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ABSTRACT

A study examined the learning strategies and attitudes of college language students and their relationship to success in language learning. Three research questions were asked: (1) Which self-reported language study strategies were associated with achievement as measured by classroom or other proficiency tests?; (2) Which attitude and motivational factors predicted success, and what was the relationship between these factors and study strategies?; and (3) What distinguished students who continued throughout one year of second language study from those who dropped out? Two large groups of volunteers, college students of Spanish and Japanese, completed attitude and study strategy questionnaires and took initial language skill tests, and those who persisted for one year were re-administered the proficiency tests. Exam scores and course grades were collected for each quarter. Analysis of the data indicated that certain study strategies were consistently associated with academic success, although some differences were found for Spanish and Japanese. Attitudinal and persistence factors were found to be different for students of the two languages. Implications for classroom teaching are discussed briefly. (MSE)

EDUCATIONAL REPORT SERIES

UNIVERSITY FOREIGN LANGUAGE LEARNING: WHAT PREDICTS SUCCESS?

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ER13

CLEAR

CENTER FOR LANGUAGE EDUCATION AND RESEARCH

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WHAT PREDICTS SUCCESS?

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Center for Language Education and Research
University of California, Los Angeles
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Center for Language Education and Research

The Center for Language Education and Research (CLEAR) is funded by the Office of Educational Research and Improvement (OERI) to carry out a set of research and professional development activities relevant to the education of limited English proficient students and foreign language students. Located at the University of California, Los Angeles, CLEAR also has branches at the Center for Applied Linguistics in Washington, D.C., Yale University, Harvard University, and the University of California, Santa Barbara.

CLEAR believes that working toward a language-competent society should be among our nation's highest educational priorities. Thus, CLEAR is committed to assisting both non-native and native speakers of English to develop a high degree of academic proficiency in understanding, speaking, reading, and writing in English and a second or native language. To work toward this goal, CLEAR has united researchers from education, linguistics, psychology, anthropology, and sociology with practitioners, parents, and community agencies.

A coordinated set of research, instructional improvement, community involvement, and dissemination activities are oriented around three major themes: (a) improving the English proficiency and academic content knowledge of language minority students; (b) strengthening second language capacities through improved teaching and learning of foreign languages; and (c) improving research and practice in educational programs that jointly meet the needs of language minority and majority students.

The CLEAR Educational Report Series is designed for practitioners and laypersons interested in issues in second language education and foreign language teaching and research.

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Introduction

Many recent calls for educational reform decry the state of foreign language education in the U.S. Few students at the secondary or post-secondary levels now take second language classes, and fewer still attain any usable level of proficiency. At the same time, within the foreign language teaching profession, interest in understanding and improving instruction through more sophisticated understanding of the teaching/learning cycle is growing. One means to this increased understanding is more comprehensive knowledge of the processes learners use as they acquire a second language; another is greater appreciation of the attitudinal factors that contribute to second language learning. To achieve both of these goals, CLEAR undertook a descriptive research project aimed at documenting the learning strategies and opinions of students in elementary Spanish and Japanese classes at the university level, the last level at which many Americans have the opportunity to learn another language through formal instruction. By describing the strategies and opinion factors associated with student progress and achievement, we hoped to offer students and teachers further keys to understanding and improving instruction.

Research Questions

The main research questions we set out to answer were these: (1) Which self-reported second language study strategies are associated with success on classroom achievement measures or on proficiency tests? By knowing more about these, we could provide some validation of the many strategies now urged on second language learners and also show students and teachers some possible keys to more effective study.

Because results regarding learning strategies have the most direct implications for the classroom, they are discussed in greater detail here. (2) Which attitude and motivational factors predict success in second language learning, and what is the relationship between attitudinal factors and study strategies? Although it is difficult to manipulate attitudinal factors, it is nonetheless valuable from a descriptive point of view to know what patterns of opinion underlie successful second language study. (3) What distinguishes students who continue throughout one year of second language study from those who drop out? Given the effort expended on language learning by both students and teachers, it would be helpful to know whether there is any way to determine who is likely to persist in study and hence make more informed choices among instructional alternatives.

