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ABSTRACT

A revised Spanish/English oral-proficiency test battery was administered to 40 Spanish-surnamed pupils equally divided by sex at grade levels 1, 3, 5, and 7. The test battery included parallel Spanish and English versions of: (1) a 12-item vocabulary pretest, (2) a 32-item vocabulary-by-domain test consisting of four sections -- home, neighborhood, church, and school--of eight items each, and (3) a 32-item grammar production test requiring 10 different grammatical operations. The pupils! performance was similar (balanced) in both languages on the home and neighborhood domains in all grades; Spanish was dominant on the church domain in grades 1 and 3, balance not being achieved until grade 7. English was dominant only on the school domain in grade 5. Spanish was dominant on the grammar test through grade 5, with balance achieved in grade 7. The general tendency was for test scores to improve with grade level or years in school. The amount of variance in the test scores that could be reliably attributed to language use (i.e., language spoken with father, mother, friends, etc.) or demographic variables appeared small. Information about the reliability of test items and about correlations between the Spanish and English versions is given here, and the complete vocabulary and grammar tests are provided in appendixes. (Author/PMP)

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Research and Development Memorandum No. 134

A REVISED SPANISH/ENGLISH ORAL PROFICIENCY TEST, 1974 FIELD TEST RESULTS

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February 1975

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The study reported here furthers the work on language proficiency tests reported in R&D Memorandum No. 120 (Politzer & McKay, A Pilot Study Concerning the Development of a Spanish/English Oral Proficiency Test, 1974) and R&D Memorandum No. 127 (Ramírez & Politzer, A Revised Spanish/English Grammar Test, 1974).



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Abstract

A revised Spanish/English oral-proficiency test battery was administered to 40 Spanish-surnamed pupils equally divided by sex at grade levels 1, 3, 5, and 7. The test battery included narallel Spanish and English versions of (1) a 12-item Vocabulary Pretest, (2) a 32-item Vocabulary-by-Domain Test consisting of four sections—Home, Neighborhood, Church, and School—of eight items each, and (3) a 32-item Grammar Production Test requiring ten different grammatical operations.

The reliability of the complete vocabulary test as measured by the Cronbach α coefficient was .43 for the Spanish version and .77 for the English version. The relacively low Cronbach α for the Spanish version was largely the result of the low amount of variance in each of the four subtests (domains) which comprised the 32 items, and this was due to the homogeneity of the sample in terms of its Spanish proficiency. Both versions of the grammar test measured with great reliability (Cronbach α of .87 for the Spanish and .94 for the English).

The English and Spanish versions of the complete vocabulary test, as well as the four subtests, correlated highly with their respective versions of the grammar test. The Spanish version of the vocabulary test (all domains) correlated positively and significantly with the English version. These correlations were probably the consequence of the pupils' taking the entire test battery first in one language and then in the other. The two versions of the vocabulary test had identical multiple choice formats.

The pupils' performance was similar (balanced) in both languages on the home and neighborhood domains in all grades; Spanish was dominant on the church domain in grades 1 and 3, balance not being achieved until grade 7; English was dominant only on the school domain in grade 5. Spanish was dominant on the grammar test through grade 5; balance was achieved in grade 7. The general tendency was for test scores to improve with grade level or years in school.

The amount of variance in the test scores that could be reliably attributed to language use (i.e. language spoken with father, mother, friends, etc.) or demographic variables appeared small, probably because the pupils represented a relatively homogeneous group in which the use of Spanish was well established.



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A REVISED SPANISH/ENGLISH ORAL PROFICIENCY TEST, 1974 FIELD TEST RESULTS

Arnulfo G. Ramirez and Robert L. Politzer

The current interest in measuring bilingual proficiency in Spanish and English has given rise to the development of various Spanish/English language tests (e.g. Burt, Dulay, & Hernandez-Chavez, 1974; Carrow, 1973; and Cervenka, 1967). The coauthors of this report have worked on the development of oral language production tests designed to give objectively measurable scores on parallel discrete items in Spanish and English (Politzer & McKay, 1974; Ramírez & Politzer, 1974). The purpose of this report is to describe the experience gained with the latest version of the tests (both vocabulary and grammar) and to report on findings concerning Spanish and English proficiency among students living in a predominantly Spanish-speaking environment near the Mexican border and attending a school with a bilingual education program in the first and third grades.

The Subjects

Ten subjects (five boys and five girls) were randomly selected from the first, third, fifth, and seventh grades (total N=40) of the Crystal City Independent School District, Crystal City, Fexas. Thirty-seven of the subjects had been born in the United States; three in Mexico. At the time the data were collected, the pupils tested in grades 1 and 3 were participating in a bilingual program in which the same amount of instructional time was allotted to English and Spanish. The pupils in grades 5 and 7 did not receive bilingual instruction but did come from the same



The Crystal City Bilingual Program has as its long-range objective "that the students leave the district as true bilingual citizens" (Application for a Bilingual Multicultural Education Program for 1974-75, p. 5). The bilingual instructional program has been extended to include the fifth grade for the 1974-75 school year.

bilingual sociocultural environment as the others. The summary of the information given on a language use questionnaire administered at the beginning of the study (Table 1) makes it clear that by and large Spanish was the dominant language. Only for "language spoken with siblings" and "language preferred at school" did the "lined totals for use of English and English combined with Spanish add u. o a figure larger than that for the use of Spanish. In the home environment, Spanish was clearly the dominant language; the exclusive use of English was reported by only two of the forty subjects of the study.

TABLE 1
Summary of Information on Language Use Questionnaire (N=40)

	Spanish	English	Both
Language spoken at home	26	2	12
Language spoken with mother	28	4	8
Language spoken with father	32	2	6
Language spoken with siblings	17	4	19
Language spoken when entering school	33	5	2
Language spoken with friends	22	7	11
Language preferred at home	27	11	2
Language preferred at school	16	15	9

There were three tests in each language. The pupils took all tests in one language on the first day and then took the entire battery in the other language on the second day. Since the pupils were selected randomly and the language of the test was assigned randomly (by flipping a coin), we hope to have reduced the effects of test language and the interval between tests to as low a level as possible within the constraints of the school's schedule and pupil characteristics.



