

# The FLES Attitudinal Inventory

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**Abstract:** *This study investigated attitudinal changes experienced by elementary students studying a second language and presents the development of an attitudinal assessment instrument, its reliability, and a summary of findings from initial administrations of the inventory. The primary purpose of this study was to compare attitudinal differences between elementary students (K-5) involved in a regular Foreign Language in the Elementary Schools (FLES) program with their peers who were not provided with additive foreign language curriculum. Results from the study showed that students participating in FLES programs had positive attitudes relating to school, perceived difficulty in language acquisition, perceived desirability of foreign language study, cultural views, and student self-esteem and confidence levels in relation to their academic achievement in comparison with their non-FLES peers. The conclusions of this study suggest that FLES programs provide students with improved motivation to participate, to persist, and to succeed in second language study.*

## Introduction

The FLES (Foreign Language in the Elementary Schools) Attitudinal Inventory, created in 1996, underwent a two-year testing period and was administered to 569 students from three elementary schools located in northern Idaho and eastern Washington. This attitudinal assessment instrument was designed to assess changes in the way students view school, second language learning, different cultures, and their personal academic achievement. The test was designed to be administered at various times during the school year to students enrolled in foreign language programs as well as those who are not. Student attitudes have been shown to affect their behavior in school because students with more positive attitudes are more likely to participate in class and take a more active role in their learning (Gardner et al. 1976; Mantle-Bromley 1995; Spolsky 1969). Many studies have described the academic, cultural, and economic advantages of bilingualism (Chapman and Haas 1987-88; Genesee 1996; Hakuta 1986; Hakuta and Pease-Alvarez 1992; Statzner 1987-88). Some studies have examined affective variables in relation to second language study, concluding that success in language acquisition is related to the learner's atti-

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tudes (Bartley 1969, 1970; Clement et al. 1977, 1980; Gardner and Lambert 1972; Gordon 1981; Lukmani 1972; Mantle-Bromley 1995; Muchnick and Wolfe 1982). Savignon (1983) reviewed many such studies and claimed that affective variables contribute more to the end result of second language acquisition than do intelligence, aptitude, method of teaching utilized in the classroom, or time spent learning the language.

The improved motivation to participate, to persist, and to succeed in second language study could possibly be explained by one's attitudes or the learned likes and dislikes toward a certain subject. The motivation to learn a second language has been shown to be dependent upon factors such as favorable attitudes toward the target language community and culture; self-esteem; ethnicity; inhibition; anxiety; attitudes of parents, teachers and peers; the learner's attitudes toward the teacher and the class; and the learner's purpose for studying the language (Brown 1981; Clement et al. 1977; Gardner and Lambert 1972; Gardner and Smythe 1975; Lukmani 1972; Mantle-Bromley 1995; Smythe et al. 1972). The literature supports the need to document the effects of the many different types of language programs that are incorporated into the elementary school system (Curtain and Hass 1995; Donato and Antonek 1994; Genesee 1996; Makin 1996; Redmond 1997), and limited research has been directed to the question of whether or not student attitudes can be changed by second language learning.

An earlier study by Rhodes, Thompson, and Snow (1989) assessed the attitudes of Immersion, FLES, and Foreign Language Experience (FLEX) students toward other cultures by administering a language and culture questionnaire. Results from this study showed that students from all three program types had positive attitudes toward learning Spanish and Spanish-speaking people. However, data regarding attitudinal differences between students participating in elementary foreign language programs in comparison with students who do not participate — which could provide implications and suggestions for school administrators, teachers, and others responsible for designing elementary programs and curricula — was not provided. The FLES Attitudinal Inventory is one method of assessing some of the affective results of second language programs as compared with students who are not in such programs. The development of the attitudinal assessment instrument, its reliability, and a summary of findings from initial administrations of the inventory are provided.

### Background and Need for the Survey

The implementation of a foreign language into the basic elementary school curriculum typically consists of a variety of school-tailored programs beginning as early as kindergarten and as late as eighth grade. Ideally, foreign language programs that begin in the elementary school

should be designed in a manner that allows for continuous study of the foreign language through grade 12. The three main program types (Immersion, FLES, and FLEX) are defined below according to Curtain and Pesola (1994).

