Foreign Language Teachers' Perceptions of Students' Academic Skills, Affective Characteristics, and Proficiency: Replication and Follow-up Studies

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Abstract: Two studies explore the relationship between foreign language teachers' perceptions of their students' academic skills and affective characteristics and their native language skills, foreign language aptitude, and oral and written foreign language proficiency. In Study I (replication), students who scored significantly lower on native language and foreign language aptitude measures were perceived by teachers as having weaker academic skills and also less positive attitudes, lower motivation, and higher levels of anxiety about foreign language learning than students who scored higher on these measures. In Study II (follow up), students from Study I and from an earlier study were followed through a second-year foreign language course and divided into high, average, and low groups according to their scores on a proficiency measure. Results showed that low proficiency

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students were perceived by foreign language teachers as having weaker academic skills and less positive affective characteristics, and also achieved lower course grades than high proficiency students. Findings suggest that foreign language teachers' perceptions of their students' affective characteristics and academic skills are related to the students' levels of native language skill.

Introduction

Foreign language educators have long been concerned about students' affective characteristics (e.g., motivation, attitude, anxiety, personality). Foreign language researchers have speculated that affective variables play a large part in students' success or failure in learning a foreign language, especially in classroom settings. For example, Gardner (1985) suggested that students' motivation for and attitude about learning a foreign language play a large role in language learning. Horwitz and others have speculated that students' levels of anxiety may play a causal role in foreign language learning (e.g., see Horwitz, Horwitz, & Cope, 1986; Horwitz & Young, 1991; MacIntyre & Gardner, 1991; Onwuebuzie, Bailey, & Daley, 1999). Ehrman (1990) hypothesized that personality type (e.g., on the Myers-Briggs Type Indicator) is important for understanding why some students learn a foreign language more easily than others.

In contrast, Sparks and Ganschow (1991, 1995a) have hypothesized that native language learning skills serve as the foundation for foreign language learning; that language aptitude is likely to account for the largest part of the variance in foreign language learning; and that students' affective differences (e.g., strong or weak motivation, positive or negative attitudes, high or low anxiety) are likely to be the result of problems with language learning generally. Sparks, Ganschow, and their colleagues have conducted studies that have provided empirical support for the aforementioned hypotheses. (For a complete description of these studies, see Ganschow & Sparks, 2001; Sparks, 1995; Sparks & Ganschow, 1995a, 1999.) For example, the findings of a recent study showed that students with higher levels of native language skill achieved higher foreign language grades, had stronger oral and written foreign language proficiency, and had lower levels of anxiety about foreign language learning than students with lower levels of native language skill (Sparks, Ganschow, Artzer, Siebenhar, & Plageman, 1997).

Other researchers have also provided support for the notion that good and poor foreign language learners exhibit language differences. Humes-Bartlo (1989) reported that fast language learners had more highly developed native language skills than slow language learners. Olshtain, Shohamy, Kemp, and Chatow (1990) reported that proficiency in the native language played the most important role in foreign language learning among a group of 11- to 12-year-old Hebrew-speaking students who were studying English. These findings were supported by Kahn-Horwitz, Shimron, and Sparks (2004) in a study with fourth grade Hebrew-speaking children learning English. Dufva and Voeten (1999) found that proficiency in native language skills was highly significant for learning English as a foreign language (EFL) in their study with seven-year-old Finnish children. Hultstijn and Bossers (1992) supported the hypothesis that some individual differences in a second (foreign) language can be accounted for by individual differences in students' first (native) language.

In an earlier study, Sparks and Ganschow (1996) raised the question of the relationship between foreign language teachers' perceptions of their students' affective characteristics (i.e., motivation for, attitude toward, and anxiety about foreign language learning) and students' native language skills and foreign language aptitude as measured by standardized tests. They speculated that some students would be rated by foreign language teachers as having lower motivation, poorer attitudes, and/or higher levels of anxiety if their language learning skills were perceived as weaker than other students by the teachers. The study included an entire first-year freshman class of foreign language learners representing all languages taught at the school. Sparks and Ganschow hypothesized that there would be: (a) significant overall differences in foreign language teachers' perceptions of students' affective characteristics when students were grouped into high, average, and low groups according to their performance on measures of native language skill (e.g., reading, spelling) and foreign language aptitude (i.e., on the Modern Language Aptitude Test [MLAT] [Carroll & Sapon, 1959]); and (b) significant differences in the three groups' end-of-year foreign language grades. Results showed that students who scored significantly lower on measures of native language skill and foreign language aptitude were perceived by their foreign language teachers as having significantly less positive affective characteristics and that these students achieved significantly lower foreign language grades than students who scored higher on the native language measures. The authors suggested that foreign language teachers were likely to be accurate judges of students' levels of foreign language skill and also that the differences in their perceptions of students' motivation, attitudes, and anxiety were likely to be associated with the students' levels of native language skills and foreign language aptitude.

The primary limitation of the aforementioned study is that it was conducted over one year only in a single-sex, private school. Thus, the purpose of the first study reported here (Study I) is to replicate Sparks and Ganschow's 1996 study with a coed, public school population. In the second study (Study II), a number of the private school students from Sparks and Ganschow's 1996 study and a group of the public school students from Study I were followed through their second-year foreign language courses. The purpose of Study II was to evaluate the students' oral and written proficiency in the foreign language (i.e., skill in reading, writing, speaking, and listening to the foreign language) using ACTFL Guidelines (1986) and to determine whether there would be significant differences in foreign language teachers' perceptions of their students' foreign language academic skills and affective characteristics when the students were grouped into high, average, and low groups, according to their overall score on the foreign language proficiency measure.

Study I (Replication) Method

Participants

Participants in this study were 101 coed students attending a suburban public high school. All participants were ninth graders enrolled in first-year foreign language courses. Their mean age was 14 years, 7 months (age range = 13 years, 6 months to 15 years, 8 months). The foreign languages represented in this study were Spanish (n = 70), French (n = 18), German (n = 9), and Latin (n = 4). Parental permission was obtained for each participant.