Methodology

The general plan of the study was this: two large groups of student volunteers, drawn from the beginning level courses in Spanish (n = 88) and Japanese (n = 121) were contacted during the fall quarter and asked to complete several questionnaires and tests. These students represented a typical university sample; nearly all were undergraduates from a variety of majors. Students of all ethnic groups on campus participated, with proportionately more Anglo students in elementary Spanish and more Asian-American students in Japanese. The two main questionnaires concerned: (1) strategies for second-language learning and (2) opinions related to language study in general and to the specific study of Spanish or Japanese. To assess initial levels of skill, students in both languages took a comprehension test; elementary

Spanish students also completed an oral interview. Students' exam scores and course grades were collected after each quarter, and at the end of the academic year those who remained enrolled were re-tested with the language proficiency tests to assess progress in functional skills as well as traditional achievement reflected in exam scores and grades. The results of the achievement and proficiency tests were correlated with the study strategies and factors derived from opinion questionnaires to see what patterns characterized successful learners at this level.

A caveat: because these results are based on correlations, it is not possible to posit a direct cause and effect relationship between these strategies and higher achievement and proficiency. Students with higher test scores used certain behaviors, so it is reasonable to think that their use contributed to better skills. However, some of these behaviors, such as being able to focus on the main point and asking the teacher about exceptions in class, depended on already having sufficient comprehension skills to identify main points and exceptions. Thus, these results are useful in a descriptive sense, for they tell us which strategies were used by good students. We then infer that use of the strategies indicated more effective learning processes, a reasonable inference but one that demands further experimental and instructional proof. The strategies linked with test scores and proficiency results serve as initial guidelines for constructing theoretical and pedagogical models of effective language learning.

Hence, the research offers a record of the first year of language learning through a series of psychometric "snapshots" taken at three points along the way. A more complete description of the study,

including the technical details of our research design, data gathering procedures, and data analysis, can be found in McGroarty (1988). The present report summarizes the general trends found and discusses their implications for the teaching and learning of foreign languages at the university level.

Results: Language Learning Strategies

Effective Strategies

The most important practical implications of the study came from the results of correlating the learning strategies with student achievement and proficiency. Achievement was measured by student exam scores and grades; proficiency by tests of second language comprehension and, for Spanish, production ability. The relationships observed between learning strategies and outcomes are summarized in Figures 1 (Effective Strategies) and 2 (Ineffective Strategies.)

In each of the figures, the strategies are divided into two main types: those describing ways of seeking input and those showing ways to practice producing output in the new language. As noted in the charts, a plus sign (+) denotes a significant positive correlation, a minus sign (-) a significant negative correlation, and a zero (0) the absence of a significant correlation.

Looking first at Figure 1, we see that four general categories of Seeking Input showed positive associations with learning and proficiency. Making guesses about meaning from context in class was associated with higher comprehension scores in both languages and with Spanish grades; guessing meaning from gestures in conversation was linked with grades for Japanese. Thus making educated guesses about

Figure 1
Effective Learner Strategies

	Achievement				Proficiency		
	Spanish		Japanese		Spanish		Japanese
	Exams	Grades	Exams	Grades	Comp.	Prod.	Comp.
1. Seeking Input							
a. Making Guesses							
Guessing meaning from context in class	o	+	o	o	+	o	+
Guessing meaning from gestures	o	o	o	+	o	o	o
b. Active Questioning							
Asking teacher about exceptions	o	+	o	o	+	+	o
Asking teacher when new form is used	o	o	o	o	o	+	o
*Asking teacher to repeat	o	o	-	-	o	+	o
c. Selective Attention to Form							
Repeating new words to self	+	+	o	o	o	o	o
Focusing on main point, ignoring rest	o	+	o	+	+	+	o
Taking notes on new words	o	o	o	+	o	o	o
Noticing grammatical rules in talk	o	o	o	+	o	o	o
d. Using Media							
Listening to L2 radio	o	o	+	o	o	o	o
Watching L2 TV	o	o	o	+	o	+	+
Going to L2 movies	o	o	o	o	o	o	+
*Attending extra language lab	o	+	-	o	-	o	o
Reading L2 to practice	o	o	o	o	o	o	+
2. Practicing Output							
a. Using the Language							
Using L2 voluntarily in class	o	o	o	o	o	o	+
Using L2 at a job	o	o	o	o	+	+	o
Socializing with L2 speakers	o	o	o	o	o	+	+
Practicing L2 with bilinguals	o	o	o	o	o	o	+
Thinking first in L2	o	o	+	o	+	o	+
b. Taking risks							
Not being afraid to volunteer in class	o	o	o	+	+	o	o
Not being afraid to make errors in talk	o	+	o	o	o	+	+
c. Self Monitoring							
*Interrupting self if error made	+	o	o	-	o	o	o
Correcting own pronunciation	o	+	o	o	o	o	o
Correcting answer aloud in class	o	o	o	o	o	+	o
Thinking of alternative expressions	o	o	o	+	o	o	o
Saying correct answer to self	+	+	o	o	+	+	+

