more autonomous and self-directed. Consequently, they have developed an increased need for strategies to enhance their language learning motivation and achievement and to facilitate their second language acquisition in English-speaking settings (Cohen, 1998). Several studies of learning strategy instruction in foreign language classrooms have been conducted to investigate correlations between strategy use and self-percepts of efficacy in language learning (Chamot & O'Malley, 1993; Robbins, 1993, cited in Chamot & O'Malley, 1994), but they, too, have been based largely on self-report rather than performance. Research from mainstream education contends that

> Strategy instruction can foster self-efficacy for learning. The belief that one understands and can effectively apply a strategy that aids learning leads to a greater sense of control over learning outcomes, which promotes self-efficacy and motivation to apply the strategy (Pintrich & Schunk, 1996, p. 179).

Increasing attention is now focused on classroom-based empirical studies linking aspects of motivation with use of language learning strategies (Oxford, 1996).

Research Questions

High self-efficacy will not produce competence without the necessary skills (Schunk, 1996), and the search for the most effective ways of teaching these skills is of continuing interest to ESL practitioners. This study was designed to investigate the following questions:

1. Does strategy instruction have a significant effect on learners' perceived level of self-efficacy?
2. Does strategy instruction have a significant effect on learners' causal attribution?
3. Does strategy instruction have a significant effect on learners' attitudes towards language learning?

Method

The Study

This research was conducted over three 16-week terms, using a non-equivalent control group design. The three groups of learners that participated in this study were enrolled in full-time English as a second language classes in a post-secondary institution in Alberta. One group received communication strategy instruction, another received affective strategy training, and the third served as the comparison group for both the treatment conditions.

Participants

ESL students

Forty-six adult students (23 male, 23 female) of intermediate ESL proficiency participated in the study. They ranged in age from19 to 59 years, with a mean age of 35 years. Eight students had attained less than a high school education, 20 had a high school education, and 18 had studied at a post-secondary institution. Their mean length of residence in English-speaking Canada was 48 months, with a range from 1 month to 26 years, 9 months. Students had varied opportunities for contact with native speakers (NSs) of English. When asked how often they conversed for more than 10 minutes with NSs outside the classroom, 13 indicated 'never', 14 'one to three times a week', 5 reported 'four to six times a week' and 13 responded that they did so at least once a day (1 missing case).

Teachers

Three teachers were involved in this study. The first, the teacher of the comparison group, had taught ESL/EFL for 5 years; she had a post-graduate degree in Applied Linguistics and was completing a Master's degree in TESL when she was involved in this research. She had originally offered to continue with the study over three terms; however, due to scheduling problems, the communication strategy treatment group in Term 2 was taught by a different instructor, with a B.A. in TESL, an M.Ed. in Instructional Technology with a TESL focus, and 13 years of experience in the ESL/EFL field. Both instructors had taught learners at a range of proficiency levels, from beginner to advanced. The second instructor completed Term 2 and was able to continue for 9 weeks into Term 3 until the affective strategy instruction had been delivered. Then, because of scheduled holidays, responsibility for the remaining 7 weeks of the class was assumed by

a substitute teacher. This individual had taught EFL overseas for a year and had, prior to that, been a public school teacher for 5 years. He had completed a non-credit TEFL course and had a Master's degree in Educational Policy Studies.

I spent time observing each of the classrooms outside of strategy instruction periods: 12 hours in the comparison class, 18 hours in the communication strategy class, 12 hours in the affective strategy class with the primary instructor, and 9 hours in the same classroom with the substitute teacher. I observed class activities using Spada and Fröhlich's (1995) Communicative Orientation of Language Teaching (COLT) Observation Scheme. All the teachers used a communicative approach to teaching ESL; in addition, they used the same core curriculum and textbooks.

I explained to each of the teachers the role that s/he would have in the study. In the first term, in order to prevent experimental treatment diffusion, I was careful not to identify the focus of the treatments in Terms 2 and 3. I discussed the study in full with the teachers of the treatment conditions, provided them with readings relevant to communication strategy instruction (Brown, 1979; Weaver & Cohen, 1998) and affective strategy instruction (Dörnyei & Malderez, 1997; Oxford, 1990; Scarcella & Oxford, 1992), and answered questions. I emphasized the importance of treatment fidelity to the teachers of the experimental groups.

I asked each of the teachers to audio-tape both general classroom instruction and strategy instruction (where applicable). The first instructor taped 8 hours of lessons and provided copies of her lesson plans, which I used for incorporating strategy instruction into the curriculum over the next two terms. The teacher of the communication strategy group taped 15 hours of general classroom and strategy instruction. In the affective

strategy condition, 10 hours were taped by the primary instructor, and one hour by the substitute teacher. The instructor who taught the strategy lessons completed a report for each lesson, indicating the date and length of the lesson, any problems that may have arisen, and a rating (using a 5-point scale) of student engagement in the lesson. The role of the substitute instructor in the study was to reinforce the affective strategies. I provided some handouts with class activities for this purpose, and they were completed by the students in class and returned, although no formal record was kept of the affective strategy reinforcement that was incorporated into the lessons.

Interlocutor

The interlocutor who participated in the strategy measurement tasks with the participants throughout the study was a female graduate student with ESL teaching experience and formal TESL training. She had native speaker proficiency and the learners interacted comfortably with her.

Strategy Instruction

For both the communication strategy group and the affective group I designed 12 hours of lessons for delivery by the regular classroom teacher. I provided the lesson plans and materials for all of the activities, as well as some follow-up materials. The lessons consisted of consciousness-raising, explicit instruction, modeling of the strategy, and practice in pairs and small groups.

Communication strategy instruction consisted of lessons that focused on circumlocution (describing physical properties, specific features, functions, location,

temporal features, elaborated features, historical properties), approximation, analogy, and superordination. Affective strategy instruction included use of relaxation techniques, positive self-talk, mental imagery, rewards, humor, and risk-taking. The instruction was offered by the classroom teacher as part of the regular ESL curriculum; I was not present when the strategy training took place. Throughout the study, I kept in close contact with the teachers by email and telephone, and through classroom visits.

Self-Report Instruments

Self-efficacy scales

After receiving each communication task (a picture story or a sample object) but before starting, the students estimated their perception of self-efficacy for completing the task successfully, using a scale ranging from 0% to 100% (Locke, Frederick, Lee, & Bobko,1984; Locke & Latham, 1984; Pintrich & De Groot, 1990). Similarly (see Appendix G), they estimated their self-efficacy for learning to perform that task well (Schunk, 1996).

Causal attribution scales

Following task completion, participants judged the extent to which each of four factors -- ability, effort, task ease, and luck -- had helped them in the task. They used a causal attribution scale (see Appendix H) ranging from 0 ('not at all') to 10 ('a lot') (see Schunk, 1984; Schunk & Gunn, 1985).