Procedure

Procedures followed were similar to those used in Sparks and Ganschow's 1996 study. Students were tested both individually and in groups. All tests were administered in the first few weeks of the school year. Group testing took approximately 1.5 hours and individual testing took approximately 30 to 45 minutes. Assistance with testing was provided by special education majors who were trained by the authors. Group achievement test scores were obtained from the school counselor's office. Final foreign language course grades were obtained from the teachers at the end of the school year. Final grades represented an accumulation of quarter and semester averages. Grades were comprised of oral and written examinations, oral and written quizzes, homework, projects, and other class activities. Except for Latin (100% written work), foreign language teachers indicated that grades comprised 50% written work, 25% listening activities, and 25% speaking activities. The teacher rating scale was completed by the students' foreign language teachers in the last three weeks of the school year.

Instruments

The foreign language teachers were asked to evaluate each student's foreign language academic skills and affective characteristics using an author-developed Teacher Rating Scale for Foreign Language Learning (see Appendix). Teachers were asked to rate the students from *low* (1) to *high* (5) in the following areas: (a) perception of students' foreign language academic skills in reading, writing, speaking, listening, and overall proficiency; and (b) perception

of students' classroom affective characteristics in motivation, attitude, and anxiety.

The assessment battery for assessing the students' native language skills and foreign language aptitude included seven different measures. (See Sparks and Ganschow, 1996, for a complete description of each testing measure.) The testing measures were those used in the authors' 1996 study with two exceptions. First, the public high school in this study used the *Iowa Tests of Basic Skills*: Total Test (ITBS TOT) (1990) instead of the *High School Placement Test* to measure overall academic achievement. Second, the school used the *Iowa Tests of Basic Skills*: *Reading Comprehension Subtest* (ITBS RCOMP) (1990) instead of the *Nelson-Denny Reading Test* to measure reading comprehension.

The measures used to assess the students' native language skills were: Wide Range Achievement Test-Revised: Spelling Subtest (WRAT-R SPELL) (Jastak & Wilkinson, 1984) to measure written spelling; Woodcock Reading Mastery Test-Revised: Basic Skills Cluster (Word Identification and Word Attack subtests) (WRMT-R BSC) (1987) to measure word reading and pseudoword (nonsense word) reading; an informal phonemic awareness task (i.e., Pig Latin) to measure skill in manipulating sounds in spoken words; Peabody Picture Vocabulary Test-Revised (PPVT-R) (Dunn & Dunn, 1981) to measure receptive vocabulary; Iowa Tests of Basic Skills: Reading Comprehension Subtest (ITBS RCOMP) (1990) to measure timed reading comprehension; and Iowa Tests of Basic Skills: Total Test (ITBS TOT) to measure overall achievement (i.e., reading, language, math). The measure used to assess students' foreign language aptitude was the Modern Language Aptitude Test: Long Form (MLAT) (Carroll & Sapon, 1959).

Test results were compiled and converted to standard scores or entered as raw scores.

Analysis of Data

The students were divided into three groups (high, average, and low) according to their scores on the six native language measures and the foreign language aptitude test. The students' standard scores (M = 100, SD = 15) or raw score on each of the six native language measures and the foreign language aptitude test were transformed to z scores; each student was assigned seven different z scores, one for each measure. The seven measures each served as independent variables. Students scoring one or more standard deviations above the mean (+1.0 SD) on a given measure were identified as those with high skills; students scoring between +.99 and -.99 on a measure were identified as those with average skills; and students scoring one or more standard deviations below the mean (-1.0 SD) on a given measure were identified as those with low skills. A minimum of one standard deviation discrepancy from the mean in either direction was considered to be statistically signif-

NUMBER AND PERCENTAGES OF STUDENTS IDENTIFIED AS HIGH, AVERAGE, AND LOW ON THE TESTING MEASURES (STUDY I)								
TESTING MEASURE	Hi	gh	Av	erage	Low			
	n	%	n	%	n %			
WRAT-R SPELL	18	18	64	63	19 19			
WRMT-R BSC	16	16	71	70	14 14			
Pig Latin	15	15	76	75	10 10			
PPVT-R	14	14	72	71	15 15			
ITBS RCOMP	13	13	70	69	18 18			
ITBS TOT	22	22	68	67	11 11			
MLAT	15	15	66	65	20 20			

Note. A particular individual might be a member of different groups depending on the testing measure. For example, one student might be a member of the high group on the PPVT-R, but a member of the low group on the WRAT-R Spell.

Table 2

MEANS AND STANDARD DEVIATIONS OF HIGH, AVERAGE, AND LOW GROUPS ON NATIVE LANGUAGE AND FL APTITUDE MEASURES (STUDY I)

TESTING MEASURE	High	Average	Low
	M SD	M SD	M SD
WRAT-R SPELL ^a	117.8 3.2	105.4 4.3	92.0 5.0
WRMT-R BSC ^a	114.6 4.3	99.0 4.5	87.1 3.7
Pig Latin ^b	14.3 0.5	11.1 1.5	3.7 2.7
PPVT-R ^a	131.9 8.7	107.3 6.5	89.9 4.1
ITBS RCOMP ^a	131.4 3.2	112.8 6.7	92.5 7.3
ITBS TOT ^a	124.0 5.0	110.8 6.9	96.5 6.4
MLAT a	124.0 6.3	105.3 6.7	85.6 4.4

^a Test scores expressed in standard scores (M = 100, SD = 15)

^b Test score expressed in raw score (range 0–20)

Note. Students scoring one standard deviation or more above the group mean were classified as high; those scoring between +.99 and -.99 were average; and those scoring one standard deviation or more below the group mean were low.

icant in determining which students fell into above average and below average ranges on the testing measures. A student might have been a member of different groups depending on his/her score on the testing measures (e.g., high group on ITBS TOT, average group on MLAT). The numbers and percentages of students identified as high, average, and low on each of the seven testing measures are shown in Table 1. The means and standard deviation of the three groups on each of the seven testing measures are reported in Table 2.

To establish whether the groups differentiated themselves on the dependent measure—the overall Teacher Rating Scale—individual multivariate analyses of variance (MANOVA) were conducted. Seven separate MANOVA analyses were conducted, one each for the six native language skill measures and the foreign language aptitude test. If the MANOVA was significant, an analysis of variance (ANOVA) was performed to determine whether the three groups differed significantly on the eight questions of the Teacher Rating Scale. A Scheffe procedure indicated which of the groups differed from one another on the eight Teacher Rating Scale questions. An ANOVA was used to examine the extent of group differences on end-of-year foreign language grades; a Scheffe procedure indicated which of the groups differed from each other.