*Immersion programs* are defined as those that utilize the foreign language to teach 50% to 100% of the core curriculum subjects by the end of the sixth grade. Students generally begin in kindergarten or first grade, where all instruction takes place in the target language. The amount of classroom time in English increases as the foreign language is decreased in grades 2 to 6. The goal of immersion programs is to insure that students master the core curriculum as well as acquire functional fluency or the ability to communicate on topics appropriate to their age almost as well as their native-speaking counterparts. A national survey found that second language immersion programs are on the increase in the United States (Fortune and Jorstad 1996). This national survey focused on 79 of the total 88 U.S. immersion programs and provided details and summaries about second language immersion programs. The study described the use of extensive subject area tests and other cognitive ability tests. However, there were no attitudinal assessments reported in this survey.

*FLES programs* typically provide foreign language instruction for approximately 1.5 to 5 hours each week. FLES programs are typically designed around a thematic study of the language itself. More specifically, FLES programs are designed to provide students the opportunity to listening and speaking skills and a limited degree of reading skills, as well as to acquire cultural awareness. However, content-based FLES programs also integrate topics from the regular curriculum into the language program and directly reinforce the basics currently taught in the classroom, ultimately enhancing the quality of the overall curriculum in many ways.

*FLEX programs* are traditionally self-contained, short-term exploratory programs that usually lasting from three weeks to one year. The general goal of FLEX programs is to provide students some minimal exposure to the designated foreign language, increase cultural awareness, and spark an interest in learning other languages.

The attitudinal effects of these three different types of language programs (Immersion, FLES, and FLEX) traditionally incorporated into the elementary school system have shown that students from all three program types have positive attitudes toward foreign language cultures. Furthermore, data gathered from FLEX students suggests that the more exposure students had with Spanish-speakers, the more positive their attitudes were toward speakers of Spanish (Rhodes et al. 1989).

Attitudinal differences that could be attributed to the addition of foreign language study in the curriculum must be explored in order to provide guidance and enable informed decision making with regards to the future

implementation of elementary foreign language programs. Clearly, there is a need for an instrument that could assess the many possible affective areas of growth due to foreign language enhancement programs that begin as early as kindergarten.

The FLES Attitudinal Inventory was created for the Idaho FLES program to assess some of the many affective changes resulting from the Spanish Language and Culture Enhancement Program that was incorporated into the curriculum of one elementary school in Northern Idaho during the 1996–98 academic school years. Spanish instruction is presented for 30-minute periods, three times each week, on a Monday/Wednesday/Friday schedule (Kennedy et al. 1998). The 90-minute week of language instruction concentrates at least 95% of the class time on the Spanish language. Prior to the initial year of language implementation, the instrument was piloted with third grade students in a neighboring school district in Northern Idaho, after which the first revision of the survey was made.

The first year of the Idaho FLES program (1997–98) concentrated on the implementation of the Spanish language into one third grade classroom. During this time, the survey was also administered in one non-FLES classroom from each grade K to 5 in that elementary school, as well as to an entire grade K to 5 school participating in a 90-minute-per-week thematic FLES program, to assess whether the survey could be used to measure attitudes in a broader elementary school population. This grade

school was located eight miles across the border in the state of Washington.

### Development of the Survey

The instrument was developed according to the procedures recommended by Gay (1992) for questionnaire construction, validation, pretesting, and analysis. The inventory was modeled after the School Attitude Measurement (SAM) (American College Testing 1993), which was designed to survey and evaluate several dimensions of student attitudes in grades K to 12. The SAM survey provides information about five attitudinal scales: (1) motivation for schooling; (2) academic self-concept, performance based; (3) academic self-concept, referenced based; (4) student sense of control over performance; and (5) student's instructional mastery. Although the FLES Attitudinal Inventory was modeled after the SAM, it differs in that it was created to measure students' attitudes concerning school, perceived difficulty in language acquisition, perceived desirability of foreign language study, cultural views, and student self-esteem and confidence levels in relation to their academic achievement. These five constructs have been consistently mentioned in the literature with regard to the outcome of foreign language study (Brown 1981; Gardner 1985; Gordon 1981; Makin 1996). The FLES Attitudinal Inventory is a 22-item questionnaire that allows the student to respond to each statement by choosing "yes," "maybe," or "no." See Appendices A and B for the pretest

**Table 1**

FLES ATTITUDINAL INVENTORY DESCRIPTION OF QUESTION ANALYSIS  
Test I and Test II differ only in the rewording from future to present tense in questions 12, 16, and 22.

