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ABSTRACT

Evaluation of a bilingual-bicultural education program indicates that significant progress was made in enabling all students to function equally well in both Spanish and English, in providing basic coping skills, and in developing the basis for a pluralistic society. The program included 210 kindergarten and first-grade children consisting of equal numbers of Anglo and Mexican-American children. A bilingual testing instrument was developed in English and in Spanish to assess progress. Five instructional objectives measured indicated that growth was greater for Spanish-surnamed in all categories. Recommendations suggested in-service training for teachers in teaching Spanish concepts in Spanish, hiring a Spanish model resource teacher, review of art work for the portion of the test matching men and animals to environments and review of performance objectives. A copy of the test is included in the appendix. (DJ)

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1970-71

FINAL EVALUATION REPORT

AREA III VALLEY INTERCULTURAL REPORT

TITLE VII, ESEA

PLACER COUNTY OFFICE OF EDUCATION

Auburn, California

TM 002 160

Director: Armando Ayala

Current Evaluator: John Vatsula

September 15, 1971

Project Number OE 7-380

F I N D I N G S

The Area III Valley Intercultural Program is a bilingual-bicultural educational program, Title VII, ESEA, sponsored by Placer County Office of Education and including 210 kindergarten and first grade children in Winters, Esparto, Roseville, West Sacramento, North Sacramento, and Elk Grove, California.

The goals of the Area III Valley Intercultural Program are:

(1) to enable all students to function equally well in both Spanish and English; (2) to provide basic coping skills; and, (3) to develop the basis for a pluralistic society. Classes in the project are made up of equal numbers of Anglo and Mexican American children from the target area.

As part of the evaluation of the Instructional Component, a bilingual testing instrument, the DVR Bilingual Test, was developed in English and in Spanish to assess the progress toward achieving the performance objectives of VIP in the Language Arts and Social Studies area at the kindergarten and first grade levels. The limitation of this instrument is that it was designed specifically to evaluate the performance objectives of the Area III Valley Intercultural Program.

Data from the DVR Bilingual Test indicate that between February 5 and May 21 of 1971, significant progress toward achieving the Area III Valley Intercultural Program performance objectives was affected in the Language Arts and Social Studies areas for the entire program. The objectives in the instructional component were evaluated according to the following six categories:

Language Arts Dominant Language Non-Verbal: Achievement of this category was very high for both Spanish-surnamed and Other Surnamed at the mid-test. The post test indicates near perfection.

Language Arts Dominant Language Verbal: Data in this category indicate a greater proficiency (82% vs. 73%) on the part of the Other Surnamed, however, the Spanish-surnamed show greater growth (16% vs. 11%).

Language Arts Second Language Non-Verbal: Even though the achievement level of the Spanish-surnamed was more than twice that of the Other Surnamed (86% vs. 39%), data indicate a greater gain by the latter (20% vs. 9%).

Language Arts Second Language Verbal: Proficiency of the Spanish-surnamed is almost two and one half times that of the Other Surnamed in this category. Each group reflected a gain of more than 20%.

Social Studies Dominant Language Non-Verbal: Relatively equivalent proficiency is reflected by both groups. Growth for the Spanish-surnamed is significantly greater than that for the Other Surnamed. The latter regressed less than one percent.

RECOMMENDATIONS

Based on the results of the DVR Bilingual Test, the following recommendations have been submitted to the program director and his staff:

(1) In the area of Language Arts Second Language Verbal, even though a significant amount of growth is reflected by the data for the Other-Surnamed, over all achievement is low. Review the materials and methods presently utilized for teaching Spanish and concepts in Spanish. In-service programs for teachers could be designed to improve this portion of the instructional program. Workshops should include methods for instructional modification to afford opportunities for each child to speak in the second language on a regular basis in addition to listening and understanding. Teachers should be trained to recognize the difference between reluctance and inability to respond on the part of a child.

(2) The hiring of a Spanish model resource teacher capable of spending time in half-day blocks in each classroom modeling lessons and planning subsequent lessons with the teachers would provide strength in this important component of the bilingual program. Particular attention should be given to proper sequence of development and reinforcement of second language acquisition.

(3) Data for several items in the Social Studies Non-Verbal portion of the test dealing with the matching of men and animals to different environments indicate regression. Review the art work for these items. Determine whether the students were guessing in a forced choice situation. Resource teachers should assist classroom teachers in developing lessons oriented to the program's unique performance objectives in the Social Studies Areas. An eclectic approach to materials available could be used.

(4) Performance objectives should be reviewed by the Valley Intercultural Program staff and teachers to determine on the basis of the data available, whether modifications are necessary. Questions to consider could be, "Are the test items valid?", "Are the objectives realistic in scope for the grade levels involved?"

APPENDIX A

THE DVR BILINGUAL TEST

THE DVR BILINGUAL TEST

PART I. GROUP. (Materials needed: Chart of "Goldilocks and the Three Bears").

TELL THE STORY OF "GOLDILOCKS AND THE THREE BEARS", FIRST IN ENGLISH AND THEN IN SPANISH.

PART II. INDIVIDUAL TEST. (Materials needed: 6 pictures of story of "Goldilocks and the Three Bears", child's field trip picture, score sheet, knowledge of child's dominant language).

EXPLAIN TO THE CHILD THAT THE FIRST PART OF THE TEST WILL BE IN HIS SECOND LANGUAGE (Items 1 through 10). RECORD HIS DOMINANT LANGUAGE ON THE SCORE SHEET.

TELL THE CHILD:

7.2 1. What is your name?
¿Cómo te llamas?

7.2 2. How old are you?
¿Cuántos años tienes?

7.2 3. Where do you live?
¿Dónde vives?

7.2 4. What school is this?
¿Cómo se llama esta escuela?

7.1 5. Would you please take three pictures from there. (Point to stack of pictures of Goldilocks).
Dame 3 retratos de allí, por favor.

7.1 6. Give them to me, please. (Place them in front of child).
Dámelos.

7.1 7. Tell me what they are.
7.3 Dime que son.

7.1 8. Stand up.
Levántate. (Párate).

7.1 9. Put them over there. (Point to the stack of pictures).
Ponlos allá.

7.1 10. Sit down.
Siéntate.

EXPLAIN TO THE CHILD THAT THE REST OF THE TEST WILL BE IN HIS DOMINANT LANGUAGE.

5.1 11. (Take the other 3 pictures from the stack of Goldilocks and the Three Bears and arrange them in front of the child).