Tables 3 and 4 contain means and standard deviations of the three groups on the Teacher Rating Scale, grouped by their scores on two of the testing measures: MLAT and WRAT-R SPELL. Because of space constraints, means tables are provided for only these two testing measures. The endof-year foreign language grades of the groups are also reported in Tables 3 and 4. These tables provide illustrative examples of student performance by group (independent variables) and by scores on the Teacher Rating Scale (dependent variable). Results for all seven testing measures are described in the Results and Discussion sections.

Table 3

MEANS AND STANDARD DEVIATIONS OF HIGH, AVERAGE, AND LOW GROUPS ON TEACHER RATING SCALE QUESTIONS AND FL GRADES, GROUPED BY MLAT SCORES (STUDY I)							
TEACHER RATING	Hig	gh	Ave	rage	Lov	W	
SCALE QUESTIONS	М	SD	М	SD	М	SD	
FL Academic Skills							
Reading ^a	4.6	0.6	3.8	1.0	3.2	0.9	
Writing ^a	4.3	0.8	3.4	1.1	2.6	1.0	
Speaking ^a	4.3	0.8	3.6	1.1	2.8	0.7	
Listening ^a	4.7	0.7	3.9	0.9	3.2	0.8	
Overall proficiency ^a	4.5	0.7	3.7	1.0	2.8	0.8	
FL Affect							
Motivation ^a	4.4	0.9	3.7	1.2	3.5	1.2	
Attitude ª	4.4	0.8	3.6	1.2	3.5	1.0	
Anxiety ^b	1.4	0.5	2.1	1.2	2.4	1.1	
FL Grade c	3.3	0.6	2.7	1.0	2.0	1.1	
a 5 = High, 1 = Low							
b 1 = Low, 5 = High							
c 4.00 = A, 3.00 = B, 2.00 = C, 1.00 = 1	D, and 0.00 = F						

Table 4

MEANS AND STANDARD DEVIATIONS OF HIGH, AVERAGE, AND LOW GROUPS ON TEACHER RATING SCALE OUESTIONS AND FL GRADES, GROUPED BY WRAT-R SPELL SCORES (STUDY I)

<u> </u>			/
TEACHER RATING	High	Average	Low
SCALE QUESTIONS	M SD	M SD	M SD
FL Academic Skills			
Reading ^a	4.3 1.0	3.8 0.9	3.5 1.2
Writing ^a	4.0 1.0	3.3 1.1	2.8 1.1
Speaking ^a	4.2 1.0	3.5 1.0	3.0 1.1
Listening ^a	4.3 1.0	3.8 0.9	3.4 1.0
Overall proficiency ^a	4.1 1.0	3.6 1.0	3.1 1.1
FL Affect			
Motivation ^a	4.1 1.1	3.7 1.1	3.6 1.4
Attitude ^a	4.0 1.1	3.7 1.1	3.6 1.2
Anxiety ^b	1.7 0.8	2.1 1.1	2.2 1.5
FL Grade c	3.2 1.0	2.6 1.0	2.4 1.2
a 5 = High, 1 = Low			
b 1 = Low, 5 = High			
$^{\circ}$ 4.00 = A, 3.00 = B, 2.00 = C, 1.00 = D, and	0.00 = F		
,, ,			

Before comparing the three groups by their performance on the measures of native skill and foreign language aptitude, three statistical procedures were conducted to examine comparability among the students enrolled in the four different foreign languages (i.e., Spanish, French, German, and Latin). First, a MANOVA procedure was performed to determine if there were overall differences on the six native language measures and the foreign language aptitude test of the students enrolled in the four foreign languages. Results showed no overall significant differences among the four language groups: Wilks's lambda (λ) = .767; F(21,265) = 1.22; p = .23.

Second, a MANOVA procedure was used to determine if there were overall differences on the Teacher Rating Scale questions among the students, by language. Results of the MANOVA procedure showed overall significant differences among the four foreign language groups: $\lambda = .381$, F(24,262) = 4.31; p = .0001. Individual ANOVAs showed overall group differences in only one area: foreign language anxiety, F(3,97) = 8.41; p = .0001. Multiple comparisons using Scheffe's correction showed between-group differences on the foreign language anxiety question between the Spanish and French, Spanish and Latin, and German and Latin groups.

Third, the results of an ANOVA procedure showed that there were no significant differences among the foreign language grades received by the Spanish, French, German, and Latin students, F(3,97) = 2.66, p = .06.

Results

Results are reported separately under the following headings: WRAT-R SPELL, Pig Latin, WRMT-R BSC, PPVT-R, ITBS RCOMP, MLAT, and ITBS TOT. A summary of overall differences among the high, average, and low groups on the eight Teacher Rating Scale questions and final

Table 5

				UKES (STUL	DY 1)		
P]	honology	7	Sema	intics	FL Aptitude	Overall Achievement	
WRAT-R	WRMT	Pig		ITBS			
SPELL	BSC	Latin	PPVT-R	RCOMP	MLAT LF	ITBS TOT	
*	*			*	*	*	
*	*			*	*	*	
*	*			*	*	*	
*	*			*	*	*	
*	*			*	*	*	
					*		
					*		
*	*			*	*	*	
	WRAT-R SPELL * * * *	WRAT-R WRMT SPELL BSC * * * * * * * * * * * * * * * *	WRAT-RWRMTPig BSCSPELLBSCLatin**********	WRAT-RWRMTPigSPELLBSCLatinPPVT-R*********	WRAT-RWRMTPigITBSSPELLBSCLatinPPVT-RRCOMP*******************	WRAT-RWRMTPig LatinITBS PPVT-RMLAT LF**	

foreign language grade is included under each heading. Significant overall differences are reported in Table 5. Between-group differences on the eight Teacher Rating Scale questions and final foreign language grade are reported in Table 6. Overall differences are reported in the Results section. The specific nature of the betweengroup differences (high vs. low, high vs. average, average vs. low) (Table 6) are examined in the Discussion section.

WRAT-R SPELL

Significant overall differences among the groups were found when the WRAT-R SPELL was used as the group variable: $\lambda = .752$; F(16,182) = 1.74; p = .04.

Significant group differences were found on five of the eight Teacher Rating Scale questions: foreign language reading, F(2,98) = 3.62; p = .03; foreign language writing, F(2,98) = 5.41; p = .006; foreign language speaking, F(2,98) = 7.72; p = .0008; foreign language listening, F(2,98) = 4.63; p = .01; foreign language overall proficiency, F(2,98) = 4.66; p = .01. Significant group differences also were found on foreign language grade, F(2,98) = 3.67; p = .03.