The Instruments

Vocabulary Pretest

All pupils used as subjects in the study were given a simple vocabulary pretest in English and Spanish. The 12-item multiple choice test called for matching one of three words or statements read by the test administrator, with a picture. All subjects used in the study had to score six or better before being given the main test. In fact, all subjects did pass the pretests.

Vocabulary-by-Domain Test

There were 32 vocabulary test items, all of them used before with a different sample (Politzer & McKay, 1974). On each, the subjects were to match one of three sentences, read by the test administrator, with a picture (see Appendix A). In accordance with the sociolinguistic concept of domain (see, for example, Fishman, 1972), the vocabulary test was divided into four sections—home, neighborhood, church, and school—as in the prior test (Politzer & McKay, 1974). Each section was represented by eight test items.

Grammar Production Test

A completely new 32-item grammar test was devised, irawing on our earlier experience with a grammar production test (Ramīrez & Politzer, 1974). Subjects were asked to perform linguistic operations on the model of illustrative samples given by the test administrator (see Appendix B). There were ten different types of operations, requiring (1) change from singular to plural, (2) change from plural to singular, (3) change from present to past, (4) change from affirmative to negative, (5) indication of location, (6) conversion of indirect to direct question, (7) conversion of indirect to direct command, (8) conversion of direct to indirect question, (9) conversion of direct to indirect command, and (10) change from positive to comparative in adjectives and adverbs.

Two related pictures accompanied each item. The test administrator read a sentence corresponding to one picture; the pupil responded by producing a statement corresponding to the other.



Scoring

Responses to each test item were recorded by the test administrator.

Response categories were "expected" (1), "other acceptable response"

(1), "incorrect" (0) and "no response" (0).

Analysis of the Tests

Reliability of the Items

Table 2 shows the mean scores for all subjects, the standard deviations, and the reliability (Cronbach α coefficient) of each item. Not

TABLE 2

Mean, Standard Deviation, and Reliability of Test Used
(N=40)

Test	Me an	s.d.	Cronbach a
Vocabulary Pretest (Spanish)	11.7	0.56	0.52
Vocabulary Pretest (English)	11.6	0.67	0.61
Vocabulary-by-Domain Test (Spanish)			
Dom-in I (Home)	7.7	0.53	-0.14
Domain II (Neighborhood)	7.2	0.83	0.15
Domain III (Church)	6.5	1.10	0.12
Domain IV (School)	6.6	0.96	0.07
Total Domains	27.7	2.17	0.43
Vocabulary-by-Domain Test (English)			
Domain I (Home)	7.6	0.76	0.47
Domain II (Neighborhood)	7.1	1.11	0.50
Domain III (Church)	5.3	1.71	0.59
Domain IV (School)	7.3	0.82	0.22
Total Domains	27.9	3.30	0.77
Grammar Test (Spanish)	26.6	4.37	0.87
Grammar Test (English	19.8	8.59	0.94



only the vocabulary pretest, but the entire vocabulary-by-domain test was obviously easy for most of the subjects. For the vocabulary-by-domain test the mean scores were 27.7 (Spanish) and 27.9 (English) out of a possible maximum score of 32. Several items were answered correctly by all subjects (see Appendix C). The amount of variance measured by the tests was extremely low--a fact that is in itself largely responsible for the relatively low reliability of the subtests (domains). The Cronbach a coefficient for the combined domains (Spanish, .43; English, .77) indicates at least respectable reliability for the vocabulary test as a whole.

The grammar test, for which mean scores were 26.6 (Spanish) and 19.8 (English) out of a possible 32, was more difficult than the vocabulary test. Both the Spanish and English versions of the grammar test measured with great reliability (Cronbach a of .87 for the Spanish version and .94 for the English version). Any reasonable and linguistically correct response was accepted and scored as correct, even if it was not the one expected as a result of the model item. An analysis of the individual items indicated that in many cases the stimulus failed to elicit the expected grammatical construction, but resulted in an alternate acceptable answer (see Appendix D). To what extent item difficulty reflects a problem inherent in perceiving the required task rather than the student's linguistic abilities is difficult to decide, but there is some indication that the role played by the perception of the task is considerable. For instance, items 29, 30, and 32--all dealing with making comparisons--were the most difficult in both the Spanish and English versions. It seems umlikely that such expressions as mejor, peor, más, or better, worse, more would be part of the normal usage of only four or five of the forty subjects. The conclusion that the analogical task required by the test was difficult for the subjects appears more reasonable.

Intercorrelations Among Tests

The intercorrelations among the tests and subtests are shown in Table 3. The most interesting one is the significant correlation of the Spanish vocabulary test (all domains) with the English vocabulary test .46; p< .001). If proficiency in one language were associated with lack of



Intercorrelations Among Tests

TABLE 3

		-	2	w	•	5	٥	,	20	٥	15	=	13		1
	Vocab. Fre-Test Eng.	1.00	.21	. 06	. 20	.04	.17	. 14		02	6 .3802 .0512	12	05	06	25
2. E	Domain I Home-Eng.		9.1	. 48	.58***	. 68	. 81	.67***	.03	. 42 **	.17	. 21	.37**		. 10
	Domain II Weighb Eng.			1.08	. 37***	.55***	. 73***	. 59	13	.03	.52***	3	. 21	8	
•	Domain III Church-Eng.				1.00	. 46	F.	.74		.27	36	. 26		¥.	
;^	Domain IV School-Eng.					1.00	. 78***	.51	01	. 32 *	. 18	÷	, ,	. 33	
<u>.</u>	Total Domains-Eng.						1.00	. 21	01	. 33	&	.23	, ,		
7. (7. Grammar Test-Eng.							1.00	14	¥.	. 39	. 19	. 28		
.e.	Vocab. Pre-Teet Span.								1.00	02	Ç	.28	20	\$	
	Domain I Mome-Span.									1.00	.23	. 16	.15	.53	
10.	Domain II MeighbSpan.										.8	¥,	.25	.68	
Ξ.	Domain III Church-Span.											1.00	.35	.77**** .32**	
12.	Domain IV School-Span.													. 70***	
13.	Total Domains-Span.														