School	Perceived Difficulty	Perceived Desirability	Culture	Self
1	2*	6	5	2
3*	7*	9	8	3
4	10	12*	13	7
11*	16*	15	18	11
14*	20*	17	2	12
		19*		14
		22*		16
				19
				20
				22

Note: The 10 questions marked with an asterisk (\*) contain aspects of self-efficacy and were therefore placed into another category in order to measure this construct.

and post-test versions of the FLES Attitudinal Inventory.

*FLES Subscales*

Questions from the FLES Attitudinal Inventory were placed into five subscales. These subscales are not independent and overlap due to the nature of the analytic framework. A child’s actual experiences in school could affect his or her attitude(s) toward the content of a specific category. Each of the five subscales are briefly explained below.

*School.* The category of school contains five specific questions related to general attitudes about school and whether the individual likes school, is happy in school, feels competent in his or her schoolwork, and is proud of his or her school work. Three questions in this category contain aspects of self-esteem and confidence level.

*Difficulty in Language Acquisition.* The category of perceived difficulty of second language acquisition contains five specific questions related to general attitudes toward an individual’s belief that he or she can successfully study and learn a foreign language. Four questions in this category contain aspects of self-esteem and confidence level.

*Desirability of Language Acquisition.* The category of perceived desirability of second language acquisition contains seven specific questions related to general attitudes toward the English-only movement and the individual’s personal motivation for learning a second language. Three questions in this category contain aspects of self-esteem and confidence level.

*Culture.* The category of cultural perceptions contains five specific questions related to general attitudes toward foreign people and cultures. This category is closely connected to the category “school” due to the direct influence that formal education has on one’s cultural views.

*Self-Efficacy.* Ten questions on the survey provide a sense of the individual’s personal confidence level and feelings about himself or herself. This construct is extremely valuable as literature supports its contribution to specific attitudes as well as academic achievement.

The number of items contained under each subscale is shown in Table 1.

**Validation of Instrument**

The first type of validation was the use of a panel. The instrument was read by 20 faculty members from the University of Idaho (UI) and Washington State University (WSU) who examined the attitudinal inventory and made recommendations for question revision as well as for final data analysis. The validation team was instructed to (1) edit the test for readability, (2) categorize similar questions together, and (3) suggest a name or heading for each category. Consensus was then reached for wording of questions and categorization of the five subscales: school, learning, language, culture, and self.

*Pilot Study*

Following the panel analysis, the instrument was piloted to elementary students as a check for readability with regard to the initial target population (third grade students) and to test its effectiveness in determining the five constructs it was designed to assess. The participants of the readability pilot consisted of 16 third grade students from a small rural school who volunteered to take the survey. The population consisted of eight female Caucasians, seven male Caucasians, and one male Native American. The students were asked to complete the survey by underlining the statement that represented their beliefs and circling questions that were difficult to understand. Results of the pilot administration of the survey led to a change in question order and a revision of the wording of some of the questions. An additional question regarding culture was added to the inventory due to negative student responses toward this construct. The final validation panel, consisting of 10 of the original 20 members, reevaluated the survey by (1) editing the test for readability, (2) categorizing similar questions together, and (3) labeling the subscales.

The second version of the FLES Attitudinal Inventory was administered to students in two different schools. All grades (K–5) were tested from one elementary school that was in its fourth year of utilizing a school-wide FLES program. The other elementary school did not have an established FLES program in place. In all, the FLES Attitudinal Inventory was administered to 569 elementary students in grades K–5 from three different school districts (see Table 2) during its preliminary developmental stages (including the initial pilot and revision checks).

*Factor Analysis.* A confirmatory factor analysis was performed to assess the extent to which the dimensions (subscales) identified and agreed upon by the panel corresponded with dimensions derived from a factor analysis. The results of the factor analysis produced five factors (all with eigen-values over 1.00) and confirmed by a scree plot. Following the varimax rotation, it was seen that, by and large, the items assigned to the subscales by the panel loaded highly on all five factors.