Pig Latin

No significant overall differences were found when Pig Latin was used as the group variable: $\lambda = .787$; F(16,182) = 1.45; p = .13.

WRMT-R BSC

Significant overall differences among the groups were found when the WRMT-R BSC was used as the group variable: $\lambda = .728$; F(16,182) = 1.95; p = .02.

Significant group differences were found on five of the eight Teacher Rating Scale questions: foreign language reading, F(2,98) = 4.57; p = .01; foreign language writing, F(2,98) = 6.04; p = .003; foreign language speaking, F(2,98) = 5.93; p = .004; foreign language listening, F(2,98) = 4.99; p = .009; and foreign language overall proficiency, F(2,98) = 4.71; p = .01. Significant group differences also were found on foreign language grade, F(2,98) = 3.23; p = .04.

PPVT-R

No significant overall differences were found when PPVT-R was used on the group variable: $\lambda = .838$; F(16,182) = 1.05; p = .41. No significant differences were found on foreign language grade, F(2,98) = 2.73; p = .07.

ITBS RCOMP

Significant overall differences on the Teacher Rating Scale questions among the groups were found when the ITBS RCOMP was used as the group variable: $\lambda = .551$; F(16,182) = 3.95; p = .0001.

Significant group differences were found on six of the eight Teacher Rating Scale questions: foreign language reading, F(2,98) = 11.77; p = .0001; foreign language writing, F(2,98) = 10.44; p = .0001; foreign language speaking, F(2,98) = 8.42; p = .0004; foreign language listening, F(2,98) = 5.34; p = .006; foreign language overall proficiency, F(2,98) = 15.06; p = .0001; and foreign language attitude, F(2,98) = 3.68; p = .0001. Significant group differences also were found on foreign language grade F(2,98) = 18.38; p = .0001.

Table 6

BETWEEN-GROUP DIFFERENCES ON TEACHER RATING SCALE QUESTIONS AND FINAL FL GRADES, GROUPED BY SCORES ON TESTING MEASURES (STUDY I)^a

SCALE QUESTIONS	Phon	ology	Semantics	FL Aptitude	Overall Achievement	
	WRAT-R SPELL	WRMT BSC	ITBS RCOMP	MLAT LF	ITBS TOT	
High Versus Low						
FL Academic Skills						
Reading	*	*	*	*	*	
Writing	*	*	*	*	*	
Speaking	*	*	*	*	*	
Listening	*	*	*	*	*	
Overall proficiency	*	*	*	*	*	
FL Affect						
Motivation						
Attitude				*		
Anxiety				*		
FL Grade	*		*	*	*	
High Versus Average						
FL Skills						
Reading				*	*	
Writing				*	*	
Speaking	*			*	*	
Listening		*		*		
Overall proficiency				*	*	
FL Affect						
Motivation						
Attitude				*		
Anxiety						
FL Grade					*	
Average Versus Low						
FL Skills						
Reading			*	*		
Writing			*	*		
Speaking			*	*		
Listening			*	*		
Overall proficiency			*	*		
FL Affect						
Motivation						
Attitude						
Anxiety						
FL Grade			*	*		

^a Because no overall group differences were found on the grouping variables PPVT-R and Pig Latin, these variables were not included in this table.

* *p* < .05

MLAT

Significant overall differences among the groups on the Teacher Rating Scale questions were found when the MLAT was used as the group variable: $\lambda = .660$;

F(16,182) = 2.63; p = .001.

Significant group differences were found on all eight Teacher Rating Scale questions: foreign language reading, F(2,98) = 10.07; p = .0001; foreign language

writing, F(2,98) = 11.57; p = .0001; foreign language listening F(2,98) = 11.01; p = .0001; foreign language speaking, F(2,98) = 12.73; p = .0001; foreign language overall proficiency, F(2,98) = 14.27; p = .0001; foreign language motivation, F(2,98) = 3.26; p = .04; foreign language attitude, F(2,98) = 3.87; p = .02; and foreign language anxiety, F(2,98) = 3.28; p = .04. Significant group differences also were found on foreign language grade, F(2,98) = 8.10; p = .0006.

ITBS TOT

Significant overall differences on the Teacher Rating Scale questions among the groups were found when the ITBS TOT was used as the group variable: $\lambda = .525$; F(16,182) = 4.32; p = .0001.

Significant group differences were found on six of the eight Teacher Rating Scale questions: foreign language reading, F(2,98) = 11.08; p = .0001; foreign language writing, F(2,98) = 8.26; p = .0005; foreign language speaking, F(2,98) = 10.55; p = .0001; foreign language listening, F(2,98) = 7.97; p = .0006; foreign language overall proficiency, F(2,98) = 9.33; p = .0002; and foreign language attitude, F(2,98) = 3.35; p = .04. Significant group differences also were found on foreign language grade, F(2,98) = 8.43; p = .0004.

Study II (Follow Up) Method

Participants (Private School)

Sixty females attending a highly-selective, single-sex, college preparatory high school and enrolled in second-year Spanish, French, and German courses served as participants. All students had been participants in a study conducted by Sparks and Ganschow (1996) during their first year of foreign language study. At that time, 154 students had been administered several measures of native language skill and the MLAT. Thirty Spanish students, 20 French students, and 10 German students accepted the authors' invitation to continue in the current study through their second year foreign language course. Of this number, there were 58 tenth-grade students and 2 eleventh-grade students. The mean age of the students was 16 years, 1 month (age range = 15 years, 5 months to 17 years, 2 months).

Procedure

The students' foreign language teachers were asked to rate each student in his/her class on the Teacher Rating Scale at the end of the school year. Students' end-of-second-year foreign language grades were obtained from foreign language teachers at the end of the school year. The foreign language proficiency measures were administered during the last three weeks of the school year at the conclusion of the students' second year of foreign language study. The foreign language reading comprehension and foreign language writing items, which took approximately 30 minutes, were given in one session to all students. The three language groups took the tests in separate rooms. The foreign language listening/speaking items (oral interview), which took approximately 10 to 15 minutes to complete, were individually administered. The first two authors of this paper, who were not proficient in any of the three foreign languages in this study, administered the reading and writing tests. After completion of the reading and writing tests, each student was assigned a number. That number was written on each student's reading and writing tests so that these tests could be scored anonymously by the last three authors of this paper. The last three authors had no previous information about the participants.

