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Classroom Tasks and Korean Junior College Students' Learning Strategy Variability

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This study explores the effect of learning task treatment group participation on self-reported learning strategy use (SRSU). Korean Junior College students (n=224) participated in 3 types (differing levels of difficulty) of classroom tasks and were immediately assessed for their self-reported strategy use with a questionnaire. The null hypothesis, that there would be no significant difference between the groups in overall SRSU, was defeated at a $p > 0.01$ level. It was found that the Role Play pedagogic task group had higher overall self reported strategy use than the other two treatment groups. A descriptive look at the data revealed trends in the patterns of strategies that Korean Junior College students report using. While care must be taken in interpreting the pedagogical implications of this study's findings, the use of classroom tasks in shaping learners' approaches to learning in classroom settings is explored.

I. INTRODUCTION

A long-standing interest in learning tasks and task based syllabus design (see Long and Crookes, 1992 for an organizational overview) led to a call for the development and extension "both substantively and methodologically" of further task research (Nunan, 1991). Nunan suggests linking future studies to "a greater range of...psycholinguistic models" and provides as an example a study that involved cognitive psychological precepts (declarative and procedural knowledge dimensions). The predominant focus of cognitive learning theory in second language acquisition research has been on learning strategies (Wenden, 1987; Wenden and Rubin, 1987).

The idea of combining research on tasks with that of learning strategies had already received attention and had generated a call to investigate "how these strategies interplay with specific language learning tasks." (O'Malley et al; 1985b). For the most part, task/strategy studies have looked at the interaction between certain strategies and task performance (Abraham and Vann, 1987; Abraham and Vann, 1990), strategy training and task performance (O'Malley et al, 1985b) or descriptions of overall strategy use (Chamot, 1987). Unfortunately, variation in study design, data collection procedures and analysis has made the results of these studies difficult to compare.

This study addresses the question of how task participation influences the amount and type of self-reported strategy use (SRSU). The overt teaching of learning strategies to students has met with mixed results (see Abraham and Vann, 1990 for a review) for a number of reasons. This study hopes to lay the foundation for a different approach to the problem of how educators can influence the learning strategy patterns that students employ. Given a general description of a learner's strategy patterns, teachers could shape those patterns into more effective learning approaches through the selection of classroom tasks that would promote or reduce specific learning strategy use. Of course, this scenario rests upon the assumption that a connection can be shown between specific tasks and strategies.

Our first alternative hypothesis is that a significant difference in the overall strength of SRSU will be found between the three groups receiving various task type treatments. Our second alternative hypothesis predicts a significant difference between any of the treatment group SRSU scores and the Control group's. The two null hypotheses statements are:

- a.) No significant differences in mean SRSU scores exist between groups participating in different learning tasks. ($1H_0$)
- b.) No significant differences in mean SRSU scores exist between groups participating in different learning tasks and the Control group which does not participate in any learning task. ($2H_0$)

This study was designed with SRSU as the dependent variable (interval DV) and task-type group membership as the independent variable (nominal IV).

II. METHOD

230 native Korean speaking Junior College students participated in this study. Six subject mortalities (incomplete questionnaire items) resulted in a sample of 224 ($N=224$). Demographics for 223 of the subjects are provided in Table 1. One subject completed the SRSU questionnaire but did not fill out the personal information items. Ten extra credit classroom participation points were given to each subject for their participation in the study.

A experimental research design was used in this study to gather information and establish the survey and statistical procedures. Borg and Gall (1989:680) describe this design as a "posttest-only Control-group design" and warn of the twin hazards of ensuring sufficient randomness in group assignment and problems caused by attrition. As a means of dealing with the first problem, large samples are recommended (1989: 680). The sample of

TABLE 1
Demographic Information for Native Korean Speaking Subjects.

