

DOCUMENT RESUME

ED 050 845

80

RC 005 270

AUTHOR Chandler, John T.; Plakos, John  
TITLE Spanish-Speaking Pupils Classified as Educable  
Mentally Retarded.  
INSTITUTION California State Dept. of Education, Sacramento.  
SPONS AGENCY Office of Education (DHEW), Washington, D.C.  
PUB DATE 69  
NOTE 11p.

EDRS PRICE EDRS Price MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Elementary School Students, Individual Tests,  
\*Intelligence Tests, \*Mental Retardation, Mexican  
Americans, Research, \*Rural Urban Differences,  
Second Language Learning, \*Spanish Speaking

ABSTRACT

A total of 47 pupils enrolled in grades 3-8 was selected for this study. Of these pupils, 17 were from a rural area and 30 were from an urban area. The pupils selected had to (1) be of Mexican descent, (2) be currently enrolled in educable mentally retarded (EMR) classes, and (3) have evidenced a problem in using the English language due to their native language being Spanish. The assessment instrument used was the "Escala de inteligencia Wechsler para ninos," which is the Spanish version of the Wechsler Intelligence Scale for Children." Results of the testing showed that the average gain from the previously low test scores (which classified the students as retarded) to the present test scores was 13.15 IQ points. The median score for the prior IQ was 70, while the median score for present IQ was 83. It was concluded that many Mexican American pupils may have been placed in EMR classes solely on the basis of performance on an invalid IQ test. The previous testing was termed invalid because this particular subpopulation of pupils lacks facility with, and understanding of, the English language. When tested in Spanish, pupil performance in many cases was above the cutoff level of the EMR category (approximate IQ of 75). (LS)

ED050845

U.S. DEPARTMENT OF HEALTH, EDUCATION  
& WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED  
EXACTLY AS RECEIVED FROM THE PERSON OR  
ORGANIZATION ORIGINATING IT. POINTS OF  
VIEW OR OPINIONS STATED DO NOT NECES-  
SARILY REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY.

**SPANISH-SPEAKING PUPILS  
CLASSIFIED AS  
EDUCABLE MENTALLY RETARDED**

Prepared by  
**JOHN T. CHANDLER**  
and  
**JOHN PLAKOS**  
**MEXICAN-AMERICAN  
EDUCATION RESEARCH PROJECT**  
**DIVISION OF INSTRUCTION**

RC 005270

**CALIFORNIA STATE DEPARTMENT OF EDUCATION**  
**Max Rafferty—Superintendent of Public Instruction**  
**Sacramento 1969**

This publication was produced with  
Elementary and Secondary Education  
Act, Title V, funds.

1969

## PREFACE

School personnel and parents of Mexican-American pupils repeatedly voice concern over the high proportion of Mexican-Americans, in relation to the total enrollment, who are placed in classes for the educable mentally retarded (EMR). Many contend that the schools lack proper assessment instruments and techniques for measuring accurately the intelligence quotient (IQ) of Mexican-American pupils, particularly those whose cultural and linguistic backgrounds are quite different from those of most of the pupils enrolled in California's public schools.

The procedure generally followed for placing atypical children in these special classes is this: The classroom teacher makes a referral to the psychologist, who, in turn, administers a test of intelligence. Unfortunately, the test usually administered is one which has the norm set for the average, middle-class native speaker of English. The test is almost without exception administered in English, not taking into consideration the fact that the pupil being tested may understand little or no English.

It is my hope that this report will be helpful to those who are seeking solutions to the problems created by the placement of Mexican-American children in EMR classes on the basis of test results that may not reflect the childrens' true potentials for learning.

John Chandler, Consultant to the Mexican-American Education Research Project, performed the assessment and analyzed the data gathered in the investigation reported in this publication. Mr. Chandler and John Flakos, Coordinator of the Mexican-American Education Research Project, prepared the summary of the findings.