*Intercorrelations Among Subscales.* Table 3 presents the

**Table 2**

NUMBER AND GRADE LEVEL FOR STUDENTS COMPLETING FLES ATTITUDINAL INVENTORY

	Grade					
	1	2	3	4	5	total
K	1	2	3	4	5	total
60	69	125	136	114	65	569

Note: Administration of the test took place over a two-year period.

intercorrelations among the five subscales. Because of the central theme of the FLES program, it was expected that there would be moderate correlations among the subscales. Nevertheless, there was a fair degree of independence among factors. The dimension of "Self-efficacy" correlated most highly with the other subscales because items concerning self-concept were imbedded in the other scales.

*Construct Validity.* A construct of the FLES inventory was that attitudes represented in the five subscales could and would be changed as a result of studying a foreign language. This construct was supported by significantly greater improvements in all five subscales by students who participated in a FLES program over the control group of students who followed the same curricula but did not receive any foreign language instruction (Kennedy 1998).

## Reliability of the Instrument

### *Cronbach's Alpha*

A Cronbach's alpha coefficient was calculated for the FLES Attitudinal Inventory and found to be .79. This was considered to be satisfactory reliability for an affective behavior scale of this type at this grade level. The items had relatively high item-total correlations for an affective test, which indicated that each subscale was reliable. This analysis was completed for the entire instrument as well as the five separate subscales on the two-item response version of the attitudinal survey.

A final revision of the test expanded the two-answer format to include the choice of "maybe" to determine

whether providing this choice would enhance the reliability of the instrument. A Cronbach's alpha coefficient was calculated with scores of second, third, and fourth grade students ( $n = 171$ ). The alpha coefficient (.79) did not change. Nevertheless, it was decided to keep the three-response option after interviewing the children. The students indicated that the addition of the response "maybe" provided them with an alternate response when they were unable to decide between "yes" or "no." (Refer to Appendices A and B for the pretest and post-test versions of the FLES Attitudinal Inventory.)

### *Stability Reliability*

The control group subjects in the study by Kennedy (1998) were tested on the FLES inventory three times over a period of nine months. Test-retest alpha coefficients were calculated for the subscales as follows: School = .91; Perceived Difficulty in Language Acquisition = .94; Desirability of Language Acquisition = .96; Culture = .82; and Self-efficacy = .96. All of the reliability coefficients over time were considered to be very good.

## Survey Results and Analysis of FLES Inventory Subscales

Third grade students from two classrooms at an elementary school in a rural university community located in Northern Idaho participated in the study. After absentees and students with missing data were eliminated, a sample of 49 subjects (94% of the possible sample) was obtained and utilized for analysis of the FLES Attitudinal Inventory.

**Table 3**

PEARSON CORRELATIONS BY SUBSCALES OF FLES INVENTORY

Subscale	Culture	Language	Learning	School	Self
Culture		.494	.232	.360	.503
Language			.481	.619	.821
Learning				.417	.644
School					.682

**Table 4**

MEAN SCORES FOR ATTITUDE TOWARD SCHOOL SUBSCALE ON FLES

Group	Test 1	Test 2	Test 3	Average
Experimental	4.5	4.6	5.0	4.7
Control	4.3	4.3	3.9	4.2

Note: Maximum score = 5, minimum score = 0.

Analyses were run on the entire sample and on subgroups within the sample. Subgroups analyzed included gender and treatment group. The analysis for group differences was performed by a 2 (treatment) x 3 (test administration) factorial ANOVA with repeated measures on the last factor. In the following analysis of each of the five subscales of the FLES test, the *F*'s for main effects and test administrations are reported. In these analyses, when a significant interaction occurs, interest in main effect differences diminishes, since the interaction indicates that main effect differences (between treatment and control) are different over the three FLES test administrations. Graphical analyses were performed to interpret the interactions.