Age	<i>n</i>	Gender	<i>n</i>	Program of Study	<i>n</i>
18-20	77	Female	123	1st year	
21-23	85	Male	100	TourismEnglish	107
24-26	58		223	2nd year	
over 27	3			Tourism English	70
	223			Women's Affairs	46
					223
<u>Time studying English</u>		<u><i>n</i></u>		<u>Outside study</u>	<u><i>n</i></u>
5-7 years		131		Self-study	139
8-10 years		86		Private tutor	1
11years				Language institute	54
or more		6		Other (armed	
		223		service training,	13
				etc.)	
				Combinations	15
					222 ¹⁾

1) The total for outside study equals 222 because one subject left this item blank on the questionnaire.

230 was as large as possible and the process of randomizing the assignment of groups was rigorous. Subject attrition did not appear to be a problem, and in fact, only 6 surveys out of 230 (2.6%) had to be excluded (the proctor in one session didn't get a chance to see if the questionnaires had been totally filled out).

Several methodological difficulties have been noted in learning task and strategy research. Specifically, Long and Crookes (1992) note that a systematic way of sequencing tasks has remained elusive. Nunan (1988: 55) reports on a hierarchy of activities that he developed in earlier research. For each ascending level of difficulty in the model (PROCESSING, PRODUCTIVE and INTERACTIVE), pathways were chosen that would lead to a 'typical' classroom activity. For example, the simplest task used in this study was based on the parameters of PROCESSING → response required → non-physical & non-verbal. A modified cloze-type, fill-in-the-blank task met these requirements of processing (written text), providing a response (written) and non-physical & non-verbal (writing vs. moving or speaking) modes of response. Using Nunan's (1988:55) framework and explanations, the following three sets of treatment tasks were developed:

PROCESSING → Response → Non-physical & Non-verbal

- 1) A 29 item modified cloze-type (no prompts), fill-in-the-blank exercise. Presented as a public service announcement, the text has an overall 6th grade level rating using the Flesch-Kincaid method.

PRODUCTIVE → Response → Meaningful practice

- 2) Interview sheets which provided partial and full prompts for questions that would typically be asked by matchmakers or computer dating services. Subjects work in pairs and alternate asking and responding to their partner.

INTERACTIVE → Simulated → Role Play

- 3) We created a Role Play using maps and role cards for combinations of 3-5 subjects. Participants had either the role of a lost traveller asking for directions or that of a person providing directions. Alteration of the

cities and routes presented on each map assured prolonged negotiation and discussion.

For each task, two versions were constructed: contextually specific (Korean referents) and contextually general (cosmopolitan referents). The modified maps for the role-plays were either Korean maps (specific) or maps of Belgium (general). The results for the treatment groups were combined and the context of the task material was not taken into account for this study.

Consensus has begun to form around the InterAmerican Research Associates (IARA) inventory of strategies as well as their definition of learning strategies (Rubin, 1987; Chamot, 1987). For this study, sixteen learning strategies were chosen from the IARA inventory for the construction of a questionnaire instrument in 1988 (by Schwedersky). The sixteen strategies were selected from O'Malley et al. (1985b: 567-8) by choosing those strategies with the highest percentage of use, until 90% or more of the strategy use reported in their study was accounted for. A chart of definitions for the sixteen strategies used in this study is provided in Appendix A.

The questionnaire was developed by taking items or descriptions from various LS studies (Rubin, 1975; Reiss, 1985; Politzer and McGroarty, 1985; Chesterfield and Chesterfield, 1985; Bialystok, 1985; Gillette, 1987; Huang and Van Naerssen, 1987; Pearson, 1988; Porte, 1988) and combining them to form two statements to elicit responses on LS use. For example, Self-Monitoring (correction of performance for accuracy relative to setting or people) is identified in 8 of the 9 studies that were compared. Item 22 in Huang and Van Naerssen's (1987) questionnaire asks the learner, 'Do you "correct yourself whenever you make an error" in informal conversations?' (1987: 302). Self-Monitoring behavior receives Politzer and McGroarty's attention when they ask, "Do you listen carefully to your own pronunciation and try to correct it?", as item B9 on their questionnaire (1985: 122). These items were then incorporated into the present instrument through the statements:

I listen carefully to my pronunciation and try to correct it. I cut short a word or sentence in English when I realize that I am saying it wrong.