Legend: see Figure 2

Figure 2
Ineffective Learner Strategies

	Achievement				Proficiency		
	Spanish		Japanese		Spanish		Japanese
	Exams	Grades	Exams	Grades	Comp.	Prod.	Comp.
1. Seeking Input							
a. Making Guesses							
Guessing meaning from examples	-	o	o	o	o	o	o
Pretending to understand even if you don't	o	o	o	o	o	-	o
b. Active Questioning							
*Asking teacher to repeat	o	o	-	-	o	+	o
c. Selective Attention to Form							
Analyzing L1/L2 contrasts	-	o	-	o	-	-	-
Making vocabulary lists	o	o	o	o	o	o	-
Looking up all new words before reading	o	o	o	o	-	-	o
Integrating new material after class	o	o	o	o	o	o	-
d. Using Media							
*Attending extra language lab	o	+	-	o	-	o	o
2. Practicing Output							
a. Using the Language							
Changing known forms to fit need	o	o	o	o	-	o	o
Practicing areas missed in class	o	o	o	o	-	o	o
b. Avoiding the L2							
Reviewing lesson in English before class	o	o	o	o	o	-	o
Using English at bilingual social events	o	o	o	o	-	-	o
c. Self Monitoring							
*Interrupting self if error made	+	o	o	-	o	o	o
Correcting self during interaction	o	-	o	o	-	-	o
d. Studying by "cramming"							
Memorizing forms without analysis	-	o	o	o	o	o	o
Memorizing sentences and units	o	o	o	o	-	o	o

* = ambiguous strategy
+ = significant positive correlation
- = significant negative correlation
o = no correlation

meaning clearly has a place in elementary second language instruction, particularly with respect to comprehension skills.

The second subtype of effective learner strategies consisted of Active Questioning behaviors used in class. All the positive associations observed here pertained to the Spanish classes. Asking the teacher about exceptions to grammatical rules demonstrated links with both grades and aural/oral skills. Asking the teacher when a new form is used was associated with better oral interview scores. Asking the teacher to repeat was an ambiguous behavior; it was negatively associated with exams and grades in Japanese, suggesting that in those classes it was typical of students with a lower achievement profile; however, it was positively related to oral skills in Spanish. Thus the value of asking for repetition in class may vary depending on the nature of the class and student skill level.

The third subcategory of input strategies dealt with Selective Attention to the Formal Structure of the new language. Not surprisingly, most of the positive relationships noted here were observed with the achievement measures, exams and grades, which involve a certain degree of accurate control of linguistic forms. Repeating new words to oneself in class was linked with exam scores and grades in Spanish. Focusing on the main point and ignoring the rest of the lesson, a selective attention strategy, was associated with better grades in both Spanish and Japanese and with comprehension and production skills in Spanish. Two strategies oriented to control of form, taking notes on new words in class and noticing grammatical rules in talk, demonstrated links with higher grades in Japanese. Selective attention to the

oral and written forms of the new language was, hence, positive with respect to many achievement and score proficiency outcomes.

Using Different Types of Media to support second language learning, the fourth method of seeking input, was valuable in several ways. Students who were higher on listening to the radio in L2 had better exam scores in Japanese. Watching TV in L2 was associated with better grades and higher comprehension scores in Japanese and with better oral interview skills in Spanish. Going to L2 movies and reading the new language to practice were associated with better comprehension in Japanese. Attending extra language lab was an ambiguous behavior, associated positively with grades but negatively with comprehension scores in Spanish and negatively with exam scores in Japanese. (Discussions with the Japanese instructors revealed that the quality of the lab materials was uneven, suggesting that the usefulness of attending extra language lab sessions may depend on the adequacy of the materials available.)