Language learning questionnaire

A language learning questionnaire (see Appendix I) was administered before each set of interviews took place, in order to monitor learner motivation, which is dynamic and subject to fluctuation over time. Learners responded to 15 items borrowed or adapted from previous questionnaires used in SLA research (Clément & Kruidenier, 1983; Gardner, 1985; Oxford, 1990). Participants were asked to indicate to what extent they agreed with each of the statements presented, using a 7-point scale (1 = 'disagree strongly', 7 = 'agree strongly').

Speaking Tasks

At each task administration, learners completed two tasks with the interlocutor: a picture description task and an object description task.

Narratives

Participants described one narrative at Times 1 and 2, and two narratives at Times 3 and 4. One of the picture stories used at Time 4 was a repetition of the first picture story that the learners had described; thus, a total of five different stories were presented to the students. Ratings of narrative difficulty were collected from 18 ESL learners at the same level of proficiency as those in the experiment. On a 5-point scale (1 = 'very easy', 5 = 'very difficult'), the mean ratings for the picture stories varied from 2.1 to 2.7, at the lower end of the scale.

At each administration of a picture description, learners were given one minute to examine the story. They were then asked to describe the story to the interlocutor, who, I explained, would attempt to arrange the eight frames of the story in the order in which

they were described by the learner. Participants were asked to provide as full a description of the narrative as possible.

The picture story used in the pre-test (Rollet & Tremblay, 1975) depicts a couple who move to the country and discover, through a series of misadventures, that they are ill-suited to arduous country living. The second narrative (see Munro & Derwing, 1994) is the story of two hunters who go to the forest in search of game, which they fail to find. The third picture description task (Munro & Derwing, 1998) is about a male and a female traveler who collide, apologize, and arrive at their destination to find that they have inadvertently exchanged suitcases. The fourth narrative (Heyer, 1997) describes a man's search for the lottery ticket that he bought, threw away, and finally recovers at the city dump. The final picture story is an adaptation of Mayer's (1969) story about a boy who is eventually reunited with his lost pet frog. I audiotaped and transcribed all the narrative tasks. The brief notes that I took (related to comments, paralinguistics, and mumbled words) during the interviews were helpful in transcribing the data.

Real-world objects

The participants received a sample object at the beginning of the object description task. They were told that they would be given an object to describe to the listener. I explained that they would have to give as much information about the object as possible in order to enable the listener to identify that particular object. The students were told that simply naming the object would not be sufficient, as the interlocutor had five very similar items with the same name (e.g., comb).

Procedure

Learners left the classroom for periods of 30 to 40 minutes to participate in the experiment in another room in the institution. The majority of students were able to participate at Weeks 1, 5, and 10 of the study; approximately half the learners were available for the follow-up administration at Week 15.

The participants sat across the table from the interlocutor, and I sat at one end so that I could provide instructions and stimuli to the learners, and tape the learner productions. A low barrier separated the interlocutor from the participants, but enabled the two to make eye contact. A flat conference microphone sat in front of the participant. The interlocutor had only a limited repertoire of responses (e.g., "Can you tell me more?"; "Is it this one?") that she was permitted to use.

Data Analysis

I transcribed the learner productions and counted the total number of words in each narrative description. In addition, I calculated a success score using baseline data from nine native and two native-like speakers (see Derwing, 1989). Their stories were used to identify the essential elements in each of the eight frames of the picture stories (see Tomlin, 1984). Learner productions were awarded one point for each essential element included in the description, and an additional five points for having communicated the overall intention or the gist of the narrative. The success scores were then converted to percentages.

In the object descriptions, I counted the total number of words to the point of identification (or, if unsuccessful, to the end of the production) for each item. A success

score (1 or 0) was given for each of the three new objects presented at a given task administration, and a composite score (%) was calculated for each set of tasks.

Responses to the four reverse scale items on the language learning questionnaire were recoded before analysis.

Results

Statistical Analyses

Analyses of variance (ANOVA) for repeated measures were conducted on the data to determine significant differences over time and between groups in task self-efficacy, in self-efficacy for learning, in causal attribution (ability, effort, task difficulty, and luck), and in responses to the language learning questionnaire. Paired-samples t-tests were used to determine where significant differences occurred. Comparisons are made between means at Times 1 and 2; it was expected that the strategy instruction would have the greatest effect on immediate post-test measures.

Two analyses were conducted: data from the communication strategy instruction group were compared with those of the comparison group, and separate analyses compared the data from the affective strategy instruction group with those of the comparison group. As the communication strategy instruction and the affective strategy instruction were very different in nature, it was considered unlikely that they would they have similar effects on the variables in this study.

Bonferroni corrections are usually made when multiple tests are conducted on data, in order to preserve an overall level of significance of .05 for the analysis as a whole. Adjustments were not made in this case, in order to enhance the opportunity for

strategy instruction effects to be revealed. Consequently, actual p values are reported for each of the analyses.

Finally, hierarchical cluster analysis and scale reliability analysis were conducted on the items in the language learning questionnaire. Analyses of variance for repeated measures were used to determine change over time.

Effects of Strategy Instruction on Learners' Perceived Level of Self-Efficacy

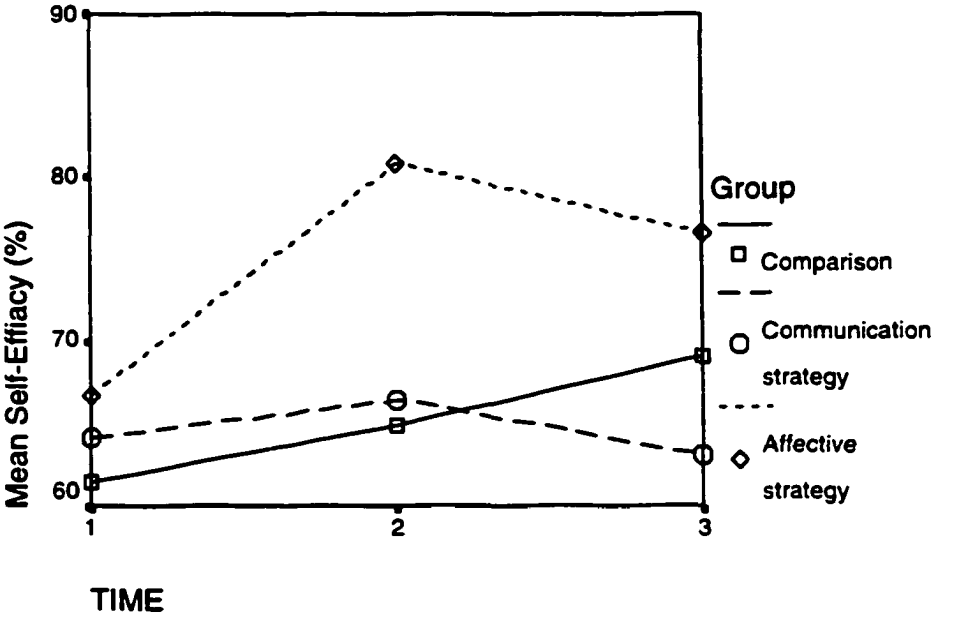
Narrative task self-efficacy

The mean ratings of narrative task self-efficacy for the comparison group, the communication strategy group, and the affective group are displayed in Figure 1. Analyses of variance for repeated measures to determine within- and between-group differences in the learners' perceptions of narrative self-efficacy at Times 1 and 2 were non-significant for the communication strategy and comparison groups.