Tell me what they are. (Child should respond from left to right).
Dime que son.

4.5 12. (Point to each picture.)

What's happening?
¿Qué está pasando?

4.3 13. What do you think happened to Goldilocks after she ran away?
¿Qué crees que le pasó a la niña cuando salió corriendo?

(Put the pictures away).

- 4.1 14. Would you please name the days of the week.
Dime los días de la semana.
- 3.1 15. Take the picture of your field trip and put it in front of you.
Toma la pintura de tu paseo y ponla enfrente de tí.
- 4.2 16. I see you made a beautiful picture of your field trip. Tell me some different things that are in your picture.
Ya veo que hiciste una pintura muy bonita de tu paseo. Dime que son unas de las cosas que hay en la pintura.
(At least 3 responses should be third person, present tense).
- 4.6 19. What did you do on your field trip?
4.7 20. ¿Qué hiciste en este paseo?
21. (At least 3 responses should be first person, past tense and sequentially ordered).
22. (Put field trip picture away).
Say this sentence: "Duneri a castañ."
(Ask the child):
- .16 23. Why didn't you do what I just asked you to do?
¿Por qué no hiciste lo que te dije que hicieras?
- .16 24. What would you need to know to understand?
¿Qué tienes que saber para entender?
- .16 25. Gesture the child to stand-up. (Child should stand-up).
- .15 26. What did I ask you to do?
.16 ¿Qué te dije?
27. Gesture for child to sit down and be quiet. (Child should sit down and be quiet).
28.
- .15 29. What did I ask you to do?
30. ¿Qué te dije que hicieras?
- .17 31. Without speaking, tell me that you have a stomach-ache.
Sin hablar, dime que te duele el estomago.
- .17 32. How tell me.
Ahora dime.
(Give the child a crayola).
(Tell the child):
- 6.3 33. Write your name on this paper (back of score sheet).
Pon tu nombre en esta página.
- 6.1 34. Put a line under your name (underline your name).
Pon una línea debajo de tu nombre.
- 6.2 35. Make a square.
Has un cuadro.
- 6.2 36. Make a circle.
Has un círculo. (una rueda).



- 6.2 37. Make a triangle.
Has un triángulo.
- (Show child the first picture of picture package).
- 5.2 38. Point to the two pictures that are the same.
Apunta (enseñame) a los dos retratos que son iguales.
- 5.2 39. Point to the two pictures that are the same.
Apunta (enseñame) a los dos retratos que son iguales.
- 5.2 40. Point to the two pictures that are the same.
Apunta (enseñame) a los dos retratos que son iguales.
- 5.2 41. Point to the two pictures that are the same.
Apunta a los dos retratos que son iguales.
- 5.3 42. Point to the two pictures that start with the same sound.
Apunta (enseñame) a los dos retratos que se pronuncian lo mismo al empezar.
- 1.2 43. Point to the picture that answers this riddle:
Apunta al retrato que contesta esta adivinanza:
I have hands.
Tengo manos.
- I have a face.
Tengo cara.
- I say, "Tick, tock."
Digo, "Tick, tock."
- But, I have no mouth!
Pero, no tengo boca!
- Who am I?
¿Quién soy?
- .14 44. Point to the picture that makes this sound, "Meow, meow."
Apunta al retrato que hace este sonido, "Meow, meow."
- .14 45. Point to the picture that makes this sound, "Bow, wow."
Apunta al retrato que hace este sonido, "Bow, wow."
- .14 46. Point to the picture that makes this sound, "Dunami a cashah."
Apunta al retrato que hace este sonido, "Dunami a cashah."
- .3 47. Point to the one that depends on his mother the longest.
Apunta al retrato que depende más tiempo de su mamá.
- .5 48. Point to the animal that is not like the others.
Apunta al animal que no es igual a los otros.

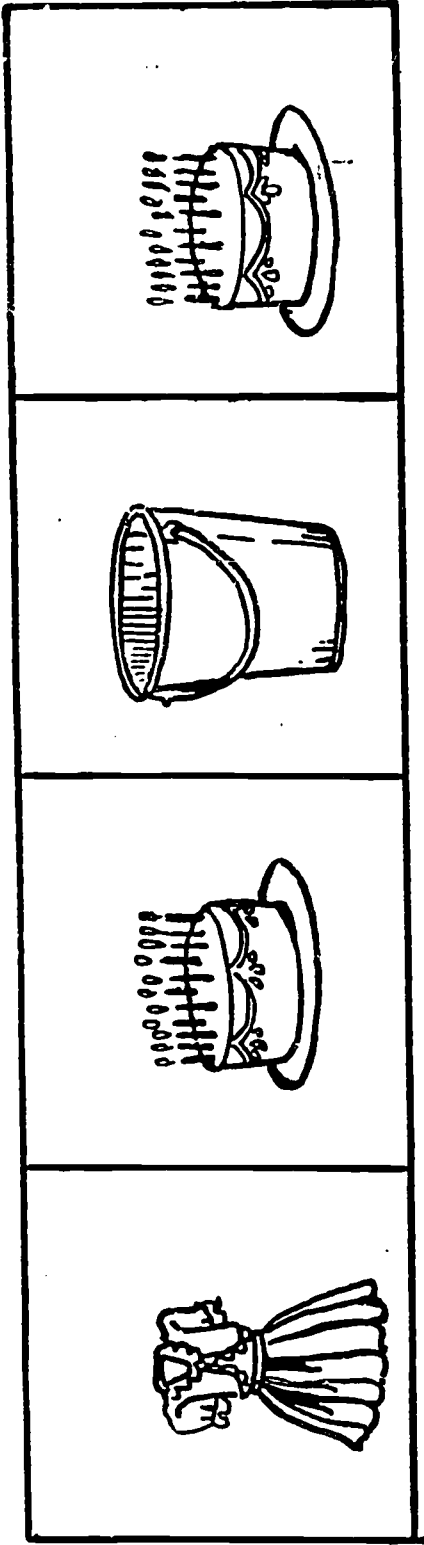
- .5 49. Point to the animal that is not like the others.
Apunta al animal que no es igual a los otros.
- .12 59. Repeat # 62.
- .8 60. Repeat # 61.
- .9
- .1 50. Point to three human beings in the picture.
.2 Enseñame en estos retratos tres humanos.
.6
- .12 61. Repeat # 62.
- .8 62. Repeat # 61.
- .9
- .10 51. Point to the one that came first.
¿Cuál vino a este país primero?
- .12 63. Repeat # 62.
- .8 64. Repeat # 61.
- .9
- .10 52. Point to the one that came next.
¿Cuál vino después?
- .12 65. Repeat # 62.
- .10 53. Point to the one that came next.
¿Cuál vino después?
- .2 66. Name three things that man can do and
.6 animals cannot.
Dime tres cosas que el hombre hace que el animal no puede hacer.
- .8 54. Look at the men at the top of the page.
.9 Point to the man that you think lives in the box.
¿Ves a los hombres que están arriba de la página? Apunta al hombre que tú crees que vive en este lugar.
- .7 69. Can you name 4 things the world is made of?
70. of?
71. ¿Me puedes decir que son cuatro cosas de
72. lo que el mundo está hecho?
- .12 55. Look at the animals at the bottom of the page. Point to the animal that you think lives in the place in the box.
¿Ves los animales que están arriba de la página? Apunta al animal que tú crees que vive en este lugar.
- .8 56. Repeat # 61.
.9
- .12 57. Repeat # 62.
- .8 58. Repeat # 61.