The second major category of strategy use consists of ways to practice producing output in the second language. For the first strategy subtype, Using the Language, almost all of the positive relationships were observed with the aural/oral proficiency measures, convincing evidence that actual use of the new language enhances functional ability although it may have no clear relationship with improved achievement on written tests. The one strategy that showed a positive link with achievement, thinking first in L2, which was related to Japanese exam scores, describes a kind of private rehearsal rather than interpersonal use of language. Using the L2 voluntarily in class was linked with better comprehension of Japanese. Using the

second language at a job (a behavior observed for a small number of students in Spanish and almost no students in Japanese because of local employment conditions) was related to both comprehension and production of Spanish. Socializing with second language speakers outside class showed links with Spanish oral skills and Japanese comprehension; practicing the second language with bilingual persons who also spoke English was characteristic of students with higher Japanese comprehension scores. Thinking first in the second language enhanced comprehension scores in both languages.

Risk-taking behavior, long thought to make a difference in second language learning, was linked with achievement as well as proficiency. Not being afraid to volunteer in class was correlated with grades in Japanese and with Spanish comprehension scores. Not being afraid to make errors during natural conversation outside class was linked with Spanish grades and with higher comprehension scores for both languages.

The third subcategory of output strategies, those related to Self-Monitoring, were also relevant to both achievement and proficiency. Interrupting oneself if an error was made in conversation was ambiguous, showing positive relationships with Spanish exam scores but negative ones with Japanese grades. Correcting one's own pronunciation when studying in private was linked with grades in Spanish. Correcting answers aloud in class coincided with better production skills in Spanish. Thinking of alternative ways to say things was typical of students with higher grades in Japanese. Finally, saying the correct answer to oneself in class was positively related to exam scores and grades in Spanish and to aural and oral proficiency in both languages.

Taken together, these effective learner strategies give us a portrait of beginning language students who make active efforts to generate and comprehend input by asking questions in class, using different types of media, and making guesses about meaning. Additionally, they practice producing the new language by using it in class, on the job where possible, and in social situations. They are not afraid to risk making errors and use several strategies to check on their own accuracy in grammar and pronunciation. Finally, they expand their awareness by making efforts to generate alternative expressions and think in the new language.

Ineffective Learner Strategies

Figure 2 shows the strategies with significant negative correlations with achievement and proficiency. Again, such relationships do not necessarily show cause and effect, but they do tell us which strategies were characteristic of students who scored lower on the outcome measures.

Of the input-seeking strategies, certain kinds of guessing were associated with lower scores on exams and the Spanish oral interview. Weaker students made inappropriate guesses about examples or pretended to understand even when they did not. As noted previously, an active questioning strategy, asking the teacher to repeat, was ambiguous, correlated negatively with achievement in Japanese but positively with oral skills in Spanish, suggesting that its usefulness may vary with instructional circumstances.

The results for the third input subcategory, Selective Attention to Form, are the most striking of the ineffective strategies: the negative relationships observed here were, with one exception, all

related to oral/aural skills, indicating that these strategies were inversely related to comprehension and production in both languages. Students who made vocabulary lists, looked up all new words before reading, and went over material after class, all behaviors that denoted assiduous and possibly excessive concern with grammatical form, performed less well on the tests of functional oral skills. The one formally oriented behavior that was negative with respect to achievement as well as proficiency was analyzing L1/L2 contrasts. Contrastive analysis, a long-established technique especially popular in the days of structural linguistics, co-occurred with relatively lower achievement and proficiency for these elementary language students.

The use of media in the form of attending extra language lab showed ambiguous results. In the case of Spanish, it is likely that attending extra language lab demonstrated a conscientious effort to improve on the part of students with low initial comprehension scores. As noted already, instructors of the Japanese classes suggested that the quality of the material used in the lab, particularly after the first quarter of study, was less than optimal. Hence we may speculate that extended practice with inadequate materials may have actually depressed achievement on exams.

The second major category of sometimes ineffective strategies, those related to ways to practice output, showed most of their negative relationships with the proficiency measures as would be expected; inappropriate ways of practicing the oral language had far less impact on achievement than on functional skills. This pattern was clearest for the first and second subcategories, Using and Avoiding the L2, in comparison with Spanish proficiency scores. For students of Spanish,

changing known forms to fit a new situation was characteristic of students with lower comprehension scores. This suggested that efforts to focus on known forms and then change them in interaction indicated weaker understanding. Because the results regarding practicing areas missed in class showed the effect of both missing class and practicing outside class, they are difficult to interpret; they probably indicated that students who missed things in class had lower comprehension scores. Reviewing the lesson in English before class had an inverse relationship with oral skills in Spanish, and using English at social events where both languages were used also had negative associations with comprehension and production in Spanish. These behaviors show that students who continued to rely on English instead of making efforts to use Spanish had weaker functional skills.