**EUGENE GONZALES**  
*Associate Superintendent  
of Public Instruction  
and Chief, Division of  
Instruction*

## CONTENTS

	<i>Page</i>
Preface . . . . .	iii
<b>An Investigation of Spanish-Speaking Pupils Placed in Classes for the Educable Mentally Retarded . . . . .</b>	<b>1</b>
<b>Test Group Population . . . . .</b>	<b>1</b>
<b>Assessment Instrument . . . . .</b>	<b>1</b>
<b>Testing Procedure and Conditions . . . . .</b>	<b>2</b>
<b>Analysis Technique . . . . .</b>	<b>2</b>
<b>Test Results . . . . .</b>	<b>2</b>
<b>Conclusion . . . . .</b>	<b>5</b>
<b>Recommendations . . . . .</b>	<b>5</b>
<b>Appendix</b>	
<b>Sample Excerpts from the Previous Records of Selected Pupils and Their     Scores from Present Investigation . . . . .</b>	<b>7</b>

# An Investigation of Spanish-Speaking Pupils Placed in Classes for the Educable Mentally Retarded

This report reflects the findings of an investigation conducted by the Mexican-American Education Research Project, California State Department of Education, on a sample of Mexican-American pupils enrolled in classes for the educable mentally retarded (EMR) in selected school districts in California. The investigation has been directed to the question as to whether these pupils should have been placed in classes for the educable mentally retarded or whether a language barrier prevented them from being assessed properly as to their native abilities to perform cognitive tasks.

## Test Group Population

Two school districts located in different geographical areas were selected from which a sample pupil population was chosen for the purposes of the study reported on here. One school district was located in a rural area, and the other district was located in an urban area. In each district, the pupils selected for this investigation had to meet the following criteria: (1) be of Mexican descent; (2) be currently enrolled in EMR classes; (3) have evidenced a problem in using the English language due to their native language being Spanish.

A total of 47 pupils enrolled in grades three through eight were selected for the study; 17 were from the rural area and 30 were from the urban area.

## Assessment Instrument

The assessment instrument used in this study was the *Escala de inteligencia Wechsler para niños*, which is the Spanish version of the *Wechsler Intelligence Scale for Children*. The norms for the Spanish version were established on the basis of tests conducted in Puerto Rico, which raises some question of reliability and validity when this version is administered to children whose native tongue is a Spanish idiomatic to various regions in Mexico. Before using the *Escala de inteligencia Wechsler para niños*, certain items needed to be reworded to fit the Spanish in common use by Mexican-Americans in California.

For example, *bola* was changed to *pelota* and *concreto* was changed to *cemento*.

Also changes were considered necessary in the "allowable answers" to some items, as follows:

- *General Information* (Section 6) Number 6: "In what kind of a store do we buy sugar?" One answer which should be allowed is "liquor store."
- *General Information* (Section 6) Number 14: "Where is Chile?" Allowable answers should include "in a can," "in a field," and "in a store"; otherwise the question should be eliminated, as chile in their vocabulary is not normally associated with a country.

The items noted are just a few examples of changes required to assure a reasonable level of reliability and validity when the *Escala de inteligencia Wechsler para niños* is used on a Spanish-speaking population of Mexican descent.

### Testing Procedure and Conditions

The testing procedure was arranged by working in conjunction with the director of special education in each school district and the assigned psychologist; the procedure sometimes permitted the testing of two pupils each day in their own school.

It was explained to those tested that although the test would be conducted in Spanish, English would be used when comprehension was lacking. It was soon evident that some of the pupils were not proficient in Spanish or English.

The pupils were not pressed for time to begin, nor were they rushed from one section to another. They were encouraged to relax in order to maintain rapport. At one point in the testing, two staff members attempted to make close observations of the pupils taking the test, but the pupils had difficulty concentrating; therefore, the experiment was terminated. However, by changing the method of observing the pupils, the staff members were able to make their observations with no observable discomfort on the part of the pupils.

A study of past testing results made it possible for the investigators to be cognizant of past performances and to take advantage of the information obtained by local personnel.

### Analysis Technique

The data were analyzed by using the simple comparative technique of mean and median IQ gain comparing previous IQ scores with those computed from the present testing with the *Escala de inteligencia Wechsler para niños*. (Note: In a few cases, when the pupil requested it and when the psychologist approved it, the English version of the WISC was used instead of the Spanish version). Each pupil's point difference was charted for the sections on verbal tests, performance tests, and total battery score.