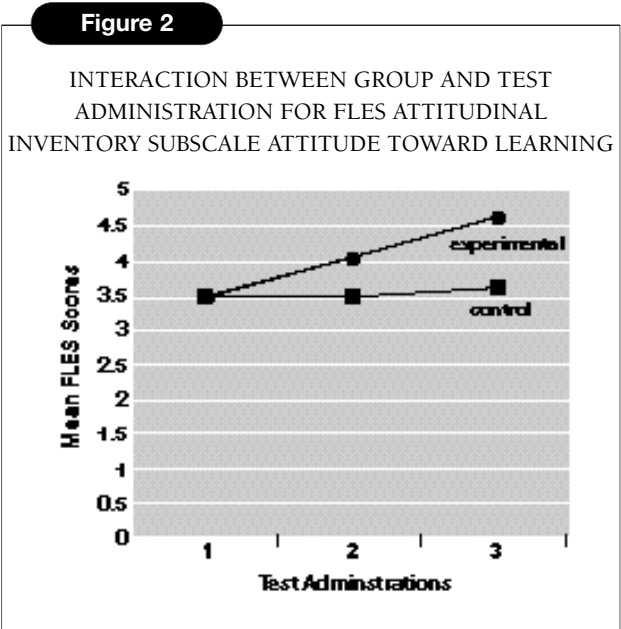
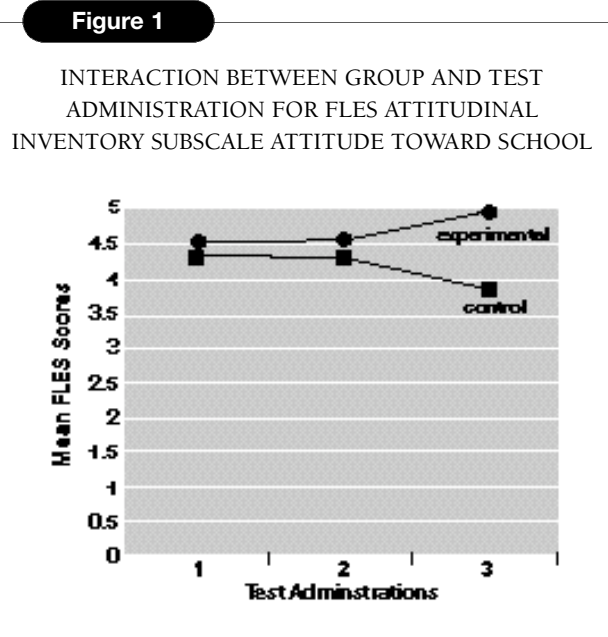
*Attitude Toward School*

The results of the 2 x 3 factorial revealed a significant main effect for group,  $F(1,47) = 6.43, p = .015$ . The difference was in favor of the experimental group ( $M = 4.7$ ) over the control ( $M = 4.2$ ). Table 4 contains the mean attitude toward school scores for the experimental and control groups over the three test administrations.

The descriptive statistics for the attitude subscale for school in Table 4 demonstrated a continual increase in the mean over the three testing periods. The significant interaction,  $F(2,94) = 12.14, p = .001$  indicated that the difference between groups was not the same over the three tests. Figure 1 illustrates that the difference between the two groups was most pronounced at the third test administration in favor of the experimental group. No interaction between groups and FLES Attitudinal Inventory Tests 1 and 2 were found. However, a significant difference in favor of the experimental group did occur between Tests 2 and 3 (see Figure 1). The scores for the experimental group increased, whereas those for the control classroom showed a slight decrease during the school year.

*Attitude Toward Learning*

The results of the 2 x 3 factorial revealed a significant main effect for group,  $F(1,47) = 4.40, p = .041$ . The difference was in favor of the experimental group ( $M = 4.0$ ) over the control ( $M = 3.5$ ). Table 5 contains the mean attitude toward learning scores for the experimental and control groups over the three test administrations.



**Table 5**

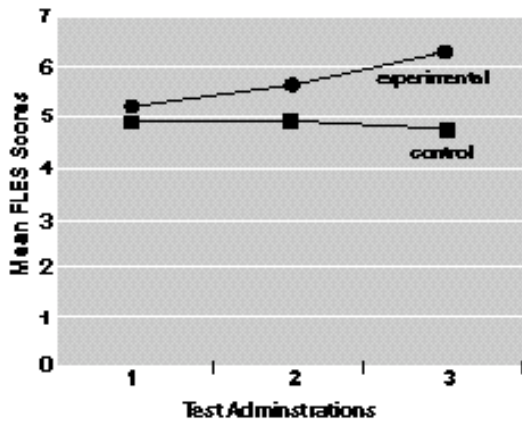
MEAN SCORES FOR ATTITUDE TOWARD LEARNING SUBSCALE ON FLES

Group	Test 1	Test 2	Test 3	Average
Experimental	3.4	4.0	4.6	4.0
Control	3.4	3.4	3.6	3.5

Note: Maximum score = 5, minimum score = 0.