The last three authors—each of whom was a foreign language professor at a local university—administered the oral interviews, which they taped for later scoring.

Instruments

There were two types of testing instruments used in this study: (1) the author-designed Teacher Rating Scale for Foreign Language Learning used in Study I (see Appendix) (dependent variable); and (2) a foreign language proficiency measure comprised of reading comprehension, writing, and listening/speaking items (independent variable). The foreign language proficiency measure was designed by the last three authors of this study. This measure had been used in previous studies conducted by the authors (e.g., see Sparks, Ganschow, Artzer, Siebenhar, Plageman, & Patton, 1998); their technical adequacy was reported in those studies. Each of the three authors had completed formal proficiency testing training sponsored by ACTFL and adapted for purposes of this study using ACTFL Guidelines (1986). The authors worked together in the development of the tests to assure uniformity of the proficiency tests across languages. The proficiency tests measured skills in the four areas identified by ACTFL as essential for foreign language acquisition: reading, writing, listening, and speaking.

The reading comprehension items involved 10 multiple choice questions in English about a one-page letter written in the foreign language which the student read. The three reading comprehension tests (French, Spanish, German) were equivalent in the respect that each used the same letter and comprehension questions. The only differences in the three tests were those specific to a particular foreign language. The test directions were the same for each of the three languages. The reading test was designed using criteria descriptive of the Intermediate-High level of the ACTFL Guidelines. Each participant had 15 minutes to read the letter and answer the questions (maximum score = 10).

The writing sample instructed each student to compose a response (in letter form) to the letter that she had read for the reading comprehension task. The letter contained five questions to which the student responded within 15 minutes. Each student's writing sample was scored for five criteria that had been selected by the last three authors who designed the writing test for this study: vocabulary, cultural appropriateness, structures, comprehensibility, and spelling. Each student was assigned a score from 0 to 5 on each of the five criteria. The ACTFL Guidelines for determining proficiency levels were used in assigning the scores (0-5) on each of the five aforementioned criteria in the following manner: 0 = no production; 1 = Novice-Low, 2 = Novice-Mid; 3 = Novice-High; 4 = Intermediate-Low; 5 = Intermediate-High and above (maximum score = 25). A student's level of proficiency was converted to a numerical score so that her level of proficiency could be quantitatively compared to other students. A score of 0 was included in the scoring because some students at this level of foreign language education may have been unable to produce any response in the target language.

The listening and speaking items involved a 10 to 15 minute oral proficiency interview with each student. Interviewers used randomly selected topics about which the students conversed (e.g., food, family, school, daily activities). The first topic was suggested by the interviewer and the conversation began with an open-ended question. The student began to speak on the topic. Then, the interviewer asked questions on the topic or related topics to determine the sustained proficiency of each student. The oral interview was scored for five criteria that had been selected by the last three authors: pronunciation, vocabulary, grammar, comprehensibility, and listening comprehension. The remainder of the scoring procedure and maximum score (25) was the same as in the writing proficiency measure. A student's level of proficiency was converted to a numerical score so that her level of proficiency could be quantitatively compared to other students.

A student's scores on the foreign language reading comprehension, writing, and listening/speaking tests were added together to obtain a total test score (maximum score = 60). The foreign language total proficiency score formed the basis for dividing students into the three proficiency groups (see Analysis of Data). The reliability of the total proficiency test was checked by a Cronbach's Alpha (α) calculation. For the foreign language total proficiency score, the α was .86.

Analysis of Data

Students were divided into three groups according to their score on the overall foreign language proficiency test. Group membership was determined by the same procedure used in Study I (i.e., high proficiency = +1.0 or higher *SD* than the group mean, average proficiency = +.99 to -.99 *SD*, low proficiency = -1.0 *SD* or lower than the group mean). There were 13 students (21.7% of the total group) identified in the high proficiency group, 35 students (58.3%) in the average proficiency group, and 12 students (20%) in the low proficiency group.

A MANOVA procedure was used to determine whether there would be overall differences in group performance on

Table 7

MEANS AND STANDARD DEVIATIONS OF HIGH, AVERAGE, AND LOW FL PROFICIENCY GROUPS ON TEACHING RATING SCALE QUESTIONS AND FL GRADES (STUDY II – PRIVATE SCHOOL)

TEACHER RATING		c .	(D	e .		、 .	
SCALE QUESTIONS	High Pro	oficiency	Average Pr	oficiency	Low Prof	iciency	
	М	SD	М	SD	М	SD	
FL Academic Skills							
Reading ^a	4.4	1.0	3.9	0.8	3.3	1.1	
Writing ^a	4.3	0.8	3.4	1.0	3.0	1.2	
Speaking ^a	4.4	0.8	3.5	1.1	2.4	1.1	
Listening ^a	4.7	0.6	3.5	1.0	3.1	1.1	
Overall proficiency ^a	4.4	0.7	3.6	0.9	3.1	1.2	
FL Affect							
Motivation ^a	4.8	0.6	4.1	0.4	2.9	1.2	
Attitude ^a	4.6	0.8	4.3	0.8	3.6	0.5	
Anxiety ^b	2.0	1.1	2.9	1.1	2.1	1.5	
FL Proficiency							
FL total proficiency ^c	51.4	2.2	41.5	3.4	32.8	2.6	
FL grade - Year 1 d	3.6	0.3	3.1	0.6	2.3	0.7	
FL grade - Year 2 ^{d,e}	3.6	0.4	3.1	0.7	2.6	0.7	

a 5 = High, 1 = Low

b 1 = Low, 5 = High

^c Possible score 0-60.

^d 4.00 = A, 3.00 = B, 2.00 = C, 1.00 = D, 0.00 = F.

e Second-year foreign language grades could not be obtained for four participants.

the Teacher Rating Scale. An ANOVA was used to determine whether the high, average, and low proficiency groups differed significantly from one another on the eight questions of the Teacher Rating Scale. The criterion for significance was a level of $p \le .05$. A Scheffe procedure was used in comparing individual group differences on each question. Table 7 reports the mean score and standard deviation of each of the three proficiency groups on the Teacher Rating Scale, foreign language total proficiency, and end-ofyear foreign language grade.