DVR SCORE SHEET

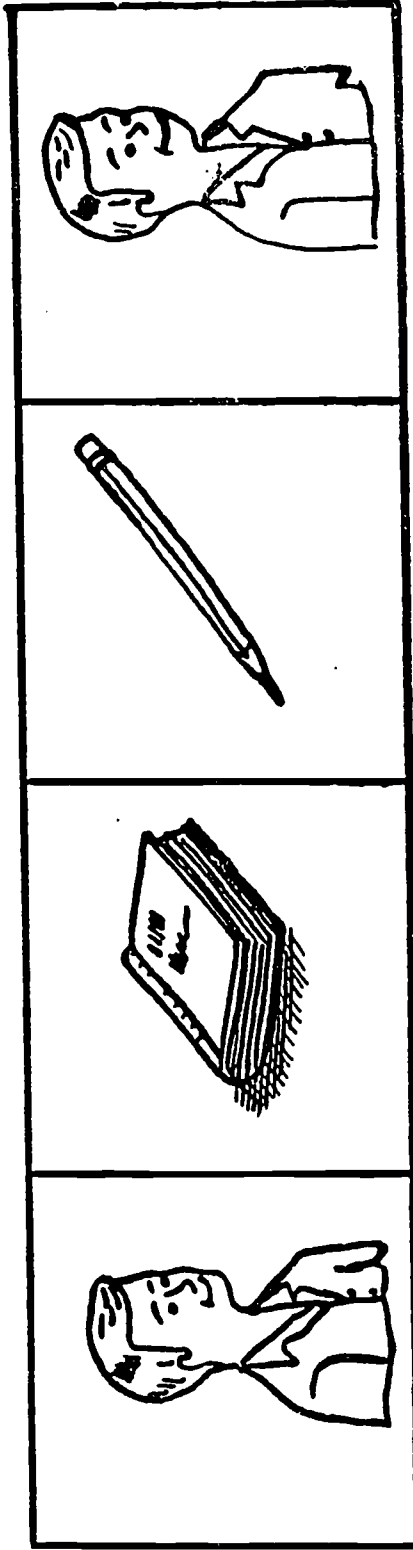
NAME OF CHILD _____
 GRADE _____ TEACHER _____
 SCHOOL _____
 DATE _____ DOMINANT LANGUAGE _____
 TOTAL SCORE _____

INSTRUCTIONS: Circle response. 1 = Correct,
 0 = Incorrect, X = No Response.

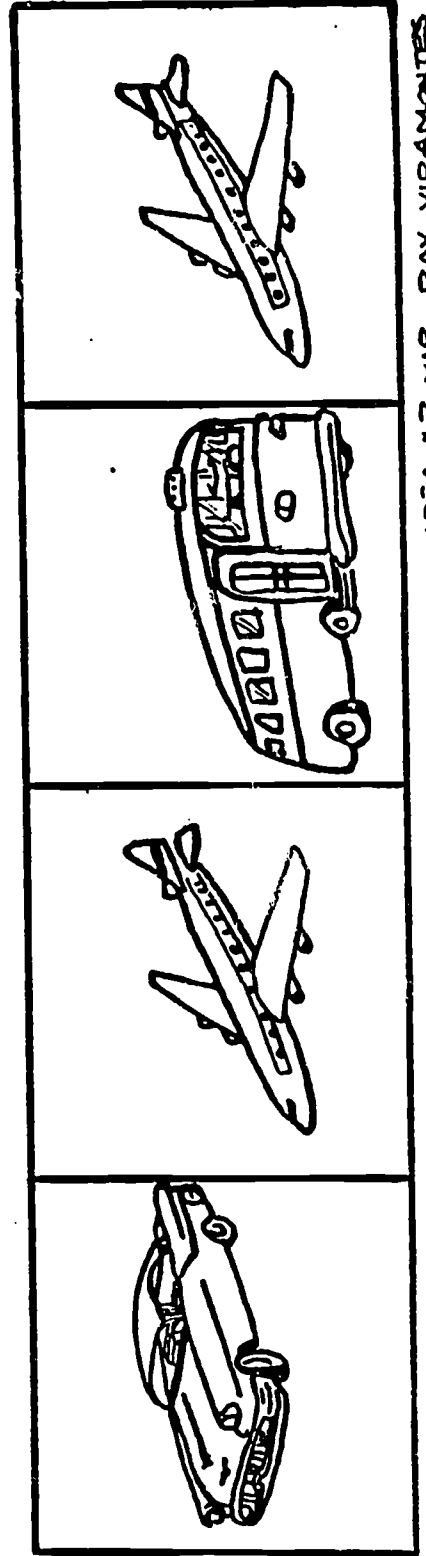
1. 1 0 X	13. 1 0 X	25. 1 0 X	45. 1 0 X	65. 1 0 X
2. 1 0 X	14. 1 0 X	26. 1 0 X	46. 1 0 X	66. 1 0 X
3. 1 0 X	15. 1 0 X	27. 1 0 X	47. 1 0 X	67. 1 0 X
4. 1 0 X	16. 1 0 X	28. 1 0 X	48. 1 0 X	68. 1 0 X
5. 1 0 X	17. 1 0 X	29. 1 0 X	49. 1 0 X	69. 1 0 X
6. 1 0 X	18. 1 0 X	30. 1 0 X	50. 1 0 X	70. 1 0 X
7. 1 0 X	19. 1 0 X	31. 1 0 X	51. 1 0 X	71. 1 0 X
8. 1 0 X	20. 1 0 X	32. 1 0 X	52. 1 0 X	72. 1 0 X
9. 1 0 X	21. 1 0 X	33. 1 0 X	53. 1 0 X	
10. 1 0 X	22. 1 0 X	34. 1 0 X	54. 1 0 X	
11. 1 0 X	23. 1 0 X	35. 1 0 X	55. 1 0 X	
12. 1 0 X	24. 1 0 X	36. 1 0 X	56. 1 0 X	
		37. 1 0 X	57. 1 0 X	
		38. 1 0 X	58. 1 0 X	
		39. 1 0 X	59. 1 0 X	
		40. 1 0 X	60. 1 0 X	
		41. 1 0 X	61. 1 0 X	
		42. 1 0 X	62. 1 0 X	
		43. 1 0 X	63. 1 0 X	
		44. 1 0 X	64. 1 0 X	