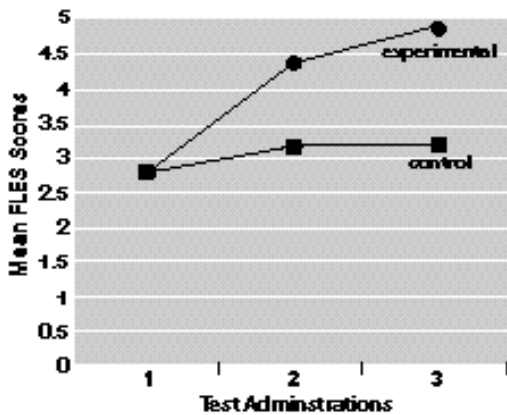
**Figure 3**

INTERACTION BETWEEN GROUP AND TEST ADMINISTRATION FOR FLES ATTITUDINAL INVENTORY SUBSCALE ATTITUDE TOWARD LANGUAGE



**Figure 4**

INTERACTION BETWEEN GROUP AND TEST ADMINISTRATION FOR FLES ATTITUDINAL INVENTORY SUBSCALE ATTITUDE TOWARD CULTURE



The descriptive statistics for the attitude subscale for learning in Table 5 demonstrated a continual increase in the means over the three testing periods. The significant interaction,  $F(2,94) = 12.98, p = .001$  indicated that the difference between groups was not the same over the three tests. A significant interaction between groups and FLES Attitudinal Inventory Tests 1 and 2 were found. A significant difference in favor of the experimental group also occurred between Tests 2 and 3 (see Figure 2). The experimental group made constant gains over the treatment year.

*Attitude Toward Language*

The results of the 2 x 3 factorial revealed a significant main effect for group,  $F(1,47) = 5.02, p = .03$ . The difference was in favor of the experimental group ( $M = 5.7$ ) over the control ( $M = 4.9$ ). Table 6 contains the mean attitude toward learning scores for the experimental and control groups over the three test administrations.

The descriptive statistics for the attitude subscale for desirability of second language acquisition in Table 6 demonstrated a continual increase in the means over the three testing periods. The significant interaction,  $F(2,94) = 8.15, p = .001$  indicated that the difference between groups was not the same over the three tests. The experimental group showed a linear increase in scores on the FLES Attitudinal Inventory, whereas the control group's scores stayed relatively the same over the three test administrations (see Figure 3).

*Attitude Toward Culture*

The results of the 2 x 3 factorial revealed a significant main effect for the group,  $F(1,47) = 3.56, p = .001$ . The difference was in favor of the experimental group ( $M = 4.0$ ) over the control group ( $M = 3.1$ ). Descriptive statistics for the attitudes toward foreign people and culture subscale representing the three testing periods are presented in Table 7.

The descriptive statistics for the attitudes toward foreign people and cultures subscale in Table 7 demonstrated a continual increase in the mean over the three testing periods. The interaction is illustrated in Figure 4. It shows a pronounced increase in scores over the three test administrations for the experimental group and minimal changes for the control group.

**Table 6**

MEAN SCORES FOR ATTITUDE TOWARD LANGUAGE SUBSCALE ON FLES

Group	Test 1	Test 2	Test 3	Average
Experimental	5.2	5.7	6.4	5.7
Control	4.9	5.0	4.8	4.9

Note: Maximum score = 7, minimum score = 0.

*Attitude Toward Self*

The results of the 2 x 3 factorial revealed a significant main effect for the group,  $F(1,47) = 7.94, p = .007$ . The difference was in favor of the experimental group ( $M = 8.4$ ) over the control group ( $M = 7.1$ ). Table 8 contains the mean attitude toward self scores for the experimental and control groups over the three testing periods.