As was suggested by Politzer and McGroarty (1985: 118), a five step

Likert scale was used in the scoring of the written questionnaire. The two item scores were then combined so that 10 was the maximum and 0 was the minimum possible frequency score for reported LS use.

The complete 32 item questionnaire was then translated into Korean for this present study. Peter Newmark (1981) proposes only two methods of Translation that are appropriate to any text: (a) communicative Translation, where the translator attempts to produce the same effect on the target language (TL) readers as was produced by the original on the source language (SL) readers, and (b) semantic Translation, where the translator attempts, within the bare syntactic and semantic constraints of the TL, to reproduce the precise contextual meaning of the author.

Both communicative and semantic methods have been used in some degree for the Translation of our questionnaire. In the case of using the communicative Translation, one of the problems was to decide to what extent it should be simplified and therefore emphasize the basic message. There was a limitation to make each question as a simple sentence which had to represent the basic message. The semantic Translation was used not only to respect the semantic and syntactic structures of the SL, but also to retain the word-order of the SL. As it was mentioned before, we selected two statements for eliciting responses for each LS. Initially, some pairs of the sentences looked almost similar when we tried to concentrate on the communicative Translation. On those sentences in Korean that looked almost the same, a word for word Translation was used first and then a literal, idea-based version was constructed.

Reliability for the translated version was determined using the split-half method (half test reliability, $r_{xy} = .83$) and the Spearman-Brown prophecy formula provided a full test reliability of $r_k = .91$. This questionnaire's reliability is well above the .60 cited by Reid (1991) in her discussion of self-reporting survey reliabilities.

III. PROCEDURE

Subjects signed-up for any one of seventeen "exercise sessions" periods,

from which one Control and six treatment groups were formed. Before assigning group status to the exercise periods, the number of signed-up participants for each session was taken into account, to get as numerically even sub-sample populations as was possible. Using a random draw of cards, the sessions were then assigned seven treatment designations: Cloze, Interview, Role Play (each with specific and general referent sub-designations) and Control (only questionnaire, no task). During the week when the treatments were administered, two additional sign-up sessions were offered and assigned to task treatment groups that had lower subsample sizes. All sessions took place in classrooms at the Junior College where the subjects were students.

At the beginning of each session, proctors took attendance and (using written instruction sheets) read the exercise instructions. While the specific instructions varied with task, each version gave brief task completion directions, set the exercise completion time at 20 minutes and solicited any questions that the subjects might have. Materials used for each task were then handed out and subjects were instructed to begin. Proctors noted starting and projected completion times and were available for answering questions, but did not prompt or interfere unless subjects overtly requested assistance.

At the end of 20 minutes, the exercise materials were collected, instructions for completing the questionnaire were read and the questionnaires were handed out. The interval between the completion of the tasks and the beginning of the questionnaire averaged 2.93 minutes with a mode of 3 minutes and a range from 1 to 5 minutes. The questionnaire starting time as well as the first and last completion times were recorded. Completion time for the questionnaire ranged from 2 to 10 minutes with an average of 6.07 minutes.

IV. RESULTS

We are attempting to show a link between learning task participation and the overall amount of strategies that subjects report using when they learn

English as a foreign language. As a means of overthrowing the null hypotheses, we'll need to see if there are any differences in the strength of the SRSU scores based on treatment group participation. Our first null hypothesis says that there won't be a difference between scores for any of the groups. The second null hypothesis is that there won't be a difference in the scores between any treatment groups and the Control group. Both of these hypothesis should be tested using some form of a group differences comparison, but care should be taken that the situation of multiple t-testing does not arise. We've already noted that the dependent variable is of an interval (continuous) form and that the independent variable is dichotomous (participation in a certain task group or not).