In order to examine the relationship between overall foreign language proficiency and first-year and second-year foreign language course grades, separate ANOVA procedures were used to compare the high, average, and low proficiency groups in first-year and second-year foreign language grades. A Scheffe procedure was used to examine group differences. Means and standard deviations for firstyear and second-year foreign language grades were compiled for each of the three groups. The first and second-year foreign language grades of the three proficiency groups are reported in Table 7.

Before comparing the three proficiency groups by their performance on the overall foreign language proficiency test, four different comparisons were conducted among students enrolled in the three different foreign languages (Spanish, French, German). First, an ANOVA procedure was conducted to determine if there were overall differences on the foreign language total proficiency measure among students enrolled in the three foreign languages. Results showed no differences among the three groups, F(2,57) = 1.12; p = .33. Second, a MANOVA procedure was used to determine if there were overall differences on the Teacher Rating Scale questions among the students by foreign language. Results showed overall significant differences the students by foreign language.

ences among the three language groups: $\lambda = .359$, F(16,100) = 4.19; p = .0001. However, individual ANOVAs showed no overall group differences on any of the eight questions. Third, the results of an ANOVA procedure showed no significant overall differences among the first-year foreign language grades received by the Spanish, French, and German students, F(2,57) = 0.12; p = .89. Fourth, the results of a separate ANOVA procedure showed no significant overall differences among the second year foreign language grades received by the students in the three foreign languages, F(2,53) = 1.44; p = .25. Thus, across the three language groups, there was consistency in overall foreign language proficiency scores, Teacher Rating Scale scores, and end-of-first-and second-year foreign language grades.

Results

Results of the MANOVA procedure showed significant overall differences among the three proficiency groups on the Teacher Rating Scale questions, $\lambda = .461$; F(16,100) = 2.95; p = .0005. Significant group differences were found on all eight questions: foreign language reading, F(2,57) = 4.90; p = .01; foreign language writing, F(2,57) = 5.89; p = .005; foreign language speaking, F(2,57) = 10.99; p = .0001; foreign language listening, F(2,57) = 10.28; p = .0002; foreign language motivation, F(2,57) = 6.79; p = .002; foreign language attitude, F(2,57) = 13.54; p = .0001; foreign language attitude, F(2,57) = 6.89; p = .002; and foreign language anxiety, F(2,57) = 3.13; p = .05.

Results of the ANOVA procedure performed on firstyear foreign language grades showed significant group differences, F(2,57) = 18.71; p = .0001.

Results of the ANOVA procedure performed on second-year foreign language grades also showed significant

Table 8

BETWEEN-GROUP DIFFERENCES ON TEACHER RATING SCALE QUESTIONS AND FIRST- AND SECOND-YEAR									
FL GRADES (STUDY II – PRIVATE SCHOOL)									
TEACHER RATING SCALE QUESTIONS	High Versus Low Proficiency	High Versus Average Proficiency	Average Versus Low Proficiency						
FL Academic Skills									
Reading	*								
Writing	*	*							
Listening	*	*							
Speaking	*	*	*						
Overall proficiency	*	*							
FL Affect									
Motivation	*		*						
Attitude	*		*						
Anxiety									
FL Grades									
Year 1	*	*	*						
Year 2	*								
* $p \le .05$									

group differences, *F*(2,53) = 7.49; *p* = .001.

Table 8 reports between-group differences on the eight Teacher Rating Scale questions and first-and second-year foreign language grades.

Participants (Public School)

Thirty-six students attending a coed, suburban public high school and enrolled in second-year Spanish, French, and German courses served as participants. All of the students had been participants in Study I described in this paper. At that time, 101 students had been administered several measures of native language skill and the MLAT. Twenty-two Spanish students, seven French students, and seven German students accepted the authors' invitation to continue in this study through their second year foreign language course. All of the students were tenth graders. There were 17 male and 19 female participants. The mean age of the students was 16 years, 1 month (age range = 15 years, 7 months to 17 years, 4 months).

Procedure and Instruments

This follow-up study with public school students used the same procedures and testing instruments that had been used in the follow-up study with the private school students.

Analysis of Data

There were seven students (19.4% of the total group) in the high proficiency group, 21 students (58.3% of the total) in the average proficiency group, and eight students (22.3% of the total) in the low proficiency group. Table 9 reports means and standard deviations of the three proficiency groups on

the Teacher Rating Scale, foreign language total proficiency, and end-of-year foreign language grades.

Before comparing the three proficiency groups by their performance on the overall foreign language proficiency test, four statistical procedures were conducted among students enrolled in the three different foreign languages. First, an ANOVA procedure was conducted to determine if there were overall differences on the foreign language total proficiency measure among students enrolled in the three foreign languages. Results showed significant overall differences among the three languages, F(2,33) = 3.96; p = .03. Significant differences were found only between the Spanish and German groups. Second, a MANOVA procedure was used to determine if there were overall differences on the Teacher Rating Scale questions among the students by foreign language. Results showed overall significant differences among the three language groups: λ = .400, *F*(16,52) = 1.89; *p* = .04. However, individual ANOVAs showed no overall group differences on any of the eight questions. Third, the results of an ANOVA procedure showed no significant overall differences among the first-year foreign language grades received by the Spanish, French, and German students, F(2,33) = 0.90; p = .42. Fourth, the results of a separate ANOVA procedure showed significant overall differences among the second year foreign language grades received by the students in the three foreign languages, F(2,33) = 4.25; p = .03. However, individual ANOVAs showed no between-group differences among the three language groups. Thus, across the three language groups, there was consistency in overall foreign language proficiency scores, Teacher Rating Scale scores, and end-of-first-and second-year foreign language grades.