The descriptive statistics for the attitudes subscale for student self-efficacy in Table 8 demonstrated a continual increase in the mean over the three testing periods. Group differences over time was evidenced by a significant interaction,  $F(2,94) = 9.61, p = .001$ . The mean differences shown in Figure 5 demonstrate that the experimental group's scores increased significantly from Tests 2 to 3, while the control groups scores dropped slightly.

*Inventory Summary*

The results of this study showed that students who participated in the FLES program demonstrated more positive attitudes than those who did not participate in the lessons.

**Administration Procedures**

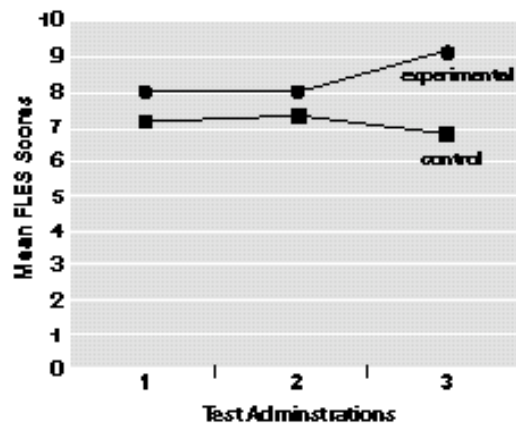
The test administrator explained to the class that the survey was attempting to gather information about how the students feel about school and the subjects that they study. The students were asked to provide as true an answer as they were able to for each statement and were told that there were no right or wrong answers. Students were instructed not to talk or share answers during the survey.

Students completed the top of the survey by writing

their names, circling "boy" or "girl," and writing the date and teacher's name. It was found to be more expedient for the administrator to fill in the majority of this information before making copies and administering the instrument. Students were instructed to use a pencil and were provided with a blank piece of paper or cardboard to cover the completed items as they proceeded through the survey. This was most easily done by having the students begin the survey with the blank sheet of paper at the top (covering

**Figure 5**

INTERACTION BETWEEN GROUP AND TEST ADMINISTRATION FOR FLES ATTITUDINAL INVENTORY SUBSCALE ATTITUDE TOWARD SELF



**Table 7**

MEAN SCORES FOR ATTITUDE TOWARD CULTURE SUBSCALE ON FLES

Group	Test 1	Test 2	Test 3	Average
Experimental	2.8	4.4	4.9	4.0
Control	2.8	3.2	3.3	3.1

Note: Maximum score = 5, minimum score = 0.

**Table 8**

MEAN SCORES FOR ATTITUDE TOWARD SELF SUBSCALE ON FLES

Group	Test 1	Test 2	Test 3	Average
Experimental	8.0	8.0	9.2	8.4
Control	7.1	7.3	6.9	7.1

Note: Maximum score = 10, minimum score = 0.



the title) and then pulling the paper down over each completed item. The tester explained that this technique insured that the students had privacy when responding to each statement. Students were to circle either "Yes," "maybe," or "no" for each statement on the survey. The tester read each statement twice, allowing students to circle their responses and pull the cover sheet down. The survey was then collected and scored according to the scoring procedures.

### Scoring Procedures

Answers were scored as 0 (negative response), 1 ("maybe"), or 2 (positive response). Some questions were worded negatively, which required reversing the point value. Individual student responses can be followed for improvement from pretest to post-test, or categorized into the five different subsets to provide a score for each attitudinal dimension.

### Summary

The FLES Attitudinal Inventory represents a means of quantifying the attitudinal effects that foreign language enhancement programs hold for the basic curriculum. This inventory was developed to assess the attitudinal impact of early second language programs. The validity and reliability of the FLES Inventory were considered to be most satisfactory as an affective measure for young children. Validity evidence for the five dimensions of attitudes toward school, learning a foreign language, the desirability of learning a foreign language, cultural aspects of a foreign language, and self-efficacy in learning a foreign language was obtained via panel analysis, factor analysis, and construct validity. Reliability evidence was established by means of internal consistency coefficient alpha and test-retest stability coefficient alpha.

The results of research with third graders was consistent with the two-school study, revealing that the students who studied a second language and culture scored significantly higher on all subscales of the inventory than students who did not participate in a second language program. We believe that the FLES Attitudinal Inventory can be used effectively in future research endeavors in the area of elementary foreign language. However, more research is needed to see if any other factors influenced the control group's responses over time and to test the effectiveness of the Attitudinal Inventory in the secondary classroom.