Descriptive statistics for the Control and experimental groups are provided in Table 2.

TABLE 2
Descriptive Statistics for Each Group.

	<u>CLOZE</u>	<u>INTERVIEW</u>	<u>ROLE PLAY</u>	<u>CONTROL</u>
GROUP MEAN	80.22	80.57	91.40	86.79
STAND. DEV.	19.20	22.69	16.67	15.78
SUB SAMPLE	n= 64	n= 61	n= 70	n= 29

The appropriate statistical test to find significant differences between any of our treatment groups is a one-way analysis of variance (ANOVA) (Wiersma, 1991: 344-45). This technique uses total population curves (or parameters) in discovering the level of significant difference, and thereby allow greater generalization of findings in terms of external validity (Welkowitz et. al., 1982: 6). Because our sampling technique is probability based, we can use parametric inferential tests of significance.

TABLE 3

One-way Analysis of Variance (ANOVA) for Treatment and Control Group Overall SRSU Scores.

<u>SOURCE</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>SIGNIF.</u>
Between groups	3	5592.8	1864.3	5.02**	(P<.01)
Within groups	220	81675.4	371.3		
Total	223	87268.2			

Table 3 presents the values for a one-way analysis of variance for this data. The rejection regions are $F = 2.65$ (.05) and $F = 3.88$ (.01). With an F value of 5.02**, the null hypothesis is defeated with a confidence interval of $p < 0.01$. The result of this one-way ANOVA indicates the defeat of the first null hypotheses.

To determine where the significant differences lie and whether there are any difference between treatment groups and the Control group, we performed a *post-hoc* Scheffe test. This test is appropriate for discovering where between group differences are, given a significant ANOVA result and unequal subsample sizes (Hinkle et al., 1979:276). Table 4 presents the results of the Scheffe test pair-wise comparisons for treatment groups and the Control group. Group mean scores indicate the overall mean SRSU score for individuals participating in that group. F critical values are calculated for both $p < 0.05$ and $p < 0.01$ for the Scheffe test to facilitate comparison of the findings.

TABLE 4

Result of the Scheffe Pair-wise Post-hoc Multiple Comparison Test for All Groups.

<u>Pair-wise comparisons</u>	<u>F Value</u>	<u>Significance</u>
CLOZE X INTERVIEW	0.01	ns
CLOZE X ROLE PLAY	11.26*	$p < 0.05$
CLOZE X CONTROL	2.32	ns
INTERVIEW X ROLE PLAY	10.29*	$p < 0.05$
INTERVIEW X CONTROL	2.05	ns
ROLE PLAY X CONTROL	1.17	ns

$$F_{crit} = (4-1)(2.65) = 7.95 \quad p < 0.05$$

$$F_{crit} = (4-1)(3.88) = 11.64 \quad p < 0.01$$

The second null hypothesis (that there would be a difference between treatment groups and the Control group) is not defeated. The significant differences between the SRSU scores for the Role Play/Cloze groups and the Role Play/Interview groups show the location of between group contrasts. None of the treatment group's scores are significantly different from the Control group's.

V. DISCUSSION

1. Null Hypotheses

Rejection of the first, but not the second, null hypothesis leads us to observe that while certain pedagogic tasks (Role Play) enhance overall SRSU scores, others (Cloze and Interview) have a repressive effect. This result does not support the observations of O'Malley et al. (1985a), reported in O'Malley and Chamot (1990), who found "the highest reported strategy uses were for isolated language learning tasks and the lowest were for integrative language tasks" (1991: 122). Most of the classroom tasks used in the O'Malley et al. (1985a) study would fall into Nunan's (1988) Processing and Productive categories, which did not significantly differ in SRSU scores in this study. Collecting data immediately after a subject participates in a classroom task Controls for interference in the self-reported introspection technique (Cohen, 1985), which may also have lead to the O'Malley et al. (1985a) findings. Further studies investigating pedagogic influences on self-reported strategy use should note the importance of collecting self-reported introspective data immediately after task completion (Faerch and Kasper, 1987).