### Test Results

The results of the testing of the pupils in the two districts (rural and urban) showed that the average (mean) gain between the prior test scores and the present test scores was 13.15 IQ points (the prior IQ mean being 68.61 and the present IQ mean being 81.76). The mean IQ point difference between the prior scores and the present scores was +12.45 points, which indicates a significant gain in the overall point score, thus exceeding chance.

The median score for the prior IQ was 70, while the median score for the present IQ was 83, an increase of 13 IQ points.

The results also showed that of the 47 pupils tested, 27 scored IQ ratings of 80 or over, and 37 had IQ ratings of 75 or above.

Table 1 (rural) and Table 2 (urban) indicate the individual patterns of point differences noted in the prior test scores and the present test scores.

The data in Table 2 clearly show the discrepancies between the IQs secured by using the English version of the WISC as opposed to those secured by using the Spanish version. Taking into account the distrust of the IQ as a sole basis for making a judgment, there is yet the fact that point variance, mean, and median IQ differences are all at a 12-point level and indicate a modal cluster in this area.

**Table I**  
**Comparison of WISC Test Scores Made by Selected**  
**Mexican-American Pupils Enrolled in a School District**  
**Located in a Rural Area of California**

Pupil number	Verbal IQ		Point diff.	Performance IQ		Point diff.	Total battery		Point diff.
	Prior	Present		Prior	Present		Prior	Present	
1		79			99		67	87	+20
2	79	80	+1	76	71	-5	75	73	-2
3	65	76	+11	80	104	+24	70	88	+18
4		86			85		67	84	+17
5	83	85	+2	79	113	+34	83	98	+15
6		84			110		69	96	+27
7	61	80	+7	79	74	-5	67	75	+8
8		76			86		60	79	+19
9	75	97	+22	76	82	+6	73	89	+16
10	67	77	+10	64	92	+28	62	83	+21
11	69	97		87	100		72	99	+27
12	71	77		76	76		71	75	+4
13	69	69		80	96		72	80	+8
14		77		76	71		62	72	+10
15		67			74		63	67	+4
16	76	90		71	72		71	80	+9
17	72	90		94	104		81	101	+20



Table 2

**Comparison of WISC Test Scores Made by Selected  
Mexican-American Pupils Enrolled in a School District  
Located in an Urban Area of California**

Pupil number	Verbal IQ		Point diff.	Performance IQ		Point diff.	Total battery		Point diff.
	Prior	Present		Prior	Present		Prior	Present	
18		90			117		75	103	+28
19		67			79		56	70	+14
20	55	46	-9	75	75	0	61	56	-5
21		81			97		67	88	+4
22		56			67		56	57	+1
23	72	95	+23	68	92	+24	67	93	+26
24		86			65		73	73	0
25		75			74		51	71	+20
26		71			90		61	78	+17
27		86			87		68	85	+17
28	75	87	+12	71	96	+25	70	91	+21
29							70	83	+13
30	63	76	+13	85	86	+1	71	79	+8
31	70	85	+15	78	90	+12	71	86	+15
32	76	82	+6	62	78	+16	67	78	+11
33	72	80	+8	92	92	0	80	84	+4
34	76	85	+9	86	87	+1	79	85	+6
35	72	75	+3	75	87	+12	71	79	+8
36		82			94		69	87	+18
37	70	85	+15	83	101	+18	74	92	+18
38	55	58	+3	67	94	+27	56	73	+17
39	70	66	-4	64	76	+12	61	68	+7
40	74	76	+2	74	86	+12	71	79	+8
41	67	81	+14	75	76	+1	68	77	+9
42	77	96	+19	71	82	+11	72	88	+16
43	74	85	+11	78	65	+7	73	83	+10
44	74	79	+5	85	83	-2	77	79	+2
45		85			90		62	86	+24
46	70	75	+5	93	99	+6	79	85	+6
47	80	82	+2	72	83	+11	74	81	+7

Some pupils' gains were minimal, and one pupil (number 20) had a -5 point difference. However, the high mean and median IQ gain in points is indicative of the need to assess the placement of Mexican-American pupils in EMR classes when the placement is based solely on their inability to function in what is to them a foreign language, particularly when tested in the "foreign language." Another factor which must be analyzed when considering the placement of such pupils is that some have spent as long as three years in a "special" class and as such may not have received the same advantages as pupils with comparable IQs in regular classes; the "special" placement may have been a retarding influence.