An ANOVA of the affective strategy and the comparison group data at Times 1 and 2 showed significant effects of time on narrative task self-efficacy ($F [1, 29] = 4.953$, $p = .034$), which were maintained by the comparison group at Time 3. There was a trend toward significance in between-group differences ($F [1, 29] = 3.789$, $p = .061$) on narrative task self-efficacy in favour of the affective group.

Figure 5-1

Narrative Task Self-Efficacy Across Time



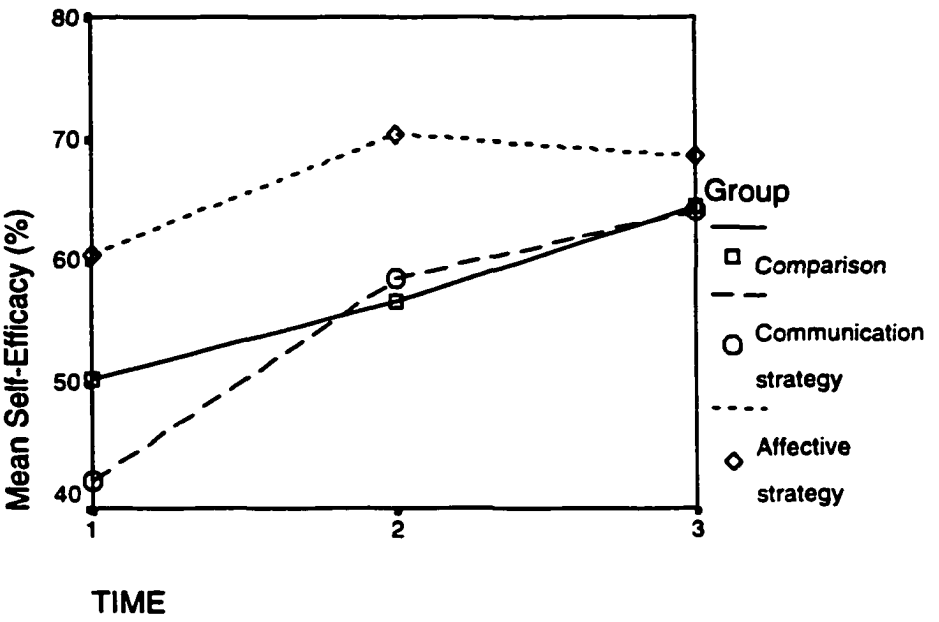
Object description task self-efficacy

Group means for object description task self-efficacy at Times 1, 2, and 3 are displayed in Figure 2. Analyses of variance in the data of the communication strategy and the comparison groups at Times 1 and 2 showed a significant difference over time (F [1, 29] = 6.099, p = .020), but no significant interaction and no significant between-group differences in object description task self-efficacy.

Results of analyses of the affective and comparison group data at Times 1 and 2 showed a trend toward significant effects of time (F [1. 29] = 3.884, p = .058) on the object description task, which were maintained at Time 3 by the comparison group only.

Figure 5-2

Object Task Self-Efficacy Across Time

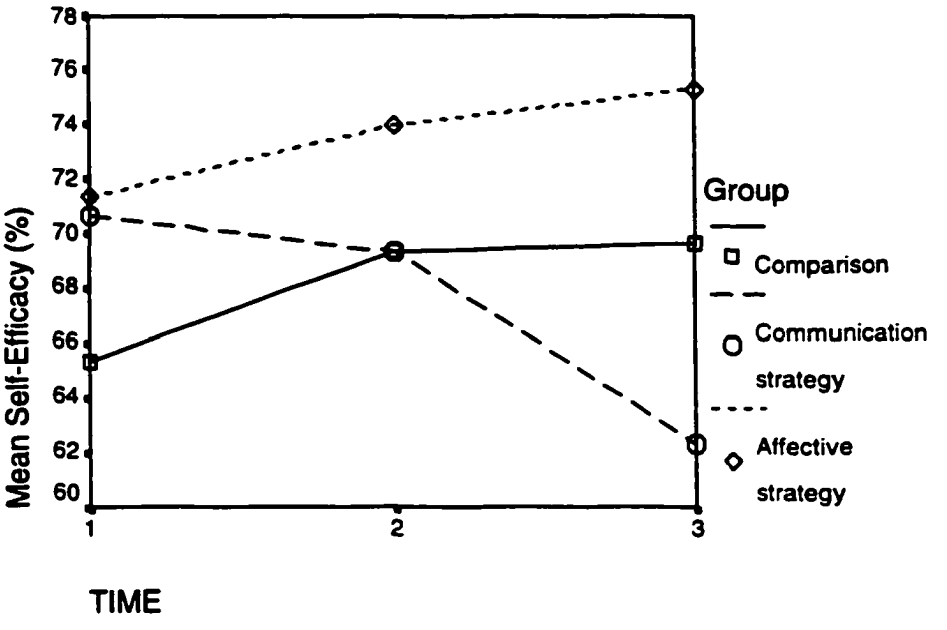


Narrative self-efficacy for learning

Figure 3 shows group means for self-efficacy for learning to perform the narrative task. A repeated measures ANOVA on the data of the communication strategy group and the comparison group at Times 1 and 2 showed no significant differences over time, no significant interaction, and no significant between-group differences in self-efficacy for learning ratings on the narrative task. Analyses of the data of the affective strategy group and the comparison group also showed non-significant differences in self-efficacy for learning on the narrative task (see Figure 3).