The subcategory of self-monitoring strategies that appeared ineffective reflected excessive self-interruption. Students of Spanish who frequently interrupted themselves during natural interaction had lower grades and lower aural and oral proficiency, again indicating insecurity in the new language. However, interrupting oneself in class if an error had been made was positively related to Spanish exam scores, although negatively related to grades for Japanese students. This mixed outcome suggests that self-interruption in class was not uniformly counterproductive and that additional research to link self-correction to instructional processes and to specific features of the language being studied.

Finally, two strategies that could be called "cramming" approaches to L2 mastery emerged as negative influences on Spanish achievement and proficiency. Memorizing forms without analysis was typical of students

with lower exam scores, a reasonable result given that exams require, at least in part, accurate understanding and manipulation of language structure. Memorizing sentences as units without breaking them down into parts was negatively linked with Spanish comprehension, showing that students who could not yet segment the new language appropriately could not understand it well.

In general, these ineffective learner strategies were not uniform in their relationships with achievement and proficiency. It would, therefore, be wrong to claim that any particular strategy (with the possible exception of contrastive analysis) should be avoided in elementary language study. However, the overall pattern shows that students of elementary Spanish who made inappropriate guesses, often interrupted themselves in talk, and avoided using the new language even when they could try it out in social situations or in individual study had lower achievement and proficiency scores. In the beginning Japanese classes, the lower-achieving students were those who frequently asked the teacher to repeat and interrupted themselves when speaking in class. For both languages, excessive attention to form as manifested in contrasting the first and second language, making vocabulary lists, and looking up all new words before trying to read was associated with weaker functional skills in comprehension and production. Consequently, in elementary language classes where development of functional skills is a goal, teachers should caution students against overreliance on such approaches to second language study.

Results: Attitudes Affecting Second Language Study

The second area of research was identification of the attitudes and motivations characteristic of students who did well in elementary language courses. Although such considerations cannot be taught directly, they are valuable in understanding affective predispositions which influence foreign language study. The opinion scales as a whole and the separate factors underlying them show some of the attitudinal dimensions affecting second language achievement and proficiency in Spanish and Japanese.

Attitudinal Influences: Spanish

For the elementary Spanish students, the total score for the opinion questionnaire, a measure that combined attitude toward foreign language study in general, specific integrative and instrumental use of Spanish, attitudes toward the language class itself, and social support for language study, showed positive relationships with the comprehension and production pretests and with the strategy scales related to use of classroom and individual study behaviors. Positive attitudes were thus typical of students who had higher proficiency scores even at the beginning of the course. Moreover, such students were also more likely to make more frequent use of study strategies in class and in individual study of Spanish.

Once the total opinion questionnaire had been analyzed into separate factors, additional patterns emerged. The four distinct factors identified in the Spanish questionnaire were:

(1) an overall interest factor reflecting favorable evaluation of foreign language study in general and of Spanish in particular;

(2) a specifically integrative factor related to the importance of Mexican American language and culture in the Southwest;

(3) a language class-related factor showing lack of anxiety and willingness to take risks in class; and

(4) a social support factor showing perceived parental and peer interest in Spanish study.

The most robust set of relationships occurred with the language class factor, which showed significant positive associations with all of the pretests, exam scores and grades, and with the scale related to use of classroom strategies attesting to the strength of personality traits which came into play in language classes (Ely, 1988). The perceived social support factor was related to all of the pretests, to grades for one quarter, and to the strategy scales for classroom and individual study behaviors. The first factor, overall interest in and positive evaluation of languages and of Spanish, was associated with all of the pretests but with none of the achievement measures. The integrative factor related to local Mexican American language and culture was correlated with exam grades for one quarter.

For students of elementary Spanish, then, the order of importance of the attitudinal dimensions showed that attitudes related to enjoyment of the language class and to perceived social support of the language influenced both choice of language and success in study. Overall interest in foreign languages and in Spanish was typical of students who did well on the proficiency pretests, but it had no perceptible relationship with achievement. The motivational cluster related to the local importance of Spanish was the weakest influence;

it had no impact on functional skill and only one association with achievement. For elementary Spanish students, then, the language class-related factor had the strongest impact on achievement and proficiency.