\$ 0.001 \$ 0.001 \$ 0.001

proficiency in the other, the correlation would be negative. In fact, the reverse is the case. Still, the positive correlation does not seem to justify the conclusion that proficiency in one language is related to proficiency in the other, especially since the Spanish grammar test shows no strong relation to any of the English skills. What seems more plausible is that the correlation of the Spanish and English vocabulary tests is produced by the test-taking ability (or transfer of learning) involved in both. One can only surmise that test-taking ability may also be responsible for the somewhat surprising relationship shown between the Spanish vocabulary test and the English grammar test (.42; p< .01).

Analysis of Results

Dominance Configuration

Table 4 shows the mean scores achieved on all tests by grade and the significant differences between the Spanish and English scores. Table 5 shows the dominance patterns. The subjects' performance was similar (balanced) in Spanish and English on Domain I (Home) and Domain II (Neighborhood) for all grades. Significant differences in favor of Spanish existed for Domain III (Church) in grades 1 and 3; balance was achieved by seventh grade. The only case of dominance in favor of English occurred in Domain IV (School) in the fifth grade. On the grammar test the pupils exhibited a dominance in Spanish in grades 1, 3, and 5; balance was not achieved until the seventh grade.



TABLE 4

Mean Scores, Standard Deviations, and Significant Differences of Means by Grade

	Spar	nish	Engl:	ish	Difference	T-Value
Grade	Mean	s.d.	Mean	8.d.	of Means	(2-Tail Prob
		<u>v</u>	ocabulary P	retest		•
1	11.8	0.40	11.4	0.84	0.4	1.50
3	11.5	0.71	11.6	0.70	-0.1	-0.32
5	11.9	0.32	11.7	0.48	0.2	1.50
7	11.6	0.70	11.5	0.71	0.1	1.00
		Vocabi	ulary-by-Don	main Test	•	
Domain :	I (Home)					
1	7.3	0.68	7.2	0.92	0.1	0.29
3	7.7	0.48	7.3	1.06	0.4	1.81
5	7.7	0.48	8.0	0.0	-0.3	-1.96
7	7.9	0.32	8.0	0.0	-0.1	-1.00
Domain 3	II (Naighb	orhood)				
1	6.6	0.84	6.3	1.57	0.3	1.00
1 3 5 7	7.0	0.94	6.9	0.99		0.25
5	7.5	0.71	7.7	0.48	-0.2	-0.61
7	7.8	0.42	7.7	0.48	0.1	0.43
Domain :	III (Churc	h)				
1	6.5	1.18	4.0	1.76	2.5	4.29**
3	5.7	1.06	4.2	1.32	1.5	3.00*
5 7	6.8	1.14	6.5	0.85	0.3	0.61
7	6.9	0.74	6.7	0.68	0.2	0.48
Domain 3	IV (School))				
1	6.6	0.52	6.8	0.7	-0.2	-0.80
3	6.1	1.20	6.9	0.88	-0.8	-1.81
3 5 7	6.6	0.97	7.9	0.32	-1.3	···.4.35**
7	7.3	0.82	7.7	0.68	-0.4	-1.50



TABLE 4 (Cont'd.)

	<u>Sp</u>	anish en	En	glish	Difference	T-Value
Grade	Mean	s.d.	Mean	s.d.	of Means	(2-Tail Prob
		Total '	Vocabulary 1	Domain Tes	<u>st</u>	
1	27.0	1.70	24.0	3.09	2.7	3.20*
3	26.5	2.17	25.3	3.06	1.2	1.15
5	28.6	2.41	30.1	1.37	-1.5	-1.43
7 .	29.9	1.66	30.1	1.37	-0.2	-0.28
		Gram	mar Product:	lon Test		
1	23.5	6.19	11.2	7.74	12.4	3.02*
3	25.9	4.23	16.6	6.45	9.3	4.15**
5	27.8	2.25	23.3	2.63	4.5	4.82**
7	29.1	1.52	28.2	5.05	0.9	0.55

p < .05**P < .01

TABLE 5 Pupils' Language Dominance According to Grade

		Gr.	ade	·
Test	1	3	5	7
Domain I: Home	В	В	В	В
Domain II: Neighborhood	В	В	В	В
Domain III: Church	S	S	S	В
Domain IV: School	В	В	E	В
Total	S	В	В	В
Grammar	S	S	S	В



S=Spanish dominance E=English dominance B=Balance

The test results do not seem to reflect the language dominance configuration one would expect from a sample of Mexican-American pupils living in a predominantly Spanish-speaking environment near the Mexican border. Mexican-American pupils account for 99 percent of the school population, and the city, which has a population of 10,000, appears to be a stable bilingual community in which Spanish is used in the home and neighborhood, and English, until 1970, was the principal language of the school.

The Spanish dominance reflected in Domain III (Church) and the grammar test in grades 1, 3, and 5 does seem to mirror the sociocultural reality. The balance shown in the domains of home and neighborhood, especially in the first two grades (1 and 3), may be only a mirage. An explanation of this "mirage" might be found in the level of difficulty of the test or in the effort to make the domain tests parallel in the two languages. The parallelism may have eliminated the differences between some of the elements of Mexican-American and Anglo-American culture that probably can be reflected linguistically but cannot be measured with identical vocabulary items.

Significant Source of Variance: Grade

We expected to find that grade was a significant source of variance and that there was a general tendency for test scores to improve from the lower to the higher grades. In fact, the significant improvement by grade is shown in two of the Spanish vocabulary subtests (Domain II: Neighborhood; Domain IV: School), the total Spanish vocabulary test, and the Spanish grammar test (see Table 6). In other words, among the Spanish tests only the pretest and the vocabulary subtests dealing with home and church did not vary significantly according to grade, evidently because even most of the first-grade subjects seem to have been totally familiar with the vocabulary items included in those portions of the test. Among the English tests, on the other hand, all except the pretest show significant variance and improvement associated with grade.