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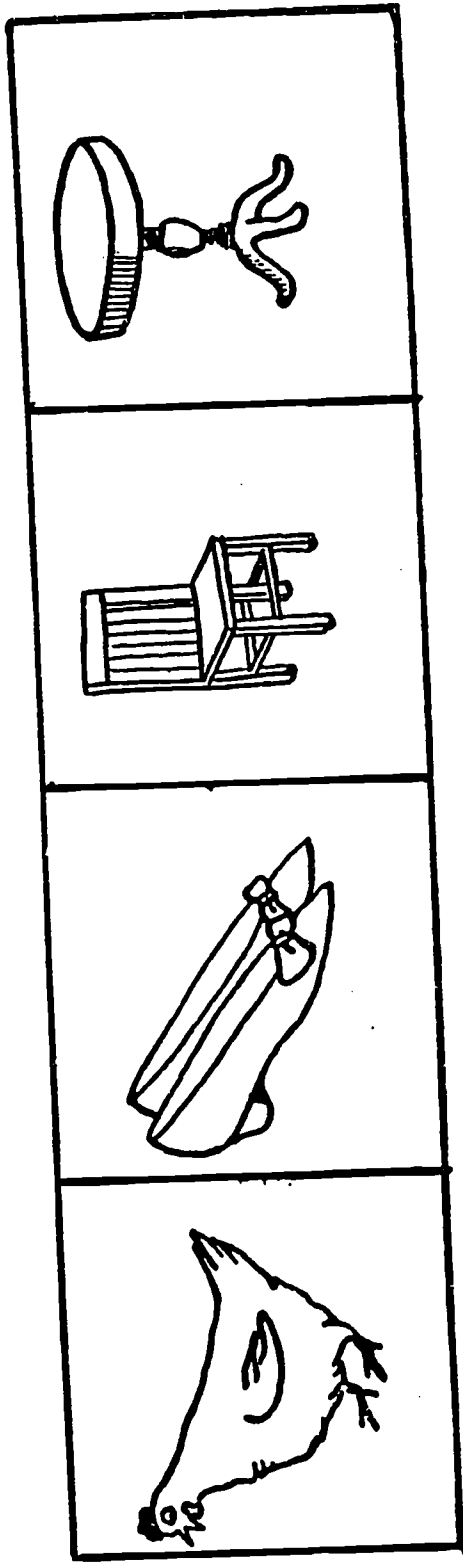
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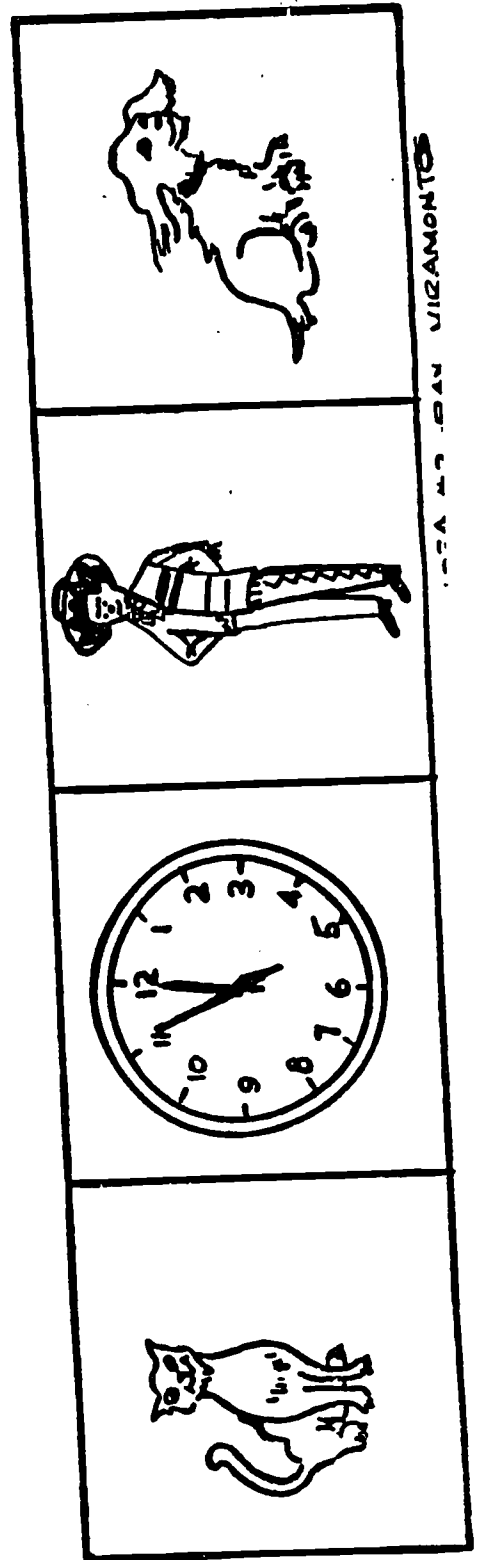
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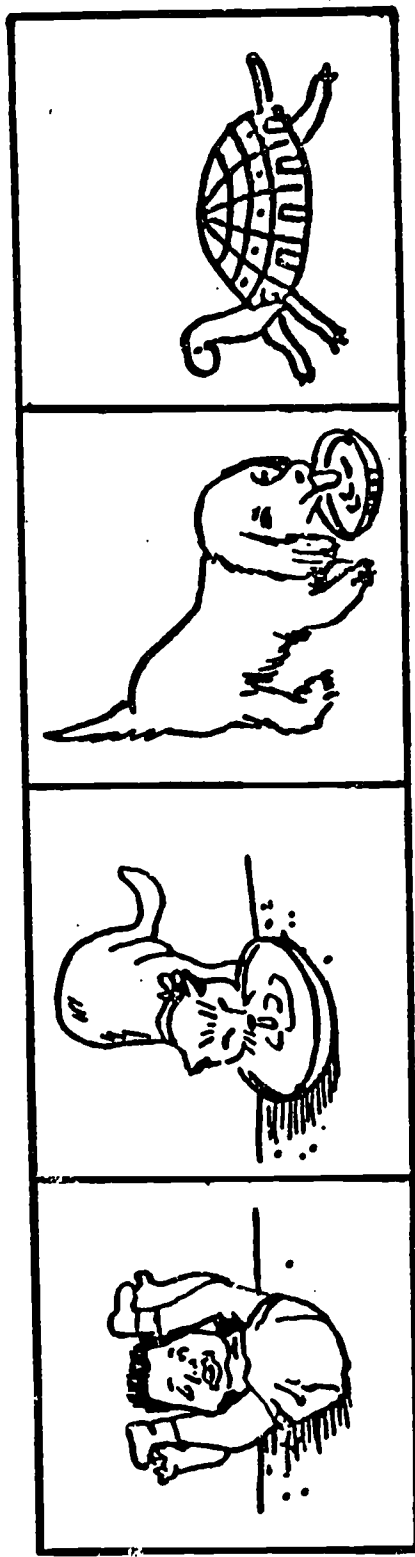