Figure 5-3

Narrative Self-Efficacy For Learning

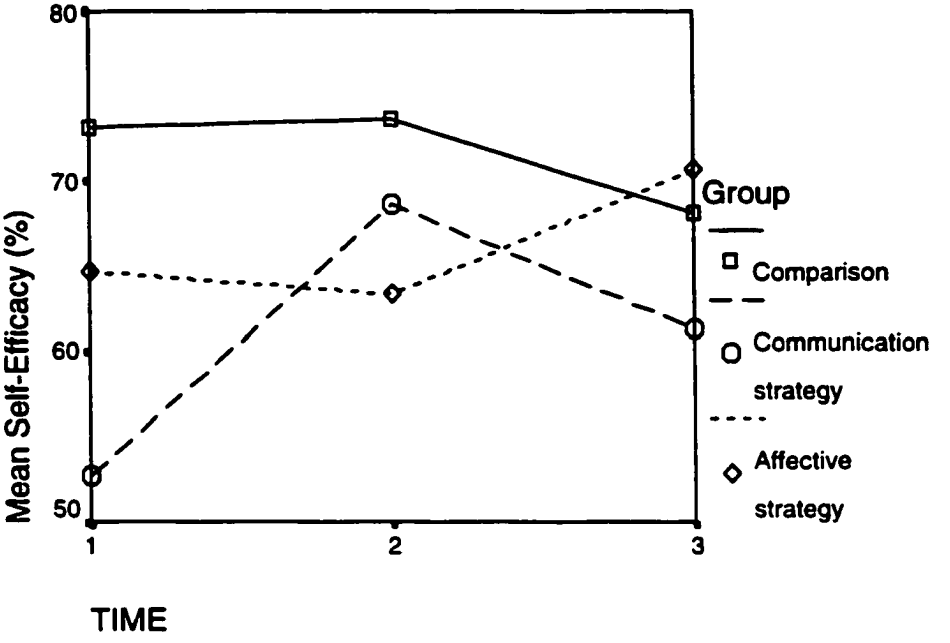


Object description self-efficacy for learning

Mean responses to object description self-efficacy for learning scales are shown in Figure 4. On the object description task, analyses of ratings of self-efficacy for learning at Times 1 and 2 revealed a trend toward significant effects of time (F [1. 29] = 3.818, p = .060) for the communication strategy and the comparison groups. There were also significant between-group differences in perceived self-efficacy (F [1. 29] = 5.785, p = .023) in favour of the communication strategy group. Analyses of the self-efficacy for learning data of the affective group and the comparison group were non-significant on the object description task.

Figure 5-4

Object Self-Efficacy for Learning



Effects of Strategy Instruction on Learners' Causal Attribution

Table 5-1 presents the group means for causal attribution on the narrative task; means for the object description task are shown in Table 5-2. The effects of instruction on the attributions to ability, effort, task ease, and luck at Times 1 and 2 will be examined within each category; analyses of data from the communication strategy instruction group and the comparison group will be presented first, followed by findings of analyses conducted on data from the affective instruction and the comparison groups.

Table 5-1

Causal Attribution: Narrative Task

Group	Attribution	Time 1	Time 2	Time 3
Comparison	Ability	7.44	7.94	7.56
	Effort	5.94	6.00	5.66
	Task ease	6.50	7.06	7.00
	Luck	6.75	5.25	5.66
Communication strategy	Ability	7.33	7.47	7.77
	Effort	6.93	7.80	7.73
	Task ease	6.33	7.07	5.80
	Luck	6.20	5.73	5.73
Affective strategy	Ability	8.80	8.67	8.73
	Effort	6.53	7.07	7.00
	Task ease	6.87	7.00	7.30
	Luck	5.53	7.07	6.70

Note. Judgments were made on 10-point scales (1 = helped not at all, 10 = helped a lot).

Table 5-2

Causal Attribution: Object Description Task

Group	Attribution	Time 1	Time 2	Time 3
Comparison	Ability	6.69	7.69	7.56
	Effort	7.00	6.81	6.06
	Task ease	5.81	5.44	6.69
	Luck	6.69	5.00	6.44
Communication strategy	Ability	7.13	7.20	6.47
	Effort	7.67	8.07	7.53
	Task ease	3.80	4.73	4.13
	Luck	6.73	6.00	5.80
Affective strategy	Ability	7.60	7.27	7.87
	Effort	6.47	7.33	7.13
	Task ease	6.73	6.00	5.80
	Luck	5.33	5.73	5.27

Note. Judgments were made on 10-point scales (1 = helped not at all, 10 = helped a lot).

Ability

Learners rated the degree to which their knowledge or ability was helpful in completing the tasks, using a 10-point scale. Results of a repeated measures ANOVA conducted on the data of the communication strategy treatment group and the comparison group showed no significant differences over time, no significant interaction, and no significant between-group differences. Analyses of the attributions to ability on the narrative task by the affective group and the comparison group indicated no significant effects of time, no significant interaction, but a trend towards significance in between-group differences (F [1, 29] = 3.875, p = .059) in favour of the comparison group.

On the object description task, an ANOVA for repeated measures showed no significant difference over time, no interaction, and no significant group differences in causal attribution to ability.

Effort

Attribution to effort on the narrative task at Times 1 and 2 by the communication strategy condition and the comparison group showed no significant difference over time and no interaction. There was a trend (F [1, 29] = 4.008, p = .055) toward significant between-group differences in favour of the treatment group. Analyses of the data from the affective strategy group and the comparison group showed no significant within- or between-group differences.

Analyses of causal attribution to effort on the object description task at Times 1 and 2 showed no significant effects of time, no significant interaction, and no significant

between-group differences between the communication strategy and the comparison groups, and between the affective strategy and the comparison conditions.

Task ease

The results of a repeated measures ANOVA on ratings of narrative task ease at Times 1 and 2 in the communication strategy and comparison groups showed a trend toward significance over time (F [1, 29] = 3.665, p = .065), but no significant interaction and no between-group differences. There were no significant within- or between-group differences in attributions to task ease by the affective treatment group or the comparison condition.

Attributions to task ease were lower in the object description task than in the narrative task at Times 1 and 2. There were no statistically significant differences in attributions to task ease by the communication strategy and the comparison conditions, or in the attributions of the affective strategy and the comparison groups.

Luck

The fourth factor on the causal attribution scale was luck. In the narrative task at Times 1 and 2, there were no significant differences in the data of the communication strategies and the comparison groups. The data from the affective and comparison groups, however, showed a trend towards significance in the interaction statistic (F [1, 29] = 3.975, p = .056), due to a rise in the affective group's ratings of causal attribution to luck, and a corresponding decrease in the ratings of the comparison group.

On the object description task, a repeated measures ANOVA of attributions to luck by the communication strategy group and the comparison group at Times 1 and 2 indicated a trend toward significance in the effects of time (F [1, 29] = 3.777, p = .062), with a decrease in emphasis on luck as a cause of success for both groups. Analyses of the data from the affective and the comparison conditions at Times 1 and 2 showed no significant effects.

A review of the means for internal (ability, effort) and external (task difficulty, luck) attributions show that, in all groups, attributions to internal causes receive higher ratings than do attributions to external causes. For the comparison group, the combined means, on a 10-point scale, were 6.97 for internal and 6.15 for external attributions; for the communication strategy group, they were 7.64 and 6.40, respectively; and for the affective strategy group, mean responses for internal attributions were 7.87 compared with 7.04 for external attributions.

Correlation analyses for all participants were conducted between task self-efficacy and attributions for ability, effort, task ease, and luck. Results showed a significant moderate correlation between task self-efficacy ratings and causal attributions to ability (r = .536, p = .000) on the narrative task at Time 2. A significant positive correlation was also found between task self-efficacy and task ease (r = .363, p = .013), as predicted, and between task self-efficacy and narrative success (r = .344, p = .019) on the immediate post-test. Correlation analyses of task self-efficacy and causal attributions failed to produce significant results on the object description task.

Effects of Strategy Instruction on Learners' Responses to the Language Learning Questionnaire

A hierarchical cluster analysis was conducted on the responses of all participants to the 15 items in the language learning questionnaire at Time 1. The four reverse scale items ('Learning English is difficult for me'; 'Praise from the teacher is not important to me'; 'I hesitate to ask for help from English speakers'; 'I rarely think about my progress in learning English') clustered together separately from the other items in the questionnaire. It had been perceived at administration that these reverse scale items might have caused comprehension difficulties for some learners. A closer examination of the responses confirmed this; consequently, these four items were omitted from the language learning questionnaire. Cronbach's alpha reliability coefficient of internal consistency for the revised questionnaire was .8569, and the standardized item alpha was .8661.