TABLE 6
Summary of One-Way Analysis of Variance for Significant Variance Due to Grade

Source	Sum of Squares	d.f.	Mean Square	F
Spanish Vocabulary Test		•		
Domain II (Neighborhood)	-			
Between Groups	8.48	3	2.83	4.96**
Within Groups	20.50	36	0.57	
Total	28.98	39		
Domain IV (School)				
Between Groups	7.30	3	2.43	2.94*
Within Groups	29.80	36	0.83	
Total	37.10	39		
Total Spanish Vocabulary Test	•			

Between Groups	72.20	3	24.07	5.94**
Within Groups	145.80	36	4.05	
Total	218.00	39		
Spanish Grammar Test				
Between Groups	171.8G	3	57.27	3.61*
Within Groups	571.81	36	15.88	
Total	743.61	39		
English Vocabulary Test Domain I (Home)				
Between Groups	2.69	2	1.35	3.27*
Within Groups	15.21	37	0.41	
Total	17.90	39		
Domain II (Neighborhood)	-			
Between Groups	13.90	3	4.63	4.74**
Within Groups	35.20	36	0.98	
Total	49.10	39	•	



TABLE 6 (Cont'd.)

Between Group Total Between Group Total Domain IV (School) Between Group Within Group Total Total English Vocabu Test Between Group Total	54.20 117.10 118 9.27 17.50 26.78	3 36 39 3 36 39	20.97 1.51 3.09 0.49	
Within Group Total Domain IV (School) Between Group Within Group Total Total English Vocabu Test Between Group	54.20 117.10 118 9.27 17.50 26.78	36 39 3 36	3.09	13.93** 6.36**
Domain IV (School) Between Group Within Group Total Total English Vocabu Test Between Group	117.10 1ps 9.27 ps 17.50 26.78	39 3 36	3.09	6.36**
Domain IV (School) Between Group Within Group Total Total English Vocabu Test Between Group	1ps 9.27 ps 17.50 26.78	3 36		6.36**
Between Group Within Group Total Total English Vocabu Test Between Group	17.50 26.78	36		6.36**
Within Group Total Total English Vocabu Test Between Group	17.50 26.78	36		6.36**
Within Group Total Total English Vocabu Test Between Group	17.50 26.78	_	0.49	
Total Total English Vocabu Test Between Grou	26.78	_		
Test Between Grou	ılary			
	ıps 285.90	3	92.30	16.82**
Within Group	-	36	5.67	10.02
Total	489.91	39	3.07	
English Grammar Test	<u> </u>			
Between Grou	mps 1670.08	3	556.69	16.62**
Within Group		36	33.49	
Total	2875.78	39		

^{*}p < .05

Effects of Demographic and Language Use Variables

Of the variables gathered through the questionnaire on language use, rather few contributed to significant variation in the test scores (see Tables 7 and 8). Subjects who reported speaking Spanish with their mothers performed better on the neighborhood domain of the Spanish vocabulary test. Somewhat surprisingly, the three subjects who were born in Mexico did significantly worse in the Spanish grammar test than the rest of the group. This fact could be interpreted only if case histories of



^{**}P < .01

TABLE 7

Means and Standard Deviations for Significant
Variance due to Demographic and
Language Use Variables

		N	Mean	s.d.
Language	Spoken with Mother	Spanish	Domain II	(Neighborhood)
	Spanish	28	7.4	
•	English Both	4 8	6.5 6.9	_
Place of	Birth	Spænish	Grammar Te	st
	USA	37	27.1	
	Mexico	3	20.3	12.22
Language	Spoken at Home	English	Vocabulary	Pretest
	Spanish	26	11.5	0.65
	English Noth	2 12	10.5 11.8	0.71 0.62
Language	Spoken with Friends	English	Domain II	(Neighborhood)
	Spanish	22	6.8	1.34
	English Both	7 11	7.7 7.6	0.49 0.52
Language	Spoken with Siblings	English	Domain IV	(School)
	Spanish	17	7 6	0.80
	English Both	4 19	7.8 7.0	0.50 0.82



TABLE 8 Summary of One-Way Analysis of Variance for Significant Variance Due to Demographic and Language Use Variables

Source	SS	d.f.	M.S.	F
Language Spoken with Mother	Spanish I	omain II	(Neighborhoo	d)
Between Groups	4.24	2	2.12	3.17*
Within Groups	24.73	37	0.67	
Total	28.97	39		
Place of Birth	Spanish G	Grammar I	'est	
Between Groups	127.38	1	127.33	7.86**
Within Groups	616.24	38	16.22	
Total	743.62			
Language Spoken at Home	English V	ocabular/	y Pretest	
Between Groups	2.69	2	1.35	3.27*
Within Groups	15.21	37	0.41	
Total	17.90			
Language Spoken with Friends	English I	omain II	(Neighborhoo	d)
Between Groups	7.08	3	3.54	3.12*
Within Groups	42.02	37	1.14	
Total	49.10	39		
Language Spoken with Siblings	English I	omain IV	(School)	
Between Groups	3.91	2	1.95	3.16*
Within Groups	22.87	37	0.62	
Total	26.78	39		

^{*}p < .01 **p < .05



the individuals involved were available.

On the English side of the test battery, the vocabulary pretest appears to have been influenced by language spoken at home. Those who spoke both languages did slightly better than those who spoke only Spanish; the two individuals who spoke only English performed worse. On Domain II (Neighborhood) those who reported using English or both English and Spanish with their friends did slightly better than those who spoke only Spanish. In Domain IV (School) those who reported using both languages with siblings had scores slightly below those using either Spanish or English.

In general, the amount of variance in test scores that can be reliably attributed to language use or demographic variables appears small—probably because the subjects represented a relatively homogeneous group in which the use of Spanish, at least within the home environment and with friends and siblings, seemed to be rather firmly established.

Implications

The results of this study have three implications.

First, the performance of the subjects on the English and Spanish tests, particularly the grammar tests, shows that "balance" is eventually reached, confirming previous findings. In a San Francisco study (Ramírez & Politzer, 1974), which also tested students in a bilingual education program, balance was reached in grade 3. The Crystal City pupils did not achieve balance until grade 7. The difference might be explained in terms of the different environment affecting the two groups (Crystal City, rural and near the border; San Francisco, urban and away from the border influence), but since different versions of the grammar test were used, the findings are not entirely comparable.

Second, at least for the Crystal City sample, the home and neighborhood domains of the vocabulary test did not seem to represent language use accurately. In different situations (San Francisco vs. Crystal City) different levels of difficulty may be required to measure dominance or balance, because balance and imbalance can occur at different levels of performance (see Ramírez & Politzer, 1974, p. 4).