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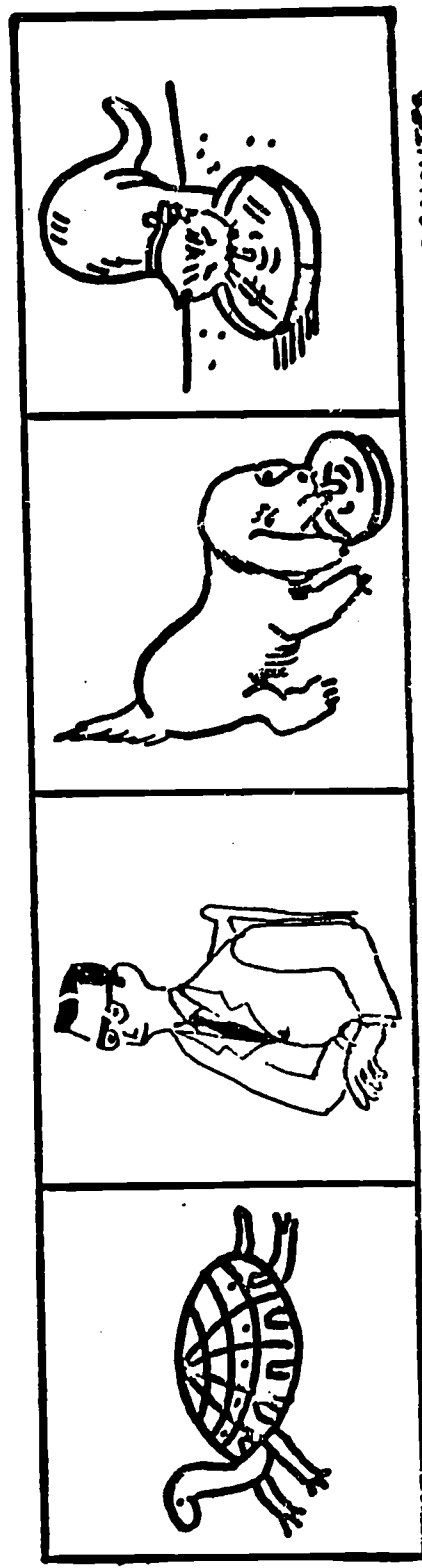
ISSA 43 DAN VIGAMONTO