Our inability to substantiate the second alternative hypothesis, that at least one of the treatment group's overall SRSU score should vary from the Control group, could result from a sensitivity problem with the way in which the hypothesis was framed. Many separate kinds of behavior are combined in the questionnaire to reach a total strength of SRSU score. This grouping could mask variation on separate items between the groups (hence our choice not to use the SILL inventory (See Oxford, 1990)). To explore this possibility, we constructed a descriptive table for each groups strength of learning

strategy use (APPENDIX B).

2. Trends in Individual Learning Strategy Use Variability

The information presented in Appendix B reveals variations within each groups patterns of individual strategy use, as well as variations between groups. Korean Junior College students (as represented by the Control group) report high levels of translating and Inferencing strategies. Translation was the only strategy reported by the Control group more than any other group, even though this group did not have to use the target language (English in this case) at all. We believe learning experiences that the students had at the pre-tertiary level either emphasized this strategy or that it is widely accepted among Korean College students as the 'correct' way to learn a foreign language. We attribute the repression of Translation strategy scores in the treatment groups to the inefficiency of using this strategy in real time task performance.

Within the Role Play mean scores, there are four strategies (Directed Attention, Repetition, Resourcing and Questions for Clarification) that are more than 10% (arbitrarily selected for comparison purposes) over the Control group's mean scores. The increase in reported Resourcing strategies could stem from the manipulation of the cue cards and maps (where each participant's map had been altered), as well as increased Questions for Clarification. Because the information we gave in the Role Play was ambiguous and misleading, a higher demand for Directed Attention use is not surprising. Overall higher reported levels of strategy use generated by the Role Play task could also reflect higher demands for explicit, symbolic knowledge in the performance of the task (Bialystok, 1991: 1993).

As we noted before, the Cloze and Interview tasks repressed reported strategy use, resulting in mean scores lower than the Control in fourteen out of sixteen cases in Appendix B. Four of the strategy mean scores (Selective Attention, Self-Evaluation, Translation and Contextualization) are 10% less than the Control group mean score for both the Interview and Cloze groups. We speculate that this is the case for tasks (Receptive and Productive) that demand immediate performance without opportunities to consult with peers or plan in advance. These parameters may be forcing learners to rely more heavily on strategies that are implemented concurrently in the situations of

use: Directed Attention, Self-Monitoring and Inferencing. Cloze and Interview tasks apparently repress strategies that rely on analyzing the details of the task (Selective Attention), inherent linguistic features (Self-Evaluation and Contextualization) or the time consuming process of Translation.

3. Pedagogic Implications

Among the many pedagogical issues that this study touches upon, we would like to discuss just one: the use of learner SRSU profiles for individualizing instruction and establishing more effective scaffolding within the zone of proximal development (ZPD). Table 5 provides a comparison table of the individual SRSU scores for two individual subjects in the Control group as a percentage of their total reported raw scores.

TABLE 5
A Comparison of a Low (S4) and a High (S11) Strategy User's
SRSU Score Percentages from the Control Group.

<u>Strategy Name</u>	<u>S4</u>	<u>S11</u>	<u>Difference</u>
Functional Planning	6%	6%	-
Selective Attention	3%	5%	2%
Directed Attention	6%	4%	2%
Self-Management	5%	7%	2%
Self-Monitoring	9%	9%	-
Self-Evaluation	9%	8%	1%
Repetition	6%	5%	1%
Note-taking	6%	2%	4%
Imagery	8%	4%	4%
Translation	8%	10%	2%
Transfer	8%	6%	2%
Inferencing	6%	6%	-
Resourcing	5%	3%	2%
Contextualization	6%	5%	1%
Questions for Clarification	3%	10%	7%
Cooperation	8%	10%	2%
*Totals	102%	100%	

*(Totals greater than 100% reflect rounding)

Subject 4 (S₄) is a low self-reported strategy user (total raw score of 63 out of a possible 160) whereas Subject 11 (S₁₁) reports relatively high strategy use (101/160). O'Malley and Chamot (1990) found that effective language learners utilize a wider range of LS as well as a greater amount of strategy usage (1990: 149).