Communication strategy and comparison groups

Analyses of variance for repeated measures were conducted on the responses to the remaining 11 language learning questionnaire items at Times 1 and 2 (see Table 5-3) to determine if strategy instruction had an effect on learner responses. The responses of the comparison group were compared first with those of the communication strategy condition. On two questions ("I often start conversations in English" and "I put a lot of effort into learning English"), the responses of both the communication strategy group and the comparison group fell significantly at Time 2 (F [1, 29] = 4.221, p = .049 and F [1, 29] = 5.240, p = .030, respectively). An increase in the ratings of the communication strategy condition and a decrease in the ratings of the comparison group resulted in a

significant interaction in three questions: "I have clear goals for improving my English skills" (F [1, 28] = 4.068, p = .053); "I notice my English mistakes and use that information to help me do better" (F [1, 29] = 6.320, p = .018); and "I try to find out how to be a better learner of English" (F [1, 29] = 5.070, p = .032).

There were no significant between-group differences in responses to the language learning questionnaire items by the communication strategy group and the comparison condition.

Affective strategy and comparison groups

Analyses of the responses to the language learning questionnaire items by the affective strategy group and the comparison group at Times 1 and 2 showed significant effects of time, with a decrease in ratings of both groups to the following questions: "If I can't think of an English word, I use a word or phrase that means the same thing" (F [1, 28] = 5.037, p = .033), "I put a lot of effort into learning English" (F [1, 29] = 4.262, p = .048), and "I try to find out how to be a better learner of English" (F [1, 29] = 6.040, p = .020).

Significant interactions were revealed in increased ratings by the affective strategy treatment group and decreased ratings by the comparison group to two items: "I have clear goals for improving my English skills" (F [1, 29] = 5.625, p = .025) and "I notice my English mistakes and use that information to help me do better" (F [1, 29] = 5.133, p = .031). There were significant between-group differences in learner responses to the latter question (F [1, 29] = 8.049, p = .008) in favour of the affective strategy group.

Table 5-3

Mean Responses to Language Learning Questions for Each Group Across Time

Group	Time 1	Time 2	Time 3
2. *I encourage myself to speak English even when I am afraid of making a mistake.*			
Comparison	5.69	5.37	5.63
Communication strategy	5.13	5.40	5.83
Affective	5.87	5.47	6.07
3. *I feel accepted by native speakers of English.*			
Comparison	4.94	4.67	4.56
Communication strategy	5.07	5.13	5.00
Affective	4.13	5.00	5.00
5. *I often start conversations in English.*			
Comparison	5.56	4.81	5.44
Communication strategy	4.93	4.47	4.53
Affective	5.00	4.87	4.93
6. *I have clear goals for improving my English skills.*			
Comparison	6.00	5.31	5.62
Communication strategy	5.93	6.14	5.86
Affective	5.73	6.20	6.13
7. *I plan to learn as much English as possible in this class.*			
Comparison	6.75	5.88	6.31
Communication strategy	6.80	6.93	6.73
Affective	6.40	6.47	6.47
8. *If I can't think of an English word, I use a word or phrase that means the same thing.*			
Comparison	5.94	5.37	5.69
Communication strategy	5.73	6.13	6.13
Affective	6.33	5.79	6.13
10. *I notice my English mistakes and use that information to help me do better.*			
Comparison	5.94	5.13	5.69
Communication strategy	5.87	6.13	5.73
Affective	6.27	6.47	6.20

Note. Judgments were made on 7-point scales (1 = disagree stongly, 7 = agree strongly).

Group	Time 1	Time 2	Time 3
11. *I really enjoy learning English.*			
Comparison	5.67	5.50	6.19
Communication strategy	6.20	6.33	6.40
Affective	6.33	6.27	6.47
12. *I put a lot of effort into learning English.*			
Comparison	6.06	5.44	5.69
Communication strategy	6.33	5.80	6.13
Affective	6.13	5.73	5.73
13. *I think I will do very well in this class.*			
Comparison	5.38	5.19	5.33
Communication strategy	5.40	5.73	5.67
Affective	5.57	5.80	5.07
15. *I try to find out how to be a better learner of English.*			
Comparison	6.44	5.37	5.75
Communication strategy	5.93	6.27	6.27
Affective	6.47	5.93	6.13

Note. Judgments were made on 7-point scales (1 = disagree stongly, 7 = agree strongly).

Overall, the participants (n = 46) gave the lowest ratings on the questionnaire to item 3 ("I feel accepted by native speakers of English") and item 5 ("I often start conversations in English"). Their highest responses were for question 7 ("I plan to learn as much English as possible in this class") and question 11 ("I really enjoy learning English").

Pearson product moment correlations found no high correlations between learners' responses to items in the language learning questionnaire and their performance or demographic data.

Discussion

Effects of Strategy Instruction on Learners' Perceived Level of Self-Efficacy

Task self-efficacy

The affective strategy treatment condition was the only group to make significant gains between Times 1 and 2 in narrative task self-efficacy. This may be due to the instruction in positive self-talk, risk-taking, and other affective strategies that this group received directly prior to Time 2.

I looked at the success that learners had achieved in the narrative description task to see if the increase in perception of self-efficacy was reflected in the actual performance of the participants. At Times 1 and 2, the mean narrative task success scores for the comparison group were 58% and 81%, for the communication strategy group they were 75% and 77%, and for the affective group they were 69% and 75%, respectively. In fact, although the comparison group made significant gains in success between Times 1 and 2, there was little difference in perceptions of self-efficacy. The affective strategy group, on the other hand, made impressive gains in self-efficacy, but not in success rates. It is possible that the affective strategy instruction gave the learners in the affective treatment group 'false hope' that they were more efficacious in the narrative task at Time 2; however, this hope was not borne out in their performance on the task. Bandura (1977) warns of the dangers of such practices: "to raise by persuasion expectations of personal competence without arranging conditions to facilitate effective performance will most likely lead to failures that discredit the persuaders and further undermine the recipients' perceived self-efficacy" (p. 198).

Although only the treatment groups made significant improvement on object description task self-efficacy between Times 1 and 2, all groups increased in self-efficacy at Time 2. Because this task was likely unfamiliar to the participants at Time 1, their increase in self-efficacy at Time 2 could be attributed to task familiarity. Object description task success rates on at Times 1 and 2 were 83% and 79% for the comparison group, 80% and 87% for the communication strategy condition, and 95% and 91% for the affective strategy group. A between-group trend toward significance in the increased self-efficacy ratings of the affective strategy group on the object description task did not correlate with success scores on the object description task, possibly because of a ceiling effect on the latter.

Self-efficacy for learning

Within- and between-group differences in self-efficacy for learning on the narrative task were not significant for the communication strategy and comparison groups, or for the affective strategy and comparison group.