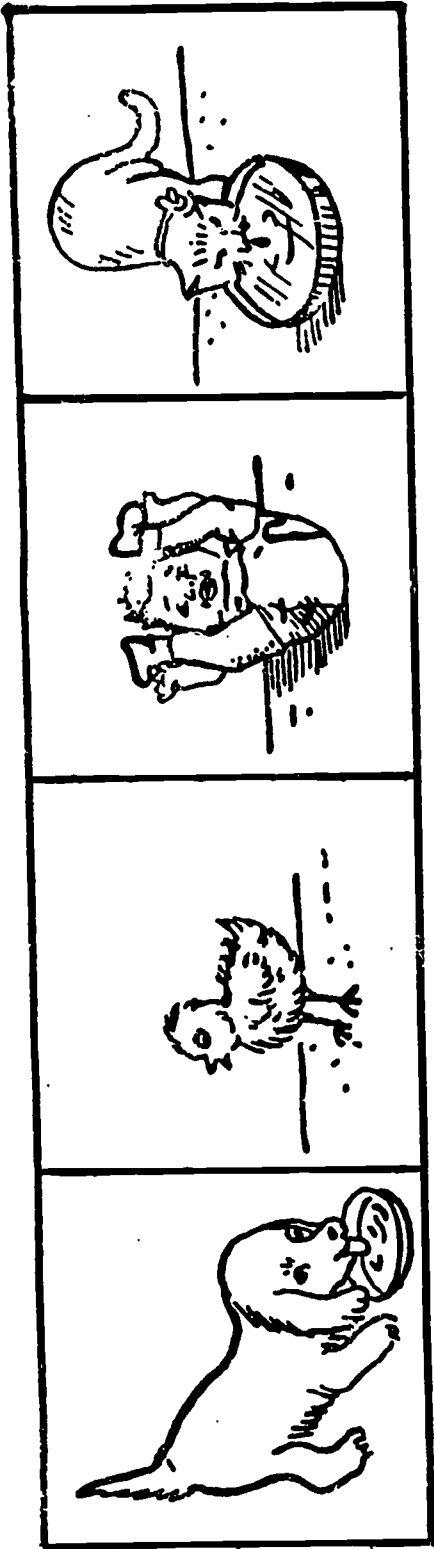
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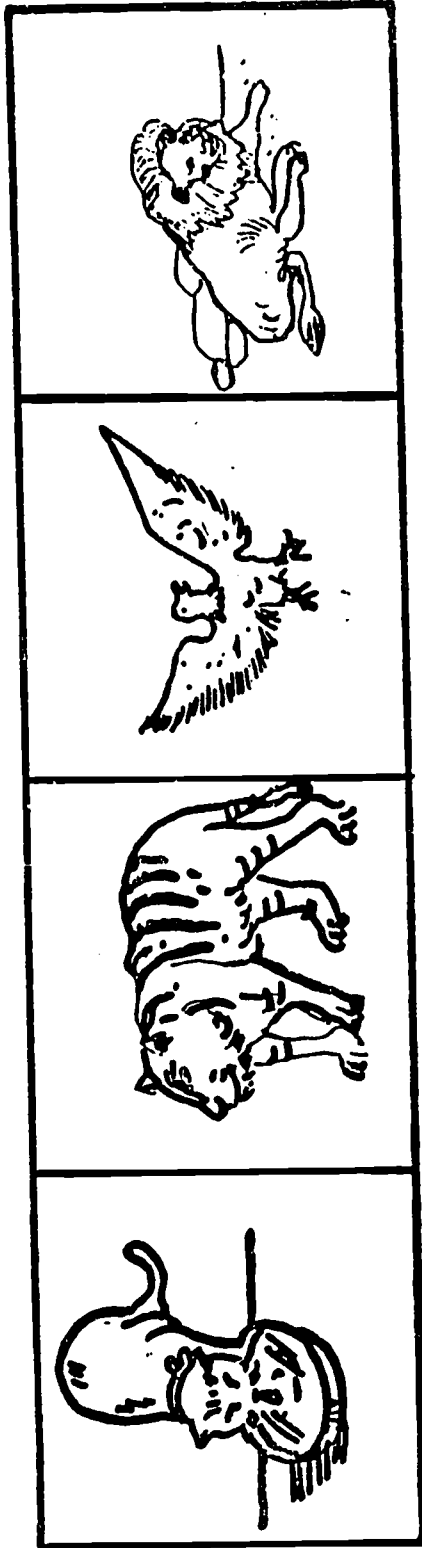
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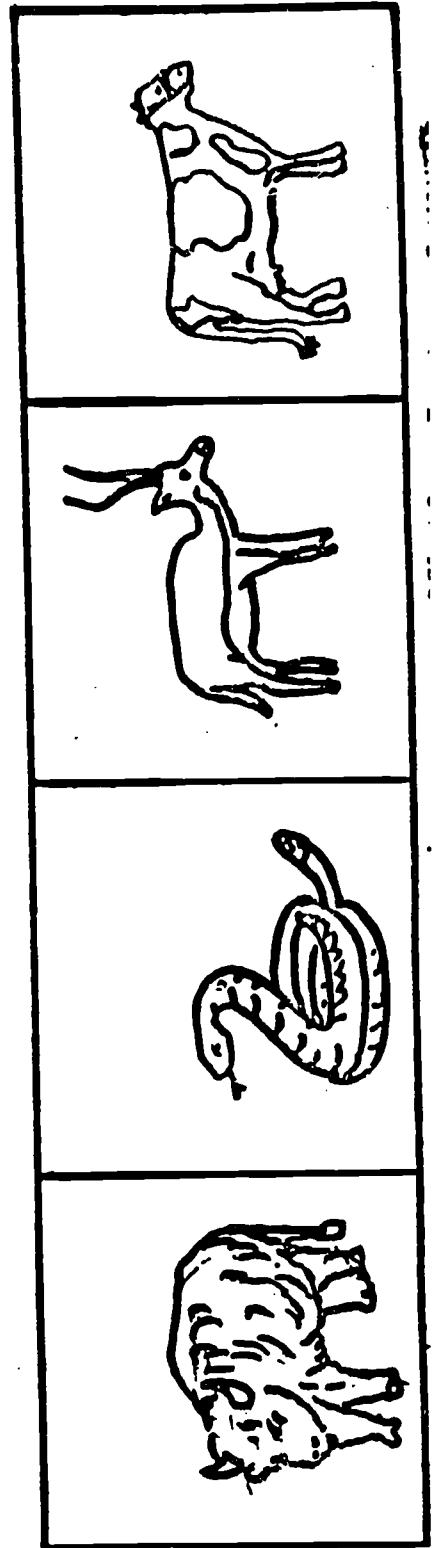
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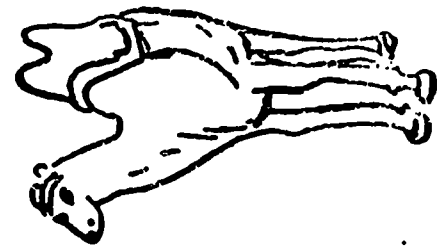
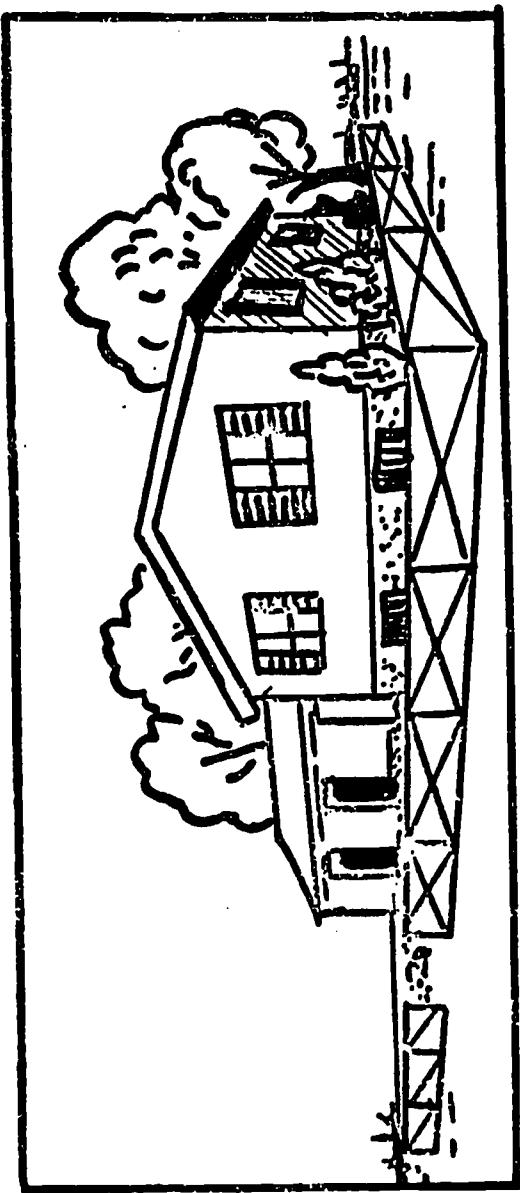
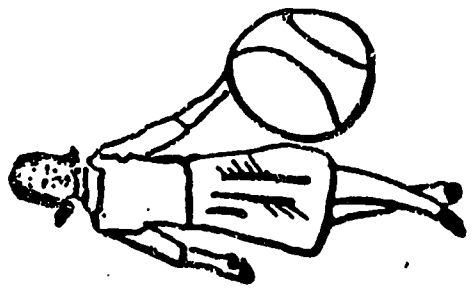
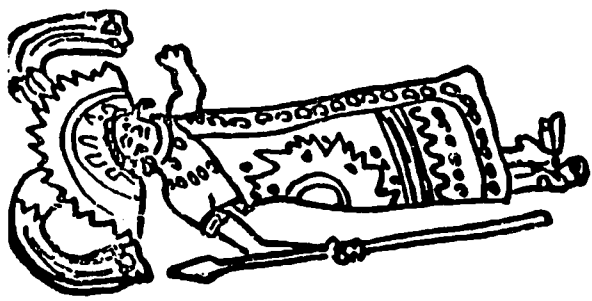
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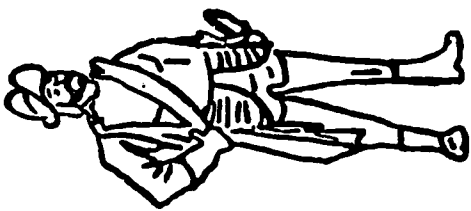
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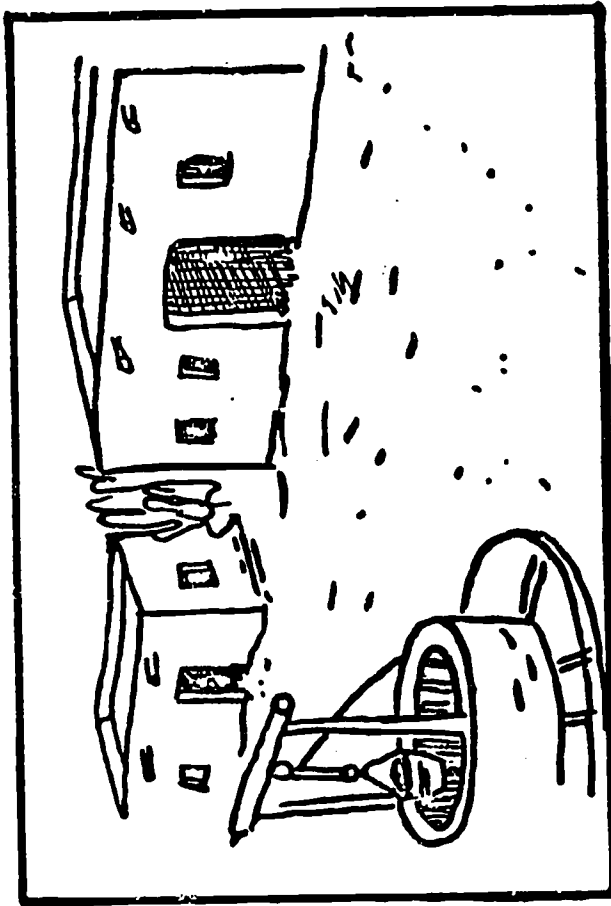
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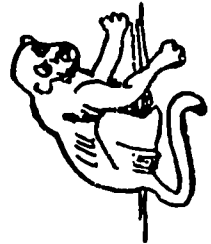
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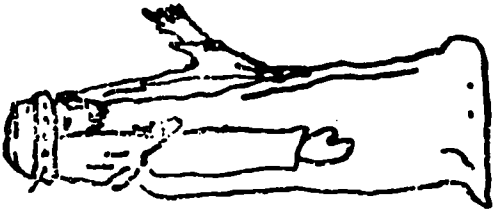
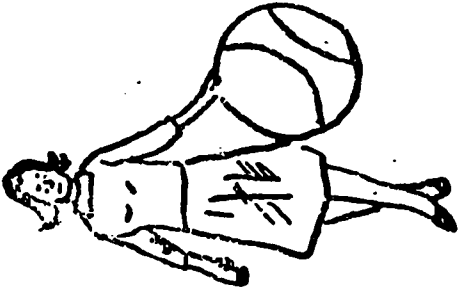
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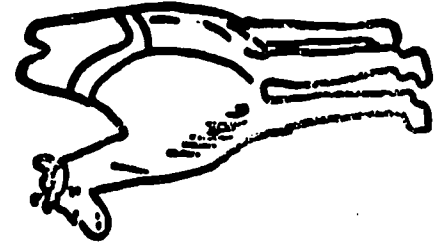
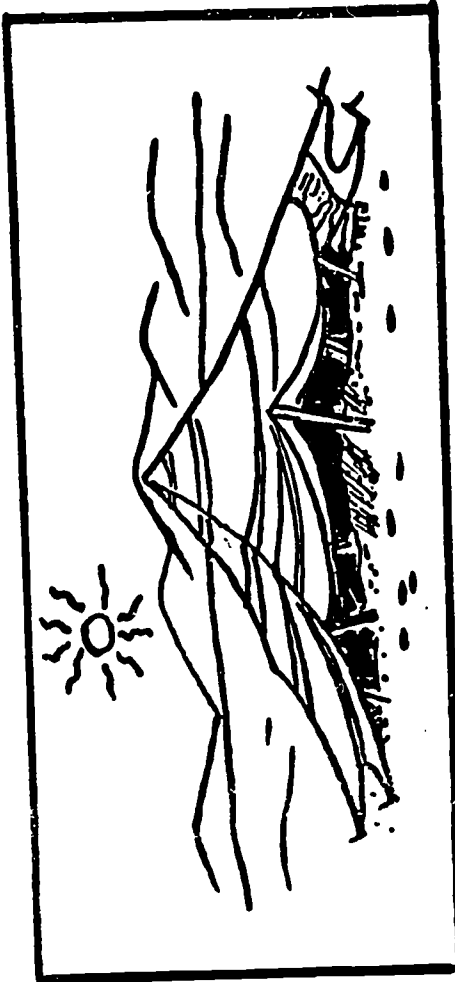
AREA 83 VIP 641 VIDANG