Third, the high correlation of the grammar test with the multiple choice vocabulary test (.81 in English and .40 in Spanish) may justify a multiple choice format for the grammar test as an alternative to the production test, especially for use with larger samples.

Further testing is being done using a multiple choice grammar test.



References

- Burt, K. M., Dulay, H. C., & Hernández-Chávez, E. The bilingual syntax measure. New York: Harcourt Brace Jovanovich, 1974.
- Carrow, E. <u>Test for auditory comprehension</u>. Austin, Texas: Educational Concepts, 1973.
- Cervenka, E. J. Final Report on Head Start Evaluation and Research, 1966-67, to the Institute for Educational Development, Section VI. The measurement of bilingualism and bicultural socialization of the child in the school setting: The development of instruments. Also published as Child Development Evaluation and Research Center, Report No. 1, ED-66-1. Austin, Texas: University of Texas at Austin, 1967.
- Fishman, Joshua A. The sociology of language. Rowley, Massachusetts: Newbury House Publishers, 1972.
- Politzer, R. L., & McKay, M. A pilot study concerning the development of a Spanish/English oral proficiency test [vocabulary and grammar]. R&D Memorandum No. 120. Stanford, Ca: Stanford Center for Research and Development in Teaching, 1974.
- Ramirez, A. G., & Politzer, R. L. A revised Spanish/English grammar test. R&D Memorandum No. 127. Stanford, Ca: Stanford Center for Research and Development in Teaching, 1974.



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APPENDIX A

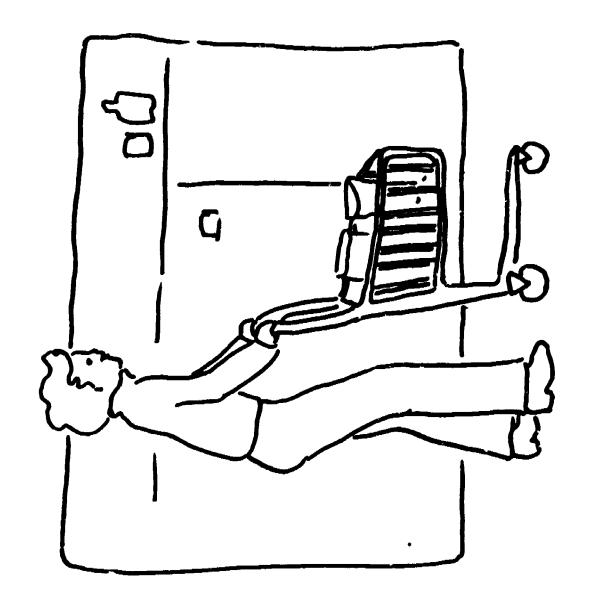
ocabulary-by-Domain Test, English Version

ij	She is waiting for a meal.	She is cooking a meal.	She is eating a meal.
2.	She is watching the baby.	She is feeding the baby.	She is dressing the baby.
<u>ښ</u>	He is building a house.	He is cleaning the house.	He is buying a house.
4.	She is in the kitchen.	She is in the hall.	She is in the porch.
۸.	They are in the yard.	They are in the garden.	They are in the living room.
6.	He is in the bedroom.	He is in the closet.	He is on the stairway.
7.	The book is on the chair.	The book is on the floor.	The book is on the night stand.
œ	She is crying.	She is ironing.	She is sewing.
17.	Neighborhood		
1.	He is a salesman.	He is a mailman.	He is a butcher.
2.	This is a shovel.	This is an axe.	This a broom.
မ်	This is a scale.	This is a cash register.	This is a display case.
4.	He sells meat.	He weighs meat.	He slices meat.
٥.	She is washing the floor.	She is sweeping the floor.	She is painting the floor.

•	He is paying.	He is arguing.	He is thinking.
7.	He is carrying the bag.	He is dropping the bag.	He is filling the bag.
&	He is pushing the cart.	He is pushing the package.	He is pushing the children.
111.	Church		
1.	They stand before the priest.	They stand before the grave.	They stand before the altar.
2.	The candle is next to the cross.	The candle is next to the flowers.	The candle is next to the chalice.
ų	He is postponing mass.	He is celebrating mass.	He is announcing mass.
4.	She is a bride.	She is a num.	She is an ushe:.
ν.	He speaks to the nun.	He speaks to the altar boy.	He speaks to the groom.
•	The girl is accompanied by the godparents.	The girl is accompanied by the bridesmaids.	The girl is accompanied by the parents.
7.	The bride is wearing a veil.	The bride is wearing a wreath.	The bride is wearing a medal.
ထံ	They are getting confirmed.	They are getting engaged.	They are getting married.
IV.	School		
~ i	The flag is next to the map.	The flag is next to the blackboard.	The flag is next to the clock.
2.	The book is on the floor.	The book is on the desk.	The book is on the shelf.

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m.	3. This is a sponge.	This is an eraser.	This is a cardboard.
4.	4. The girl is reading.	The girl is reciting.	The girl is writing.
5.	5. He is sharpening the pencil.	he is loaing the pencil.	He is scratching the pencil.
	6. She is drawing a picture.	She is showing a picture.	She is taking a picture.
7.	7. He is on the dance floor.	He is on the stage.	He is in the coatroom.
80	8. This is a ruler.	This is a stapler.	This is a nchebook.



Domain II: Neighborhood. Item 8.



Vocabulary-by-Domain Test, Spanish Version

-	Ella está cocinando.	Ella está comiendo.	Ella está esperando la comida.
2.	Ella cuida al niño.	Ella le da de comer al niño.	Ella viste al niño.
e.	El está comprando una casa.	El construye una casa.	El iimpia la casa.
4.	Ella está en el pasillo.	Ella está en la galeria.	Ella está en el cocina.
K)	Ellos están en el jardín.	Ellos están en la sala.	Ellos están en el patio.
•	El está en la recomara.	El está en el gabinete.	El está en la escalera.
7.	El libro está sobre la silla.	El libro está sobre la mesilla de noche.	El libro está en el suelo.
œ	Ella está planchando.	Ella está cosiendo.	Ella está llorando.
Ξ.	La Comunidad		
1.	El es un carnicero.	El es un vendedor.	El es un cartero.
2.	Esta es una pala.	Esta es una escoba.	Este es un hacha.
e.	Esta es una balanza.	Este es un mostrador.	Esta es una registradora.
4.	El pesa carne.	El corta carne.	El vende carne.
۶.	Ella está lavando el piso.	Ella está pintando el piso.	Ella está barriendo el piso.
6.	El está pagando.	El está discutiendo.	El está pensando.