In the object description task, however, analyses of variance showed significant differences in self-efficacy for learning between the communication strategy condition and the comparison group (F [1, 29] = 5.785, p = .023), in favour of the former. The object description task, in contrast to the narrative task, required precisely those strategies that had been taught in the communication strategy treatment group. Having been exposed to 12 hours of instruction in these strategies seems to have resulted in an increase in perceptions of self-efficacy for the treatment group.

Effects of Strategy Instruction on Learners' Causal Attribution

An ANOVA revealed few significant differences in causal attributions in this study. Effects of time were seen on the narrative task in increased attributions to task ease by the communication strategy group and the comparison group between Times 1 and 2. Analyses of variance on the object description task also showed effects of time in decreased attributions of success to luck by the communication strategy and the comparison groups.

Interestingly, there were no clear significant between-group differences in causal attribution in favour of either treatment group. There was a trend towards significance, however, in between-group differences in narrative effort ratings at Times 1 and 2 for the communication strategy and the comparison groups; the participants in the communication strategy group showed significantly greater increases in attributions to effort at Time 2.

Schunk contends that "[h]igher self-efficacy should be associated with greater emphasis on ability and effort as causes of success and with lower judgments of task difficulty" (1996, p. 10). This task was less familiar to learners, and more cognitively demanding than the narrative task. It is possible that learners were thus less capable of making informed judgments on the object description task.

Effects of Strategy Instruction on Learners' Attitudes Towards L2 Learning

The general lack of significant between-group effects on responses to the items in the language learning questionnaire is striking. Only on one question, "I notice my mistakes and use that information to help me do better", were there significant differences between

groups, in favour of the affective condition over the comparison condition. On a 7-point scale, the mean ratings for the affective group rose from 6.27 to 6.47, and those of the comparison condition fell from 5.94 to 5.13 between Time 1 and Time 2.

Learners' lowest scores are on those questions that relate to the use of English outside the classroom. Many of them had little interaction on a weekly basis with native speakers, and so it was less likely that they would report starting conversations in English often or feeling accepted by native speakers of English. The questions that received the highest scores have clear connections with classroom English: planning to learn as much English as possible in the class, and enjoying learning English.

The lack of high correlations with learners' performance and demographic data is interesting. It is possible that the participation of larger groups of students would have resulted in somewhat different findings.

Conclusion

The analyses reported here suggest that the effects of strategy instruction on self-efficacy, causal attribution, and motivation and attitudes are quite limited.

Does strategy instruction have a significant effect on learners' perceived level of self-efficacy?

No significant differences in task self-efficacy between the communication strategy group and the comparison group were noted. Analyses of task self-efficacy showed trends toward significance in between-group measures of task self-efficacy on both the narrative task and the object description task, in favour of the affective strategy training group. Affective instruction without the requisite skills, however, is of questionable value

and may, in fact, hold deleterious consequences for some learners. It is important that affective feedback be linked to actual performance and informed assessment; without these, inflated expectations in the face of repeated failure may result in loss of self-efficacy and motivation.

Only in the analyses of object description between-group differences in self-efficacy for learning were there significant differences in favour of the communication strategy group. This is not surprising, given that these were the learners who had received instruction in the strategies that were required for successful completion of the object description task. Their self-efficacy appraisals were, in effect, based on personal experience and actual performance in the communication strategy instruction that learners received, and they appeared to be task-specific.

Does strategy instruction have a significant effect on learners' causal attribution?

Strategy training appears to have had little effect on causal attribution. Analyses of the causal attribution data of the communication strategy condition and the comparison group show no significant between-group differences on attributions on the narrative task to ability, to task ease, or to luck. Only in causal attribution to effort was there a trend toward significance in favour of the communication strategy condition.

Data analysis of causal attribution ratings of the affective and comparison groups on the narrative task show a trend towards significance in between-group differences in attributions to ability, in favour of the affective strategy group. All other analyses of causal attribution for these two groups were non-significant.

On the object description task, there were no significant between-group differences found in any of the analyses conducted. These findings suggest that the strategy training that the learners in this study received did little to alter participants' attributions to ability, effort, task ease, or luck on this task.

Does strategy instruction have a significant effect on learners' responses to the language learning questionnaire?

The effects of strategy training on responses to questions regarding motivation and attitudes towards language learning were minimal. Although the mean scores in Table 5-3 show increases across time for many of these items, the only consistent pattern that emerges is the decrease in self-report ratings that the comparison group provided at Time 2. In all but question 3 ("I feel accepted by native speakers of English"), these ratings improved at Time 3, leading one to suspect that external factors influenced the data collection at Time 2.

Limitations of Self-Report

There are obvious difficulties involved in the use of self-assessment, even for the native speaker population. The most notable general response effects, or "tendencies of certain people to respond to factors other than question content" (Heilenman, 1990) include acquiescence response set, social desirability, and question wording. Acquiescence effects, the tendency to agree with statements regardless of their content, are most evident with agree/disagree statements (Converse & Presser, 1986). Studies show that respondents find it more difficult to disagree with negative questions than to agree with

positive ones (Elliott, as cited in Heilenman, 1990). Response effects are sometimes controlled for through the use of matched pairs of contradictory questions; agreement with both indicates acquiescence. I did not include contradictory questions because of my desire to limit the length of the questionnaire administered in this study.

Social desirability, the natural human tendency to want to gain the approval of others, is another strong variable in self-assessment. Mischel, Ebbeson, and Zeiss (1973, cited in Carr, 1977) posit that an individual's self-concept has a strong influence on the accuracy of his or her self-assessment. Carr (1977) states that "[g]iven a relatively ambiguous evaluative context, the [respondent] will act to enhance or maintain the self-concept and then will rationalize performance based on needs rather than on actual performance" (p. 74). Carr suggests that where evaluation is seen as a threat to the self, students tend to identify with the aspirations and goals of their instructor (or perhaps, in this case, the researcher).

Finally, question wording profoundly influences responses to self-assessment questionnaires. Imprecise, commonly used quantifiers (e.g., very often, often, quite often, sometimes, not too often) may not carry the same connotation for each respondent, and their meaning may be influenced by the context in which they appear (Bradburn & Sudman, 1979). Negatively-worded items tend to cause further confusion (Elliott, as cited in Heilenman, 1990). In the case of second language learners, the issue of question wording becomes even more critical. Students with lower proficiency in the language may not have the vocabulary necessary to comprehend self-assessment questionnaires. This limited understanding will reduce the accuracy of their responses and may necessitate the use of translation. At a higher level of proficiency, however, with false

beginners and intermediate or advanced learners, self-assessment can be used successfully (LeBlanc & Painchaud, 1985). For any learner, however, as Blue (1988) points out, lack of familiarity with, for example, concepts, terminology (e.g., "stress, rhythm, intonation") or labels such as "reading strategies" may tax the cognitive skills of the respondents. Although efforts were made to ensure that learners understood the questions in the language learning questionnaire that was completed in the class setting, it is likely that listening comprehension and reading proficiency affected the responses of some learners in this study, as responses to the reverse-coded items suggested. During the completion of the causal attribution scales during the experiment, several learners also seemed to have difficulty with the concept of "luck". Translation of the self-report instruments into the 22 native languages represented by the participants was not possible. Furthermore, translations into other languages sometimes fail to communicate accurately the intended meaning.