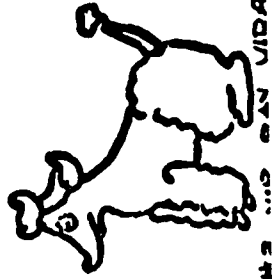
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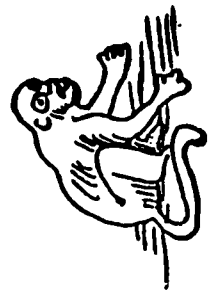
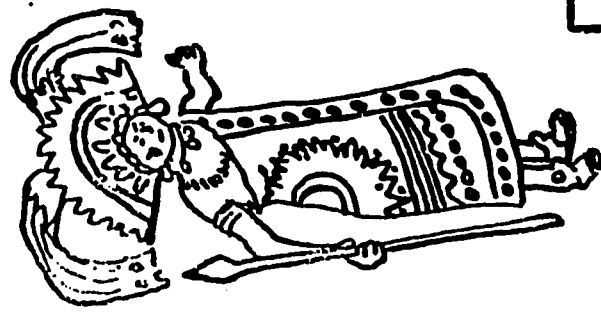
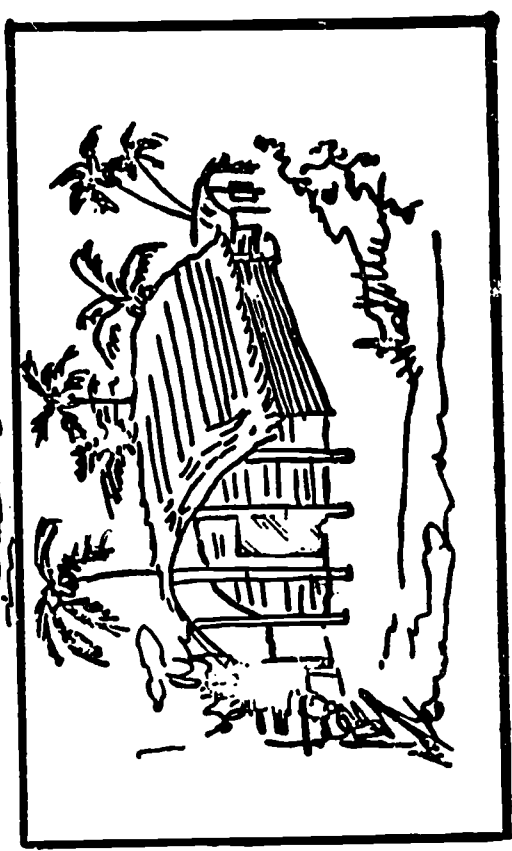
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AREA 42 110 SAN JUAN VILLAMORIS