Attitudinal Influences: Japanese

The total opinion questionnaire score for the Japanese classes showed significant positive links with all three of the strategy scale scores; students with higher overall attitudes toward Japanese used study strategies more often in class, in interaction with others, and in individual study. The opinion total showed no correlation with any of the achievement or comprehension measures, though, suggesting that, for this group of students, the total opinion score was more important in influencing initial choice of a language and efforts to study and use it consistently than in shaping progress once enrolled.

Three distinct factors emerged from the Japanese opinion data. They were:

(1) an overall interest factor related to interest in foreign language generally and Japanese in particular;
(2) a specifically instrumental factor related to present importance and expected future use of Japanese; and
(3) perceived parental and social support for the study of Japanese.

The first and third factors were comparable to those found for Spanish, while the second, instrumentality of the second language studied, emerged only for Japanese. (Unlike Spanish, no distinctive language class-related factor was found, an unexpected result which probably

reflected instructional arrangements: instead of having section meetings five hours per week with the same instructor as was the case in Spanish, students of Japanese had two large group lectures and three section meetings per week. Also, the section instructors were changed in the middle of each quarter to give students exposure to different speakers. Because of this variety of classroom formats and activities, questionnaire items about students' typical attitudes toward classroom activities were less applicable to the experience of the Japanese students.) Of the three factors in the Japanese data, only the third, perceived social support, showed any links with proficiency (here, the comprehension pretest); none demonstrated any association with the achievement measures. However, both the first and third factors were correlated with the scale measuring interactive behaviors, and all three factors were significantly related to the individual study strategy scale.

These results suggest that, for the students of elementary Japanese, attitudinal considerations were important in influencing the initial choice of a language to study. The factor reflecting perceived parental support for language study demonstrated the greatest number of significant associations with one proficiency test, interactive behaviors, and study behaviors. Higher scores on the second factor, instrumental value of Japanese, were also linked with greater use of interactive behaviors. All three factors were correlated with greater use of individual study strategies. Though attitudinal considerations showed no direct association with achievement and only one with proficiency, the pattern of correlation with the study strategy scales implied that they had an indirect influence on learning: students with

higher scores on the attitudinal factors were more likely to make use of study strategies in interaction and in private study. Because certain of these study strategies were in turn linked with achievement and proficiency in Japanese, the attitudinal factors may have promoted learning by increasing strategy use.

Results: Persistent and Non-Persistent Students

Because persistence in second language study is a necessary pre-requisite to further development of functional and formal skill in second language, we sought to identify any characteristics which distinguish those students who remained enrolled from those who left the course before the end of the first year of instruction. Two types of comparisons were done. The first consisted of a series of comparisons of background characteristics (including age, verbal and non-verbal IQ, and prior study of and exposure to the language being studied); pretests of language skills; and pre-course opinions regarding language study. For elementary Spanish and for Japanese, there were no differences between persistent and non-persistent students on any of the background variables. The pretests of language proficiency also showed no differences between the groups with one exception: in Spanish, persistent students showed a tendency to have higher pretest comprehension scores than those who later dropped out, showing that entry-level skills predicted continuance of second language study. While the Japanese comprehension pretests were comparable for persisters and non-persisters, the results for the opinion questionnaire were not. Students who stayed in the Japanese course for a year had significantly more positive overall attitudes

toward language study and study of Japanese than those who dropped out of the course, again attesting to the important if indirect role of attitudes in successful second language study.

The second set of comparisons used Rasch modeling, a technique which assessed how well the response patterns of persisters and non-persisters fit the constructs measured by the comprehension pretests, study strategy scales, and opinion measures. For both Spanish and Japanese, results showed that the responses of persisters and dropouts on the comprehension tests were no different from each other. In Spanish, however, the students who persisted in study saw themselves as using the interactive language strategies more often than those who left the course. This suggests that persistence in elementary Spanish study may, in part, be predicted by a self-perceived propensity to use the language in natural interaction. In Japanese, the only difference between the groups was that persistent students fit the positive attitudinal profile reflected in the opinion questionnaire better than those who later dropped out. This comparison corroborates the previous comparison based on the opinion questionnaire total, once more showing that motivational considerations affect long-term progress in the language by promoting persistence in the study of Japanese.