Familiarity with scalar judgments is also a factor in research of this nature. The self-report scales in this study were explained to learners and a practice example was given for use in class; initially, however, some participants seemed more hesitant in making judgments than others. One of the benefits of the scales, however, was revealed during the last set of interviews. A participant greeted the causal attribution scale enthusiastically and explained that, thanks to her participation in the study, when her doctor had recently asked her to describe her pain "on a scale from 1 to 10", she had known exactly how to respond!

The Context

The context in which this study was conducted plays an important role in the interpretation of the results. The participants in this study were mostly refugees or immigrants, all survivors and risk-takers. They had already succeeded in overcoming a number of obstacles in their lives; learning a new language was just one more challenge to be met in order to integrate into Canadian society. The research findings might have been interpreted differently in an English as a foreign language environment or in academic settings where second language instruction is mandatory. All the participants in this study had opted to study ESL, and their motivation may already have been at an optimal level. In this case, any effects of strategy training on motivation and attitudes toward second language learning would have been minimized.

Attempts were made to prevent the Hawthorne effect in any one group; for example, I spent many hours observing in all three classes. Furthermore, the instruction that was delivered in the treatment conditions was integrated into the regular ESL curriculum; learners were not aware that the communication strategy and affective strategy lessons were designed by anyone other than the instructor who taught them.

The findings of this study showed that the communication strategy lessons taught had a significant effect on reports of self-efficacy for learning in the object description task; however, there were only trends toward significance for the affective strategy group in narrative and object description task self-efficacy. The self-reports administered in this study would have been greatly enhanced, had time allowed, by the inclusion of retrospective interviews with the participants concerning their perceptions of self-efficacy, general motivation, and attitudes toward second language learning.

The lack of significant effects of both communication strategy instruction and affective strategy instruction on narrative self-efficacy for learning, causal attribution, and language learning attitudes and motivation in this study suggests that strategies are not the universally powerful motivators that they are sometimes touted to be. This research offers support to Dörnyei's (2001) assertion that "language classrooms are complex environments where many factors operate simultaneously, and significant changes can often only be achieved if several variables work in concert or in special combination" (p. 234). The search continues, through the use of classroom-based experiments, observations, and self-reports, for the most efficient means of enhancing motivation and facilitating success in the second language classroom.

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PICTURE STORY

Instructions:
Read the statements below.
Circle the number that expresses your opinion. Please answer *all* the questions.

How sure are you that you can accurately describe *in detail*...

	Not at all sure										Completely sure
2 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
4 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
6 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
8 pictures in this story?	0	10	20	30	40	50	60	70	80	90	100%
How sure are you that you could learn to give *excellent* descriptions of stories like this?	0	10	20	30	40	50	60	70	80	90	100%

PICTURE STORY

Instructions:
Read the statements below.
Circle the number that expresses your opinion. Please answer *all* the questions.

How much did the following help you tell the story?

	Not at all										A lot
I knew how to do it.	0	1	2	3	4	5	6	7	8	9	10
I worked hard on the activity.	0	1	2	3	4	5	6	7	8	9	10
It was an easy activity.	0	1	2	3	4	5	6	7	8	9	10
I was lucky.	0	1	2	3	4	5	6	7	8	9	10

Appendix I: Language Learning Questionnaire

Instructions:
Read the 15 statements below.
Decide how strongly you agree or disagree with each of the statements.
Circle the number which best expresses your opinion.
Please answer *all* the questions.

	Disagree strongly						Agree strongly
Example: Hamburgers are delicious.	1	2	3	4	5	6	7

1. Learning English is difficult for me. (reverse-coded)
2. I encourage myself to speak English even when I am afraid of making a mistake.
3. I feel accepted by native speakers of English.
4. Praise from the teacher is *not* important to me. (reverse-coded)
5. I often start conversations in English.
6. I have clear goals for improving my English skills.
7. I plan to learn as much English as possible in this class.
8. If I can't think of an English word, I use a word or phrase that means the same thing.
9. I hesitate to ask for help from English speakers. (reverse-coded)
10. I notice my English mistakes and use that information to help me do better.
11. I really enjoy learning English.
12. I put a lot of effort into learning English.
13. I think I will do very well in this class.
14. I rarely think about my progress in learning English. (reverse-coded)
15. I try to find out how to be a better learner of English.

VI. GENERAL DISCUSSION AND CONCLUSIONS

Language learning strategies have been the focus of a large number of studies over the past two decades. As Horwitz noted, "The ultimate purpose of studying learner strategies is, of course, an applied one; researchers and teacher hope to determine which strategies are most effective and help students adopt more productive learning procedures" (1987, p. 126). The vast majority of second language strategy research, however, has consisted of correlational analyses using self-reports of strategy use. The results of these have been speculative, at best. The teachability of language learning strategies, in particular, has not been adequately demonstrated; empirical evidence in favour of strategy training is still in an early stage. Experimental studies are far less common than descriptions of the findings of surveys or questionnaires. To date, there has been inconclusive evidence to support the claim that "[a]ppropriate language learning strategies result in improved proficiency and greater self-confidence" (Oxford, 1990, p. 1). The aim of this dissertation was to investigate the teachability and transfer of second language strategies, in particular, communication strategies (paraphrase) and affective strategies. I endeavoured to determine if strategy training led to improved second language performance on speaking tasks administered over 15 weeks, and if it resulted in improved perceptions of self-efficacy, general motivation, and attitudes towards language learning. In this chapter, I will summarize the main findings, discuss the educational implications, and note the limitations of each of the reported studies. The chapter will conclude with suggestions for further research.

The Challenges of Classroom-Based SLA Research

Chapter II of this dissertation attempted to provide the reader with an understanding of the particular challenges faced in conducting second language acquisition research in an adult ESL context, and to examine the support that is available for this type of study. Intact classes posed numerous difficulties, as the institutional placement test did not include a measure of oral proficiency, and there was a wide range of skill proficiency in each class. Program policies with regard to teacher assignment had to be respected; as a result, three teachers were ultimately directly involved in the study, which introduced yet another variable into the research. Participant attrition was a problem, particularly at the follow-up task administration, when approximately half of the learners were no longer available to participate in the study. The data collection process was fraught with complications related to equipment, physical facilities, and student absences. The speaking tasks that were administered elicited different strategies; the use of paraphrase was not mandatory for completion of the picture stories, so findings for the two tasks differed considerably. Data analysis was complex due to the small numbers in each group and inconsistent cell numbers due to incomplete data. Great efforts were made to avoid unnecessary inconveniences to teachers and students; however, interviews took place during class time and necessitated interruption of learning for the students. Most of these difficulties were unavoidable. The SLA manuals that I examined addressed many of these issues, and offered advice for a variety of contexts. This chapter recommends collaborative research between teachers and researchers, using a combination of qualitative and quantitative data collection procedures.