### Conclusion

The results of this investigation indicate that many Mexican-American pupils may have been placed in EMR classes solely on the basis of performance on an invalid IQ test. The test is termed invalid because this particular subpopulation of pupils lacks a facility and understanding of the English language; therefore, when tested in English, they cannot perform well. However, this investigation has shown that when these pupils are given the opportunity to perform in the language with which they are most familiar and comfortable -- usually Spanish -- their performance in many cases is above the cut-off level of the educable mentally retarded category (approximate IQ of 75).

### Recommendations

In reference to the findings of this investigation, the following recommendations are made:

- School district personnel should review the cases of Spanish surnamed pupils currently enrolled in EMR classes; those pupils who appear to have difficulty in using the English language because Spanish is their native language should be retested with the Spanish version of the WISC.
- Special personnel should be enlisted to assist the school psychologist in testing pupils who have a language barrier.
- A formal request should be made of the testing corporation to make certain changes in the Spanish version of the WISC.
- A "transition" program should be provided for pupils who need special instruction in the use of the English language. Such a program might include English-as-a-second-language (ESL) instruction and bilingual instruction in the basic subjects.
- Long-range plans should be made to improve the present methods and instruments used for assessing pupils prior to referral to EMR classes, particularly those pupils with a cultural and linguistic background different from most of the English-speaking pupils.

## Appendix

# Sample Excerpts from the Previous Records of Selected Pupils and Their Scores from Present Investigation

### Pupil Number 1

This pupil was born in Mexico but was brought to the USA when he was about six months old. The usual language of the home is Spanish; his stepmother speaks no English.

The pupil is hereby certified as eligible for the EMR program. His inability to fulfill the demands of the regular class has apparently been excessively stressful to him.

*Recommendation in previous record:* Pupil should be placed in the program for educable mentally retarded as soon as practicable, and he should not be required to attend regular classes pending such placement.

*Findings from present investigation:* Total IQ score for pupil 1 is 87; verbal IQ, 79; performance IQ, 99.

### Pupil Number 4

This pupil comes from a fairly large Mexican-American family. She has six brothers and one sister. Spanish is the only language used in the home. Parents work as farm laborers. The family typically "visits" in Mexico during winter months, at which time the children do not attend school.

The pupil was retained in the first grade and continues to have learning problems. The pupil's test results indicate that she is functioning at the borderline level in mental abilities. Her true intellectual potential is probably significantly higher than her test performance suggests. However, she lacks many of the skills necessary to function satisfactorily in a regular classroom at this time.

*Recommendation in previous record:* The pupil should be considered for placement in the EMR program.

*Findings from present investigation:* Total IQ score for pupil 4 is 84; verbal IQ, 86; and performance IQ, 85.

### Pupil Number 5

This pupil is a large, somewhat obese girl of Mexican-American background. She lives with her parents, one brother, and two sisters. Her father is a farm laborer, and Spanish is the language spoken in the home.

Test results indicate that she is currently functioning intellectually at the borderline retarded level. On the performance scale of the WISC, she scored substantially below average on all of the subtests except object assembly, which is one test, according to Wechsler, on which mentally retarded individuals frequently obtain average scores.

*Recommendation in previous record:* This pupil should be considered for placement on a trial basis in the EMR program.

*Findings from present investigation:* Total IQ score for pupil 5 is 98; verbal IQ, 85; and performance IQ, 113.

### Pupil Number 16

This pupil is pleasant, friendly, and vigorous. While his test scores overall indicate retarded functioning, slightly higher capabilities are indicated in some areas.

On the basis of his total showing, however, it is felt that he is an appropriate candidate for the educable mentally retarded classes. Behavior disturbances noted by the teacher seem to be reasonable responses to genuine frustration; a special class setting should contribute much to stabilizing this behavior.

*Recommendation in previous record:* This pupil is an appropriate candidate for EMR classes.

*Findings from present investigation:* Total IQ score for pupil 16 is 80; verbal IQ, 90; and performance IQ, 72.