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**Appendix A**
*FLES Attitudinal Inventory Pretest (Test 1)*

Name \_\_\_\_\_

 Boy  Girl Grade \_\_\_\_\_

Date \_\_\_\_\_ Teacher \_\_\_\_\_

School	Difficulty	Desirability	Culture	Self-Efficacy

**Circle the best answer.**

- |   |     |       |    |
|---|-----|-------|----|
| 1. School is fun.   | YES | MAYBE | NO |
| 2. You must be smart to learn two languages.                                    | YES | MAYBE | NO |
| 3. I am good at school work.  | YES | MAYBE | NO |
| 4. School makes me happy.   | YES | MAYBE | NO |
| 5. I know people from other countries.  | YES | MAYBE | NO |
| 6. I want to speak just one language.   | YES | MAYBE | NO |
| 7. I am good at learning new languages.   | YES | MAYBE | NO |
| 8. I want to learn about people around the world.                               | YES | MAYBE | NO |
| 9. People should speak only English.  | YES | MAYBE | NO |
| 10. Anyone can learn a new language.  | YES | MAYBE | NO |
| 11. School work is easy for me.   | YES | MAYBE | NO |
| 12. It will make me feel good to speak another language.                        | YES | MAYBE | NO |
| 13. People from other countries are scary.                                      | YES | MAYBE | NO |
| 14. I am proud of my school work.   | YES | MAYBE | NO |
| 15. I want to be able to talk to my friends in more than one language.          | YES | MAYBE | NO |
| 16. Learning a new language will be hard.                                       | YES | MAYBE | NO |
| 17. I want to learn to read another language.                                   | YES | MAYBE | NO |
| 18. I care about how different people around the world live.                    | YES | MAYBE | NO |
| 19. Hearing a language that's not English makes me nervous.                     | YES | MAYBE | NO |
| 20. I think I can learn a new language.   | YES | MAYBE | NO |
| 21. I like people from other countries.   | YES | MAYBE | NO |
| 22. Learning another language would make me feel better about myself in school. | YES | MAYBE | NO |

**Appendix B**

*FLES Attitudinal Inventory Post-test (Test 2)*

Name \_\_\_\_\_

Boy  Girl Grade \_\_\_\_\_

Date \_\_\_\_\_ Teacher \_\_\_\_\_

School	Difficulty	Desirability	Culture	Self-Efficacy

**Circle the best answer.**

- |  |     |       |    |
|--|-----|-------|----|
| 1. School is fun.  | YES | MAYBE | NO |
| 2. You must be smart to learn two languages.                               | YES | MAYBE | NO |
| 3. I am good at school work.   | YES | MAYBE | NO |
| 4. School makes me happy.  | YES | MAYBE | NO |
| 5. I know people from other countries.                                     | YES | MAYBE | NO |
| 6. I want to speak just one language.                                      | YES | MAYBE | NO |
| 7. I am good at learning new languages.                                    | YES | MAYBE | NO |
| 8. I want to learn about people around the world.                          | YES | MAYBE | NO |
| 9. People should speak only English.                                       | YES | MAYBE | NO |
| 10. Anyone can learn a new language.                                       | YES | MAYBE | NO |
| 11. School work is easy for me.  | YES | MAYBE | NO |
| 12. It makes me feel good to speak another language.                       | YES | MAYBE | NO |
| 13. People from other countries are scary.                                 | YES | MAYBE | NO |
| 14. I am proud of my school work.  | YES | MAYBE | NO |
| 15. I want to be able to talk to my friends in more than one language.     | YES | MAYBE | NO |
| 16. Learning a new language is hard.                                       | YES | MAYBE | NO |
| 17. I want to learn to read another language.                              | YES | MAYBE | NO |
| 18. I care about how different people around the world live.               | YES | MAYBE | NO |
| 19. Hearing a language that's not English makes me nervous.                | YES | MAYBE | NO |
| 20. I think I can learn a new language.                                    | YES | MAYBE | NO |
| 21. I like people from other countries.                                    | YES | MAYBE | NO |
| 22. Learning another language makes me feel better about myself in school. | YES | MAYBE | NO |