A look at Table 5 reveals S₄ to have wide ranging strategy usage, with fourteen of the sixteen strategies lying within 3% points of each other and comprising 94% of S₄'s total reported strategies. The two strategies that S₄ reports using least are Questions for Clarification (3.2%) and Self-Management (3.2%). S₁₁, however, tends to rely on just four strategies for nearly 40% of her/his total usage: Self-Monitoring, Questions for Clarification, Cooperation and Translation.

How could this information be used by classroom language teachers to individualize instruction? The present study has shown that Role Play activity participation significantly increases overall SRSU scores over the other pedagogic task groups. Involving S₄ in more Role Play activities would have a beneficial effect on raising her/his overall reported strategy usage levels, given this task's characteristic effect on SRSU scores. The trend for higher Questions for Clarification usage that Role Play participants reported could also assist S₄ in expanding her/his repertoire to include this Socio/Affective strategy. Oxford identifies the Questions for Clarification strategy as being particularly useful for the listening, writing, reading and speaking skill areas (1990: 168-170).

Information provided by the SRSU profile can also assist classroom teachers in forming the groups and dyads considered important for progress through the zone of proximal development (Gallimore and Tharp, 1990). In this hypothetical case, S₁₁ could be considered a "more capable other" in Role Play activities and would be able to provide social interactive "directions or modeling" concerning the strategies that S₄ is unfamiliar or uncomfortable using (Gallimore and Tharp, 1990: 184-85). However, not all of the benefits to be derived within the ZPD's mutual problem-solving interactions accrue to the novice.

The fundamental concept behind ZPD learning is social and "interpsychological", as Wertsch points out (1990: 113-14). Each individual brings special

abilities to bear during the performance of a task, and the present example is not an exception. S₄ can learn more about using the Socio/Affective strategies of Questions for Clarification and Cooperation from S₁₁ during a Role Play task, but S₁₁ can learn from S₄ as well. S₁₁'s primary reliance upon only four strategies means that s/he is under utilizing the strategies of note-taking (2%), Imagery (4%) and Resourcing (3%). S₄ has a more evenly distributed usage pattern for these strategies and, given the right task, could assist S₁₁ in increasing her/his familiarity with their use. O'Malley and Chamot note students tend to use both note-taking and Resourcing more frequently with writing and listening skill area tasks (1990: 142). A joint song transcription task is one possible activity which might prove beneficial in facilitating useful ZPD interactions between S₄ and S₁₁.

VI. CONCLUSION

This study has looked at the effect participation in certain pedagogic tasks has on Korean Junior College students' self-reported learning strategy usage. The results of a one-way ANOVA and a subsequent *post-hoc* Scheffe test permit us to say, with a $p < 0.01$ level of confidence, that participation in a classroom Role Play task induces significantly higher overall SRSU levels than either Cloze or Interview tasks. The second null hypothesis, that no significant differences exist between the Control group and treatment groups, was not defeated. A descriptive look at the data revealed trends in individual strategy usage patterns, dependent upon task participation, that appear to differ substantially from the Control group.

There are a number of cautions that we would like to make concerning the findings of this study.

- Only sixteen individual strategies were included in the SRSU instrument (for reasons given earlier). The inclusion of more strategies, as well as the development of a simplified English version of the questionnaire could facilitate data collection and the improve the quality of that data (Ried, 1990).

- While the univariate analysis that we performed on the data allowed parametric analysis, caution should be exercised in interpreting causality. Our assertion is that task participation has effected the strength of *self-reported strategy use* and we are not making claims about actual strategies used.
- The English version of the SRSU instrument has been previously pilot tested, but time constraints prevented pilot testing of the Korean version. Expansion and further development of the instrument should include pilot testing with the target population.