-24-

El está llenando la bolsa.	El está empujando la carreta.
El deja caer la bolsa.	El está empujando el paquete.
7. El está llevando la bolsa.	8. El está empujando a los niños.

La Iglesia III.

Ellos están de pie al frente de la tumba. Ellos están de pie al frente del sacerdote. -

La vela está al lado de la

2.

copa.

La vela está al lado de las flores.

El está celebrando la misa.

El está posponiendo la misa.

. ن

Ella es una novia.

La vela está al lado de la cruz.

Ellos están de pie al frente

del altar.

El está anunciando la misa.

Ella es una acomodadora.

El habla con el novio.

La novia está acompañada por los padres.

La novia está acompañada por

La novia está acompañada por

•

los padrinos.

El habla con la monja.

. د

Ella es una monja.

4.

La novia lleva una medalla.

7

Ellos se van a casar.

œ.

las madrinas.

El habla con el monaguillo.

La novia lleva una corona.

Ellos se van a comprometer.

Ellos se van a confirmar.

La novia lleva un velo.

La Escuela IV.

La bandera está al lado del pizarrón. ;

La bandera está al lado del mapa. El libro está en el estante.

El libro está sobre el escritorio.

La bandera está al lado del

reloj.

El libro está en el piso. 2:

ERIC

;		race ea di caicoii.	rate es un politador.
4.	La niña está leyendo.	La niña está recitando.	La niña está escribiendo.
5.	. El pierde el lápiz.	El le saca punta al lápiz.	El está raspando el lápiz.
9	Ella está tomando una foto.	Ella está dibujando un cuadro.	Ella está mostrando un cuadro.
7.	El está en la plataforma del teatro.	El está en el piso de baile.	El está en el guardarropa.
α	Esta es una regla.	Esta es una orabadora.	Rete on in citademo

APPENDIX B

Grammar Production Test, English Version

Category I-Singular to Plural

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The pupil is singing.

The pupils are singing.

Items:

1. This woman is writing.

These women are writing.

2. This child is eating.

These children are eating.

3. That goose is fat.

These geese are fat.

Category II-Plural to Singular

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The pupils are sitting at their desk.

The pupil is sitting at her desk.

Items:

The girls are studying by themselves.

The girl is studying by herself.

5. The boys are washing themselves.

The boy is washing himself.

6. The girls are doing their homework.

The girl is doing her homework.

7. The girls are praying.

The girl is praying.

Category III-Present to Past

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: Today the boy walks to

school.

Yesterday the boy walked to school.

Items:

8. Today the mother gives the boy some candy.

Yesterday the mother gave the

boy some candy.



9. Today the girl eats an apple.

Yesterday the girl ate an apple.

10. Today the boy draws a picture.

Yesterday the boy drew a picture.

Category IV-Past Affirmative to Present Negative

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: Yesterday the girl was

Today the girl isn't sick.

sick.

Items:

11. Yesterday the boys knew the answer.

Today the boys don't know the answer.

12. Yesterday the pupils did their homework.

Today the pupils don't do their homework.

13. Yesterday the man had some money.

Today the man doesn't have any money.

Category V-Location

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: This book is next to

the box.

(Interviewer: Where is that book?) (Expected Student Response: That book is in the box.)

Items:

14. This book is in front of the lamp.

I: Where is that book?

R: That book is beside the lamp.

15. This book is on the desk.

I: Where is that book?

R: That book is under the desk.

16. This book is on the chair.

I: Where is that book?

R: That book is on the table.



Category VI-Question (Indirect to Direct)

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The boy wants to know from his mother where the book is.

(Interviewer: He asks her: Where is the book? What does the boy ask his mother?)
(Expected Student Response: Where is the book?)

Items:

- 17. The mother wants to know how the boy got so dirty.
- I: What does the mother ask the boy?
- R: How did you get so dirty?
- 18. The mother wants to know if the girl has washed the dishes.
- I: What does the mother ask the girl?
- R: Did you wash the dishes?
- 19. The mother wants to know if the girl can help her.
- I: What does the mother ask the girl?
- R: Can you help me?

Category VII-Commands (Indirect to Direct)

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The teacher tells the pupil to give him the book.

(Interviewer: He says: Give me the book! What does he say?)
(Expected Student Response: Give me the book!)

Items:

- 20. The teacher tells the girl to hand her the notebook.
- I: What does the teacher say to the girl?
- R: Give me your notebook.
- 21. The teacher tells the boy to take off his coat.
- I: What does the teacher tell the boy?
- R: Take your coat off.
- 22. The teacher tells the girl not to sit on her desk.
- I: What does the teacher ay to the girl?
- R: Don't sit on my desk.



Category VIII-Questions (Direct to Indirect)

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The mother asks the girl: "Did you drop the pencil?"

(Interviewer: The mother wants to know if the girl dropped the pencil. What does the mother want to know?) (Expected Student Response: She wants to know if the girl dropped the pencil.)

Items:

- 23. The mother asks the girl:
 "Where did you put the bcx?"
- I: What does the mother want to know?
- R: The mother wants to know where the girl put the box.
- 24. The mother asks the boy:
 "Did you brush your
 teeth?"
- I: What does the mother want to know?
- R: The mother wants to know if the boy brushed his teeth.
- 25. The mother isks the girl: "Can you help me with the dishes?"
- I: What does the mother want to know?
- R: The mother wants to know if the girl can help her with the dishes.

Category IX-Commands (Direct to Indirect)

STIMULUS

EXPECTED STUDENT RESPONSE

Sample: The teacher says to the pupil: "Give me the book!"

(Interviewer: He wants the pupil to give him the book. What does he want of the pupil?)
(Expected Student Response: He wants her to give him the book.)