This follow-up study with the public school students

Table 9

MEANS AND STANDARD DEVIATIONS OF HIGH, AVERAGE, AND LOW FL PROFICIENCY GROUPS ON TEACHER RATING SCALE OUESTIONS AND FL GRADES (STUDY II – PUBLIC SCHOOL)

TEACHER RATING	High Pro	oficiency	Average P	roficiency	Low Proficiency
SCALE QUESTIONS	Ŭ M	SD	M	SD	M SD
FL Academic Skills					
Reading ^a	4.3	0.8	3.8	1.0	2.3 1.0
Writing ^a	4.1	0.7	3.6	1.0	2.0 1.1
Speaking ^a	4.3	0.8	3.5	1.0	2.0 1.1
Listening a	4.4	0.8	3.7	1.1	2.3 1.0
Overall proficiency ^a	4.3	0.8	3.7	1.0	2.3 1.0
FL Affect					
Motivation ^a	3.7	1.4	3.8	0.9	2.3 1.2
Attitude ^a	4.0	1.2	4.0	0.9	2.5 0.9
Anxiety ^b	1.4	0.8	2.3	1.2	3.3 1.1
FL Proficiency					
FL total test c	57.6	2.5	47.4	5.1	36.3 3.9
FL grade - Year 1 d	3.5	0.5	3.1	0.8	2.3 0.9
FL grade - Year 2 d	3.2	0.7	2.5	0.9	1.7 1.5
a 5 = High, 1 = Low					

c Possible score 0–60.

d 4.00 = A, 3.00 = B, 2.00 = C, 1.00 = D, 0.00 = F.

used the same data analysis procedures as those used in the follow up study with the private school students.

Results

Results of the MANOVA procedure showed significant overall differences among the three proficiency groups on the Teacher Rating Scale questions, $\lambda = .389$; F(16,52) =1.96; p = .04. Significant group differences were found on all eight questions: foreign language reading, F(2,33) =9.79; *p* = .0005; foreign language writing, *F*(2,33) = 10.31; p = .0003; foreign language speaking, F(2,33) = 10.78; p =.0003; foreign language listening, *F*(2,33) = 9.31; *p* = .0006; foreign language overall proficiency, F(2,33) = 9.69; p =.0005; foreign language motivation, F(2,33) = 6.72; p =.004; foreign language attitude, F(2,33) = 8.18; p = .001; and foreign language anxiety, F(2,33) = 4.90; p = .01. Results of the ANOVA procedure performed on first-year foreign language grades showed significant group differences, F(2,33) = 5.19; p = .01. Results of the ANOVA procedure performed on second-year foreign language grades also showed significant group differences, F(2,33) = 4.04; p = .03.

Table 10 reports between-group differences on the eight Teacher Rating Scale questions and first-and secondyear foreign language grades.

Discussion

Study I (Replication)

In this replication study with a coed, public school group of foreign language learners, results showed significant overall differences in teachers' perceptions of the students' foreign language academic skills and affective characteristics when the students were grouped by their performance on several native language measures and a foreign language aptitude test. Students who scored higher on native language and foreign language aptitude tests and were rated as having stronger foreign language academic skills and more positive affective characteristics by their foreign language teachers also received higher end-of-year foreign language grades. These findings are similar to those in Sparks and Ganschow's 1996 study and also support research which speculates that students' foreign language learning and affective differences may be due primarily to their differences in language skills (e.g., see Dufva & Voeten, 1999; Ganschow, Sparks, Anderson, Javorsky, Skinner, & Patton, 1994; Kahn-Horwitz, Shimron, & Sparks, 2004; Sparks & Ganschow, 1995b).

In Sparks and Ganschow's 1996 study with a single-sex, private school population, students' affective qualities were rated more positively by their foreign language teachers when they scored higher on the native language and foreign language aptitude measures. In the current replication study, although significant overall differences were found among the three groups on the Teacher Rating Scale, differences in affective characteristics were found only when students were grouped by their score on one testing measure (the MLAT). On the MLAT, between-group differences in affective characteristics were found primarily in foreign language attitude (high vs. average, high vs. low) and foreign language anxiety (high vs. low only). Because significant group differences in affective characteristics were apparent only on the MLAT, the findings prompt speculation that foreign language teachers viewed students in the low group as having positive affective qualities generally that were similar to the students in the high and average groups (e.g., for foreign language motivation: high = 4.4, average = 3.7, low = 3.5). Speculation that

Table 10

TEACHER RATING	High Versus Low Proficiency	High Versus Average Proficiency	Average Versus Low Proficiency
FL Academic Skills	Tionelency	Tronciency	Tronenery
Reading	*		*
Writing	*		*
Listening	*		*
Speaking	*		*
Overall proficiency	*		*
FL Affect			
Motivation	*		*
Attitude	*		*
Anxiety	*		
FL Grades			
Year 1	*		
Year 2	*		

foreign language teachers' perceptions of students' affective characteristics may be affected by students' level of language skill generally was supported by the findings of this study. Results showed that overall differences among the three groups were found on five of the seven testing measures. However, most group differences were found between the high and low groups, not between the high versus average or average versus low groups. In their previous study, Sparks and Ganschow (1996) speculated that foreign language teachers may become more concerned about students' affective behaviors (e.g., motivation, attitude, anxiety) when they perceive them to be achieving more poorly than most other students in the class (e.g., high vs. low), and also that affective differences are less likely to be perceived as a problem by foreign language teachers when students' classroom performance is more similar (i.e., high vs. average, average vs. low) than different (i.e., high vs. low). The findings of the present study suggest that the foreign language teachers were not only skillful in the recognition of students' language differences but also were sensitive to language skill differences that were both obvious (high vs. low) and subtle (high vs. average, average vs. low).

Results from the present study also confirm findings from Sparks and Ganschow's 1996 study because foreign language teachers assigned higher grades to students who had significantly higher levels of native language skill and foreign language aptitude. The findings support Sparks and Ganschow's hypothesis that foreign language grades may be affected more by students' level of language skills and less by motivation for, attitudes toward, or anxiety about foreign language learning. The findings are consistent with other research, which has found that students with stronger native language skills and foreign language aptitude achieve higher grades in foreign language courses than do students with weaker native language skills and foreign language aptitude (e.g., see Ganschow, Sparks, Javorsky, Pohlman, & Bishop-Marbury, 1991; Ganschow, et al., 1994; Sparks & Ganschow, 1995b; Sparks, Ganschow, Javorsky, Pohlman, & Patton, 1992; Sparks et al., 1998).

Study II (Follow up)

The results of the follow-up studies with both private and public school students showed that there were significant overall differences in foreign language teachers' perception of their students' foreign language academic skills, foreign language affective characteristics, and end-of-year foreign language grades when the students were grouped by their performance on a measure of oral and written foreign language proficiency. Generally, students who scored higher on the foreign language proficiency measure were rated by their foreign language teachers as having stronger oral and written foreign language academic skills and more positive affective characteristics than students who scored lower on the foreign language proficiency measure.