Effects of Communication Strategy Instruction in the ESL Classroom

Communication strategies are one set of second language strategies that are commonly used in verbal interaction but seldom taught. Although some researchers (e.g., Kellerman, 1991) see these strategies as universal and transferable from L1 to L2 contexts, others posit that instruction in the use of communication strategies is beneficial (e.g., Canale, 1983). The results of classroom interventions in communication strategy use (e.g., Cohen, Weaver, and Li, 1998; Dörnyei, 1995; Salamone & Marsal, 1997; Scullen & Jourdain, 2000) suggest that the relationship between strategy training and performance is complex and in need of further investigation.

Chapter III described a quasi-experimental study designed to examine the effects of communication strategy instruction on L2 performance, and learners' perceptions of self-efficacy, motivation, and attitudes toward second language learning. Learners in the treatment group received 12 hours of instruction in paraphrase (circumlocution, approximation, superordination) over four weeks. Post-test results showed that there was a direct effect for the communication strategy group on range of communication strategies used in the object description task, which was most effective in eliciting circumlocution. No significant between-group differences in favour of the treatment condition were found for success, rate of message abandonment, speech rate, task self-efficacy, or self-efficacy for learning. It is likely that the full-time communicative ESL classes in which the participants were registered were responsible for the gains over time in both groups. The findings from this phase of the study suggest that the teaching of language is ultimately of greater importance than the teaching of this type of communication strategy. The learners in this particular context were from a wide range of

backgrounds, but typical of Canadian ESL settings; studies conducted in less heterogeneous classes may produce different results.

Effects of Affective Strategy Training in the ESL Classroom

Affect is one set of learner strategies that has received increasing attention over the years from researchers such as Arnold (1999), Gardner (1985), Horwitz and colleagues (1986), Schumann (1997), and Young (1998). Although few practitioners would disagree that a pleasant, supportive atmosphere facilitates learner participation and risk-taking, most studies are speculative or based on findings from self-reports by learners. Despite the fact that many teaching resources (e.g., Foss & Reitzel, 1991; Hansen, 1998; Moskowitz, 1978; Oxford, 1990) recommend a wide variety of affective activities for the second or foreign language classroom, evidence that affective strategies have a direct effect on learners' L2 performance and perceptions of self-efficacy is inconclusive.

The fourth chapter of this dissertation described a study in which learners in an affective strategy condition received 12 hours of instruction on the use of affective strategies (e.g., music, relaxation, visualization, risk-taking, positive self-talk) to regulate second language attitudes, motivation and emotions. Learners in the treatment and the comparison groups completed narrative descriptions and object description tasks, as well as self-efficacy, general motivation, and attitude questionnaires. These were analyzed to determine the effect of affective strategy training on L2 performance (success, speech rate, message abandonment) and on task self-efficacy and self-efficacy for learning. The results showed no significant between-group differences on L2 performance or self-efficacy. These findings can be attributed largely to the nature of the adult ESL classes in

the study. Because the majority of the learners are refugees and/or had been out of school for a long period of time, the ESL program fostered the development of a strong, supportive community within classrooms to promote the social-emotional development of learners and to facilitate language learning. Once this type of learning environment has been established, the results of this study suggest that teachers should focus on meaningful language and content rather than devote valuable class time to the teaching of affective strategies.

Effects of Strategy Instruction on Motivation

The bulk of the research on second language motivation has been conducted on social psychological aspects of second language acquisition (Gardner, 1985). More recently, researchers (e.g., Crookes & Schmidt, 1991; Dörnyei, 1994a, 1994b, 2001; Oxford and Shearin, 1994; Tremblay & Gardner, 1995) have recommended that the focus of attention be expanded to include other aspects of motivation from related disciplines (e.g., self-efficacy, attribution theory, goal-setting). Most studies of learning strategy instruction in second or foreign language contexts have been based on self-report and correlational analyses. Few interventions have been conducted in the field of second language acquisition; they are more commonly used in mainstream educational settings (e.g., in math classes). Findings in the latter suggest that strategy training in these contexts enhances achievement (e.g., Locke, 1996; Pintrich & DeGroot, 1990; Schunk, 1984, 1991; Schunk & Gunn, 1985).

Chapter V presents a review of theoretical research in self-efficacy and causal attribution, as well as a discussion of the cultural factors that influence these constructs.

The study described was designed to determine if either communication strategy instruction or affective strategy instruction would have a significant effect on learners' perceived levels of self-efficacy, causal attribution, motivation, or attitudes towards second language learning. Each treatment group received 12 hours of strategy training; results of self-report questionnaires were compared with those of a comparison class to determine between-group differences.

The only significant between-group effect in favour of the communication strategy instruction group over the comparison group was on self-efficacy for learning in the object description task. The communication strategy group had received training in circumlocution, which was required for successful completion of this task. There were no significant between-group effects for the affective strategy group. These findings suggest that affective instruction without the requisite skills is of limited benefit to learners. The communication strategy and the affective strategy instruction provided had no direct beneficial effects on other measures of self-efficacy, or on general motivation or attitudes toward second language learning. The findings of this study suggest that the claim that strategy training increases motivation and self-efficacy is as yet inconclusive.

Analyses showed no significant between-group differences in the causal attributions of the treatment conditions and the comparison group on either the narrative or the object description task. These results suggest that strategy training had little impact on learners' attributions of success to ability, effort, task ease, or luck.

Strategy instruction seemed to affect learners' general motivation and attitudes toward L2 very little. In essence, these were learners whose motivation was already high; they had enrolled in English language classes in order to develop second language

proficiency and to integrate into Canadian society. They had overcome many obstacles in the immigration process; language learning was simply one more challenge to be faced, and they realized that their futures in Canadian society would depend to a large extent on their proficiency in English.

Because of the time limits imposed on this study, only communication strategies and affective strategies were taught, and qualitative interviews with learners were not conducted. It is possible that teaching a larger repertoire of strategies would have provided more positive evidence of strategy training benefits. Retrospective interviews on task performance and on questionnaire responses would also have supplied much-needed data on individual learners' general motivation and attitudes towards language learning over time (e.g., Abraham & Vann, 1987; Vann & Abraham, 1990).

The search for ways to improve learning outcomes has long been a central focus of the language teaching field, hence the new methods, techniques, strategies, and technologies that emerge on a regular basis. None of these innovations, however, address Earl Stevick's (1980) questions:

> Why do some language students succeed and others fail? Why do some language teachers fail and others succeed? What may the learners and teachers of foreign languages hope to succeed at anyway? How broad, how deep, how wide may be the measure of their failure or of their success? (p. 3)

Given the numbers of individuals in the world who are engaged in learning an additional language -- and the complex interplay of the many factors that affect their learning outcomes -- the goal of identifying ways in which teachers and students can improve their performances may seem overwhelming. It is only through classroom-based research,

experiments and observations both, in combination with teacher and learner self-reports, that we can hope to determine how best to enhance success and limit failure. In order to guide the development of second language curricula and teacher preparation programs on more than intuition, myth, and charisma, we must pursue the answers to Stevick's questions in a rigourous, multi-faceted manner.

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