Items:

- 26. The teacher says to the pupils: "Don't bother your neighbor!"
- I: What does the teacher want of the pupils?
- R: The teacher wants them not to bother their neighbor.
- 27. The teacher says to the girls: "Read for me!"
- I: What does the teacher want of the girls?
- R: The teacher wants them to read for her.



STIMULUS

EXPECTED STUDENT RESPONSE

- 28. The teacher says to the boy: "Put on your coat!"
- I: What does the teacher want of the boy?
- R: The teacher wants him to put on his coat.

Category X-Comparison

STIMULUS

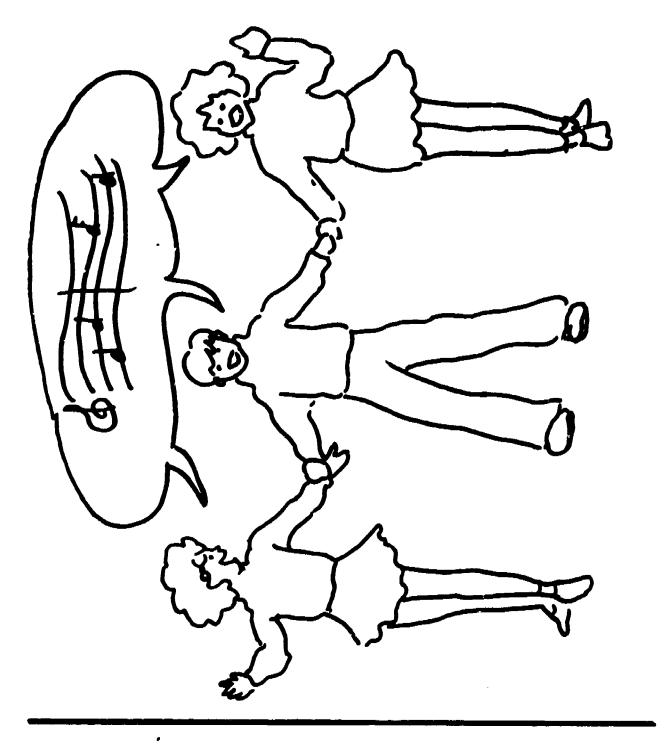
EXPECTED STUDENT RESPONSE

Sample: This girl is tired. But This girl is (even) more tired.

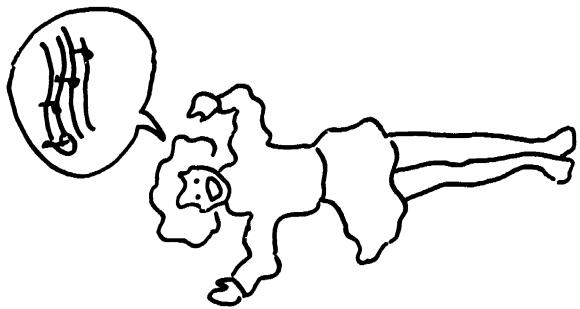
Items:

- 29. These girls sing well. But This boy sings (even) better.
- 30. This girl feels bad. But This girl feels (even) worse.
- 31. This girl runs fast. But This girl runs (even) faster.
- 32. This girl has litte money. But This boy has (even) less money.





Category I: Singular to plural. Sample item.



Grammar Production Test, Spanish Version

Categoría I-Del Singular al Plural

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: La alumna estă cantando.

Los alumnos están cantando

Las Oraciones:

1. Esta mujer está escribiendo

Estas mujeres están escribiendo.

2. Este niño está comiendo.

Estos niños están comiendo.

3. Este ganso está gordo.

Estos gansos están gordos.

Categoría II-Del Plural al Singular

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: Las alumnas están sentadas en su mesa.

La alumna está sentada en su mesa.

Las Oraciones:

4. Las niñas están estudiando solas.

La niña está estudiando sola.

5. Los niños se están lavando.

El niño se está lavando.

6. Las niñas están haciendo su tarea.

La niña está haciendo su tarea.

7. Las niñas están rezando.

La niña está rezando.

Categoría III-Del Presente Indicativo al Pretérito

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: Hoy el niño camina a la escuela.

Ayer el niño caminó a la escuela.

Las Oraciones:

8. Hoy la madre le da dulce al niño.

Ayer la madre le dib dulce al niño.

9. Hoy la niña come una manzana.

Ayer la niña comió una manzana.



EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

10. Hoy el niño hace un dibujo.

Ayer el niño hizo un dibujo.

Categoría IV-Del Afirmativo Pasado al Negativo Presente Indicativo

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: La niña estaba enferma ayer.

La niña no está enferma hoy.

Las Oraciones:

11. Los niños sabían la respuesta ayer.

Los niños no saben la respuesta hoy.

12. Las alumnas hicieron su tarea ayer.

Las alumnas no hacen su tarea hoy.

13. El hombre tuvo dinero ayer.

El hombre no tiene dinero hoy.

Categoría V-Posición y Lugar

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: Este libro está al lado de la caja.

(Examinador: ¿Donde está ese libro?)

(Respuesta esperada del estudiante: Ese libro esta en la caja.)

Las Oraciones:

- 14. Este libro está enfrente de la lámpara.
- E: ¿Donde está ese libro? R: Ese libro está al lado de

la lampara.

- 15. Este libro está sobre el escritorio.
- E: ¿Donde está ese libro? R: Ese libro está debajo del
- escritorio.
 - E: ¿Donde está ese libro?
- 16. Este libro está en la silla.
- R: Ese libro está sobre la mesa.



Categoría VI-Frases de Interrogación (Del Indirecto al Directo)

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: El niño quiere

saber de su madre donde está el libro. (Examinador: El le pregunta:
"¿Donde está el libro?" ¿Qué
le pregunta el niño a la madre?)
(Respuesta esperada del estudiante:
¿Donde está el libro?)

Las Oraciones:

17. La madre quiere saber como se ensució tanto el niño.

E: ¿Qué le pregunta la madre al niño?

R: ¿Como te ensuciaste tanto?

18. La madre quiere saber si la niña lavo los platos

E: ¿Qué le pregunta la madre a la niña?

R: ¿Lavaste los platos?

19. La madre quiere saber si la niña le puede ayudar. E: ¿Qué le pregunta la madre a la niña?

R: ¿Me puedes ayudar?