These results support Sparks and Ganschow's linguistic coding differences hypothesis (Sparks, 1995; Sparks & Ganschow, 1991, 1995a), which speculates that students' language skills serve as the foundation for foreign language learning and that students' affective characteristics (i.e., motivation, attitudes, anxiety) are related to their level of language skill. That is, a student who displays low motivation for or higher anxiety about foreign language learning is also likely to have lower levels of native language skill, foreign language aptitude, and foreign language proficiency than his/her classmates. The findings also support studies in which students with higher levels of native language skill and foreign language aptitude (on the MLAT) exhibited less positive affective characteristics (e.g., higher levels of foreign language anxiety) (Ganschow, et al., 1994; Ganschow & Sparks, 1996). In addition, the results also support a previous study by Sparks et al. (1997), which found that high school students with significantly weaker native language skills and higher levels of anxiety about foreign language learning had significantly weaker foreign language proficiency after two years of foreign language courses than students with stronger native language skills and lower levels of anxiety about foreign language learning.

The findings also revealed numerous similarities across both private and public school groups. In both schools, there were: significant overall differences among the three proficiency groups on the Teacher Rating Scale; significant overall group differences on all eight questions of the Teacher Rating Scale; and significant overall group differences in both first- and second-year foreign language grades. Generally, most group differences in both the private and public school populations were found between the high and low proficiency groups. For example, differences on the Teacher Rating Scale between the high and low proficiency groups in the private school were found on all questions except foreign language anxiety; in the public school, differences between the high and low proficiency groups were found on all eight Teacher Rating Scale questions. Also, there were significant differences between the high and low proficiency groups in end of first and secondyear grades in both schools. These results both replicate and support Sparks and Ganschow's 1996 study in which the largest number of differences on the Teacher Rating Scale were found between the high and low native language and foreign language aptitude groups.

There were some differences between the high versus average proficiency and average versus low proficiency groups in both schools. In the private school, differences were found between the high versus average proficiency groups on four of the five foreign language academic skills questions and in first-year foreign language grade; however, no differences were found in foreign language affective characteristics or second-year foreign language grade. In contrast, no differences between the high and average proficiency groups in the public school were found on any of the eight Teacher Rating Scale questions or end-of-year foreign language grades. In the private school, differences were found between the average and low proficiency groups on one foreign language skills question (speaking), two foreign language affect questions (motivation, attitude), and end of first-year foreign language grade. In the public school, differences were found between the average and low proficiency groups on the same affect questions as in the private school (i.e., motivation, attitude); however, significant differences were found between the average and low proficiency groups on all five foreign language skills questions but not in end-of-year foreign language grades. These results both replicate and support Sparks and Ganschow's (1996) findings, which showed fewer group differences in teachers' perceptions of foreign language skills and affect between students grouped as high versus average and average versus low on native language and foreign language aptitude measures.

Implications

Some limitations may reduce generalizability of the findings. First, the Teacher Rating Scale needs further research in terms of its reliability and validity. Second, because of the smaller number of public school participants in Study II, the studies should be replicated with larger numbers of students in public schools with diverse populations. Nonetheless, there are several implications that can be drawn from these studies

First, there may be important connections between foreign language teachers' perceptions of students' affective characteristics (i.e., motivation, attitudes, anxiety) and students' foreign language aptitude and actual proficiency. In these two studies, foreign language teachers did not distinguish low proficiency foreign language learners by affective characteristics when students were grouped by native language skills (Study I); yet, they did so when grouped by foreign language proficiency and foreign language aptitude (Study II). It may be that foreign language teachers perceive affective differences in students with low foreign language proficiency and poor foreign language aptitude because these students have lower levels of language skill generally. Foreign language teachers should be aware that their perceptions of students whom they perceive as having, for example, lower motivation, higher anxiety, or less positive attitudes, may be students who have weaker language learning skills than students whom they perceive as having more positive affective characteristics.

Second, the results of both studies suggest that teachers readily distinguish their good from their poor foreign language learners. Thus, foreign language teachers could begin to make appropriate classroom interventions when they suspect a learner is having difficulty with the foreign language. Those interventions should be directed primarily toward improving students' language skills and helping them with the language learning requirements of a foreign language. It seems likely that students' facilitation with language will result in more positive affective qualities.

Third, the foreign language proficiency measures developed for this study appear to be useful in measuring students' levels of oral and written proficiency, especially insofar as they matched well with teachers' own perceptions of their students' foreign language proficiency. Foreign language teachers and programs should consider developing and using their own foreign language proficiency measures to assess their students' oral and written skills in the foreign language.

Fourth, in both studies teachers' perceptions of their students' speaking skills in the foreign language discriminated high versus low and average versus low proficiency students. The fact that the teachers' rating on the speaking item of the Teacher Rating Scale distinguished students with differing levels of foreign language proficiency in both public and private schools suggests that foreign language teachers may be most sensitive to students' ability to speak the foreign language as an important indicator of their learning. Further studies on the importance of oral (speaking and listening) versus written (reading and writing) language in foreign language classrooms seem appropriate. One line of investigation might be whether teachers value mastery of both the oral and written aspects of a foreign language equally.

Finally, findings suggest that students' levels of language skill, generally, are important for foreign language learning. In other publications the authors of these studies have suggested that foreign language teachers should not assume that poor foreign language learners lack motivation, are highly anxious, or have a poor attitude for foreign language learning (e.g., see Sparks, 1995; Sparks & Ganschow, 1991, 1995a; Sparks et al., 1997). Rather, foreign language teachers should be attuned to language skill differences in their students as a way to explain more and less successful foreign language learning and develop teaching methods to assist students with individual learning differences in the foreign language classroom.

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Appendix

Teacher Rating Scale for Foreign Language Learning

NAME OF STUDENT ______ FOREIGN LANGUAGE _____

Directions: Rate the student on the following measures related to learning a foreign language. Use this scale (1 = low; 2 = moderately low; 3 = average; 4 = moderately high; 5 = high)

	Low		High		
Reading in the FL	1	2	3	4	5
Writing in the FL	1	2	3	4	5
Speaking the FL	1	2	3	4	5
Listening to the FL	1	2	3	4	5
Overall proficiency in FL	1	2	3	4	5

	Low				High
Motivation to learn the FL	1	2	3	4	5
Attitude towards learning the FL	1	2	3	4	5
1 = negative attitude					
5 = positive attitude					
Level of anxiety about FL learning	1	2	3	4	5