Overall Summary

The results for the study strategies provide some additional keys to understanding effective learning at the elementary level of university language study. In both Spanish and Japanese, behaviors denoting active participation in class such as asking the teacher about exceptions, saying answers to oneself, and guessing meaning from context

during instruction were valuable. Additionally, interaction behaviors, such as using the second language at a job and not being afraid to take risks and try using the language either in class or during conversations, showed positive links with learning outcomes, as did various behaviors related to seeking additional input through print or electronic media. In contrast, conscious comparison of the new language with the native language and frequent self-correction during interaction was consistently negative with respect to learning outcomes. Effective learners in these university classes drew on both cognitive and social behaviors to create a balance between attention to form and development of functional skills. While different behaviors emerged in the correlations for Spanish and for Japanese, results for both languages showed that certain strategies related to seeking input and practicing output in the new language contributed to traditional achievement and to functional proficiency.

The attitudinal results and persistence comparisons revealed additional influences on language study, and these were different for Spanish and Japanese. For Spanish, positive evaluation of language study and of Spanish social support for second language study, and, most importantly, enjoyment of the language class were linked with various achievement and proficiency measures. Students who persisted throughout a year of elementary Spanish had better initial comprehension skills and considered themselves more likely to use interactive learning behaviors. In the Japanese classes, only social support for language study was related to functional comprehension. Though similar in personal characteristics and initial language skills, persistent students of Japanese had significantly more positive

attitudes towards language study in general and specifically towards Japanese than those who left the course. Although a positive disposition towards language study was a common element in successful language learning, the nature of the relevant underlying factors was different for each language; this suggests that specific attitudes towards the language chosen and the instructional situation have a differential impact on elementary language study.

Taken together, the results indicate that effective language learning at the university level consists of an optimal combination of strategies that help students seek appropriate exposure to the language and practice using it in class or in interaction. Precise motivational factors vary according to language studied and instructional context, although a positive attitude towards language study and the language chosen is a constant, if sometimes indirect, influence on successful learning.

What can teachers do to help elementary language students master a new language? Results from this study show that strategies such as making guesses in context, repeating answers in class, making efforts to use the new language in real communicative situations, and using a variety of media to increase one's exposure to the language predict positive results. In contrast, excessive attention to linguistic detail, continual efforts to make conscious comparisons between the first and second languages, and reliance on English even when it is possible to try using the other language are all strategies that appear to retard achievement and proficiency. By identifying and modeling the effective strategies described and cautioning students against the

ineffective ones, teachers can enable students to make their second language study more efficient.

Even the effective strategies revealed in this study demand further investigation and pedagogical experimentation to establish their usefulness in a particular classroom setting. Further research linking student behaviors assessed here with teaching conditions and processes is needed to provide a fuller understanding of university foreign language learning. Additional studies to refine the connections between student strategy use, attitudes, instructional contexts, and learning outcomes will assist teachers and students in elementary level language classes in identifying appropriate steps toward improved second language competence.

For Further Reading

Chandron, C. (1988). Second language classrooms. Cambridge: Cambridge University Press. A systematic review of research on second language classrooms with special consideration of the classroom language of teachers and students and classroom interaction.

Ely, C. M. (1988). Personality: Its impact on attitudes toward classroom activities. Foreign Language Annals 21(1), 25-32. A study of the personality variables that showed relationships in the success in university foreign language classes.

Gardner, R. C. (1987). Social psychology and second language and second language learning. London: Edward Arnold. A synthesis of the work inspired by Gardner and his colleagues which takes up many of the points first proposed in Gardner and Lambert's 1972 Attitudes and motivation in second language learning and brings them up to date.

McGroarty, M. (1988). University foreign language learning: Spanish and Japanese. CLEAR Technical Report No. 10. Center for Language Education and Research, University of California, Los Angeles. The complete report of the present study with detailed discussion of the instruments used and the correlational findings.

Oxford, R. (1986). Second language learning strategies: Current research and implications for practice. CLEAR Technical Report No. 3. Center for Language Education and Research, University of California, Los Angeles. A review of research related to learning strategies and suggestions for using them in language study and instruction.

Oxford, R. & Schleppegrel, M. (1988). Strategies for second language learning. New York: Newbury House. A comprehensive guide for teachers and students interested in developing and applying the learning strategies identified as effective in second language learning.

Wenden, A. & Rubin, J. (1987). Learner strategies in language learning. Englewood Cliffs, NJ: Prentice/Hall. A collection of valuable conceptual papers as well as specific reports of studies on learner strategies and discussion of their pedagogical implications.

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