Research carried out within this paradigm should either use the same or easily transferable task and strategy frameworks to facilitate cross study comparisons.

The SRSU questionnaire used in this study allows researchers and teachers to develop a profile of the types of strategies students identify themselves as using. This profile is a potentially useful teaching tool for assessing the strategic strengths and weaknesses that learners bring to a task. Given this study's finding that language learning task participation alters self-reported strategy use patterns, a classroom teacher can manipulate tasks and thereby manipulate the dynamics of interaction within a specific learner's zone of proximal development for that task. Combined with information already available on the effectiveness of particular kinds of strategies in the language learning process (Oxford, 1990), this technique could prove to be very useful in individualizing instruction, increasing the efficiency of learner's efforts at language learning and enhancing the theoretical underpinnings of task-based syllabuses.

APPENDIX A

Definitions for the Sixteen Learning Strategies Used in the Present Study.

<u>Strategy Name</u>	<u>Definition</u>
METACOGNITIVE STRATEGIES	
Selective Attention	Deciding in advance to attend to specific aspects of language input or situational details that will cue the retention of language input.
Directive Attention	Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors.
Functional Planning	Planning for and rehearsing linguistic components necessary to carry out an upcoming language task.
Self-Management	Understanding the conditions that help one learn and arranging for the presence of those conditions.
Self-Monitoring	Correcting one's speech for accuracy in pronunciation, grammar, vocabulary, or for appropriateness related to the setting of to the people who are present.
Self-Evaluation	Checking the outcomes of one's own language learning against an internal measure of completeness and accuracy.
COGNITIVE STRATEGIES	
Repetition	Imitating a language model, including overt practice and silent rehearsal.
Note-taking	Writing down the main idea, important points, outline, or summary of information presented orally or in writing.
Resourcing	Using target language reference materials.
Imagery	Relating new information to visual concepts in memory via familiar, easily retrievable visualizations, phrases, or locations.
Translation	Using the first language as a base for understanding and/or producing the second language.
Transfer	Using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task.

Inferencing	Using available information to guess meanings of new items, predict outcomes, or fill in missing information.
Contextualization	Placing a word or phrase in a meaningful language sequence.
SOCIO-AFFECTIVE STRATEGIES	
Questions for clarification	Asking a teacher or other native speaker for Repetition, Clarification paraphrasing, explanation, and /or examples.
Cooperation	Working with one or more peers to obtain feedback, pool information, or model a language activity.

*Source: O'Malley et al. (1985b: 582-84).

APPENDIX B

Chart of Individual Strategy SRSU Mean Scores by Group.

STRATEGY NAME	CLOZE	INTRVW	ROLE PLAY	CONTROL
Functional Planning	5.17	5.10	5.61	5.59
Selective Attention	*>5.72	*>5.69	>6.56	>6.48
Directed Attention	>6.66	>5.85	*>7.01	>6.28
Self-Management	*<2.80	<2.93	<3.63	<3.38
Self-Monitoring	>5.98	>6.18	>6.47	>6.31
Self-Evaluation	*>5.78	*>5.59	>6.56	>6.55
Repetition	<4.41	*<4.28	*5.44	<4.83
Note-taking	<3.45	<3.59	<4.23	<3.83
Imagery	5.27	5.34	5.40	5.07
Translation	*>6.67	*>6.61	>6.79	>7.17
Transfer	4.70	4.66	<4.89	<4.83
Inferencing	>5.86	>6.25	>6.33	>6.17
Resourcing	4.75	5.05	*5.94	5.24
Contextualization	<4.47	*4.56	5.66	5.24
Questions for Clarification	<3.69	<3.80	*<5.07	<4.24
Cooperation	*4.84	5.10	5.81	5.59
COLUMN MEAN	5.01	5.03	5.71	5.42

- * scores are 10% above or below the Control group's mean.
- > scores are 10% above the column mean.
- < scores are 10% below the column mean.

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