Categoría VII-Frases de Mandato (Del Indirecto al Directo)

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: El maestro le dice a la alumna que le dé el libro.

(Examinador: El dice: ¡Dame el libro! ¿Qué le dice el maestro a la alumna?)
(Respuesta esperada del estudiante: ¡Dame el libro!)

Las Oraciones:

20. La maestra lo dice a la niña que le entregue el cuaderno.

E: ¿Qué le dice la maestra a la niña?

R: ¡Dame tu cuaderno!

21. El maestro le dice al niño que se quite el saco.

E: ¿Qué le dice el maestro al niño?

R: ¡Quitate el saco!

22. La maestra le dice a la niña que no se siente en su escritorio.

E: ¿Qué le dice la maestra a la niña?

R: ¡No te sientes en mi escritorio!



Categoría VIII-Frases de Interrogación (Del Directo al Indirecto)

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: La madre le

pregunta a la niña: "¿Dejaste caer tu

lipiz.

(Examinador: La madre quiere saber si la niña dejó caer su lapiz. ¿Qué quiere saber la madre?)

(Respucsta esperada del estudiante: Ella quiere saber si la niña dejó caer su lápiz.)

Las Oraciones:

23. La madre le pregunta a la niña: "¿Donde pusiste la caja?"

24. La madre le pregunta al niño: "¿Te cepillaste los dientes?"

25. La madre le pregunta a la niña: "¿Me puedes ayudar a lavar los platos?"

E: ¿Qué quiere saber la madre?

R: La madre quiere saber donde puso la niña la caja.

E: ¿Que quiere saber la madre?

R: La madre quiere saber si el niño se cepilló los dientes.

E: ¿Qué quiere saber la madre?

R: La madre quiere saber si la niña le puede ayudar a lavar los platos.

Categoría IX-Frases de Mandato (Del Directo al Indirecto)

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: El maestro le dice a la alumna: "¡Dame el libro!"

(Examinador: El quiere que la alumna le dé el libro. ¿Qué quiere el maestro de la alumna?)
(Respuesta esperada del estudiante: El quiere que la alumna le dé el libro.)

Las Oraciones:

26. El maestro le dice a los alumnos: "¡No molesten a su vecino!"

27. La maestra le dice a las niñas: "¡Lean para mi!" E: ¿Qué quiere el maestro de ellos?

R: El maestro quiere que ellos no molesten a su vecino.

E: ¿Qué quiere la maestra de las niñas?

k: La maestra quiere que ellas lean para ella.

K:



EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

- 28. La maestra le dice al niño: "¡Ponte el saco!"
- E: ¿Qué quiere la maestra del niño?
- R: La maestra quiere que El se ponga el saco.

Categoría X-Comparación

EL ESTIMULO

LA RESPUESTA ESPERADA DEL ESTUDIANTE

Ejemplo: Esta niña está <u>Pero</u> Esta niña está (aun) más cansada.

Las Oraciones:

- 29. Estas niñas cantan bien Pero Esta niña canta (aun) mejor.
- 30. Esta niña se siente mal. Pero Esta niña se siente (aun) peor.
- 31. Esta niña corre rápido. Pero Esta niña corre (aun) más rápido.
- 32. Esta niña tiene poco dinero.

 Pero Esta niña tiene (aun) menos dinero.



APPENDIX C

Percentage of Correct Responses on Vocabulary-by-Domain Test (N=40)

Domain	Item	Spanish	English
Home	1	97.5%	100.0%
	2	100.0	92.5
	1 2 3 4 5 6 7	95.0	92.5
	4	100.0	92.5
	5	95.0	100.0
	6	85.5	97.5
	7	97.5	100.0
	8	97.5	87.5
leighborhood	1	72.5	80.0
	2	97.5	100.0
	1 2 3 4 5 6 7	80.0	82.5
	4	90.0	80.0
	5	100.0	95.0
	6	87.5	100.0
	7	100.0	97.5
	8	95.0	80.0
hurch	1	65.0	70.0
	2	87.5	85.0
	3	52.5	20.0
	1 2 3 4 5	92.5	75.0
	5	77.5	57.5
	6 7	92.5	60.0
	7	87.5	75.0
	8	92.5	92.5
School	1	97.5	97.5
		97.5	100.0
	2 3	80.0	80.0
	4	100.0	100.0
	5	67.5	75.0
		82.5	97.5
	6 7	45.0	82.5
	8	95.0	100.0



APPENDIX D

Percentage of Expected and Acceptable Responses on the Grammar Production Test

	Spanish	Spanish Version	Englis	English Version
I cem No.	Expected Responses	Expected & Acceptable Responses	Expected Responses	Expected & Acceptable Responses
-	77.5%	97.5%	27.5%	35.02
2	82.5	97.5		45.0
ო	85.0	97.5	32.5	42.5
4	87.5	95.0	60.0	62.5
2	0.06	95.0	52.5	57.5
9	•	97.5	55.0	62.5
7	•	97.5	52.5	70.0
œ	85.0	97.5	52.5	62.5
Ø	•	95.0	57.5	67.5
10	80.0	95.0	40.0	42.5
11	82.5	87.5	55.0	60.0
12		57.5	45.0	50.0
13	٠	72.5	15.0	55.0
14	57.5	•	22.5	60.0
15	•	97.5	75.0	95.0
16	•	95.5	67.5	95.0
17	50.0	82.5	52.5	70.0
18	•	85.0	77.5	85.0
19	•	80.0	72.5	80.0
20	•	92.5	75.0	85.0
21	80.0	92.5	75.0	85.0
22	•	90.06	67.5	87.5
23	55.0	77.5	55.0	80.0
24	65.0	0.06	0.09	67.5

APPENDIX D (Cont'd.)

	Spanish Version	/ersion	English Version	Version
Item No.	Expected Responses	Expected & Acceptable Responses	Expected Responses	Expected & Acceptable Responses
17.	20.09	87.5%	50.0%	70.0%
. • !	72.0	92.5	37.5	40.0
7.7	65.0	85.0	57.5	70.0
58	72.5	95.0	42.5	62.5
53	22.5	27.5	32.5	35.0
දු	12.5	12.5	7.5	7.5
: :	65.0	75.0	57.5	57.5
32	25.0	25.0	37.5	37.5