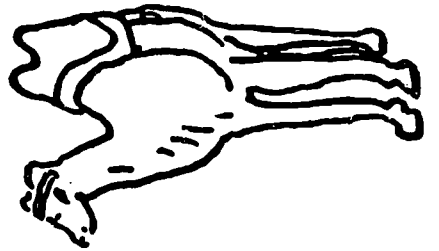
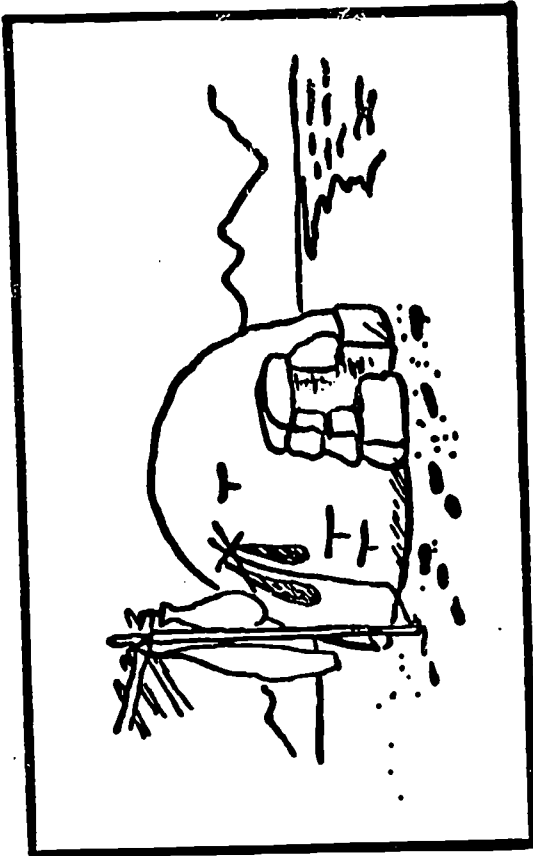


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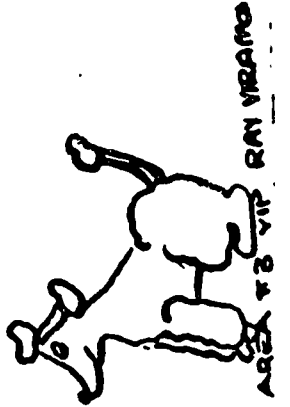
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62.



63.





64.



65.

APPENDIX B
SAMPLES OF CLASS DATA SHEETS
USED TO RECORD RESULTS BASED ON
THE DVR BILINGUAL TEST

22

DVR BILINGUAL TEST																	
LANGUAGE ARTS-Non-Verbal										SCHOOL:							
TEST ITEM											SECOND LANGUAGE						
	15	33	34	35	36	37	38	39	40	41	TOTALS	5	6	8	9	10	TOTALS
PERFORMANCE OBJECTIVES	3.1	6.3	6.1	6.2	6.2	6.2	5.2	5.2	5.2	5.2		7.1	7.1	7.1	7.1	7.1	
Tot. Sp. Sur.																	
% Sp. Sur.																	
Tot. Other																	
% Other																	
Tot. Ach.																	
Tot. % Ach.																	

20

DVR BILINGUAL TEST		SCHOOL :	
SOCIAL STUDIES-DOMINANT LANGUAGE-NON-VERBAL			
TEST ITEM			
PERFORM- ANCE OBJECTIVES	25	.16	
	27	.16	
	28	.16	
	31	.17	
	44	.14	
	45	.14	
	46	.14	
	47	.3	
	48	.5	
	49	.5	
	50	.12	.6
	51	.10	
	52	.10	
	53	.10	
	54	.8	.9
	55	.12	
	56	.8	.9
	57	.12	
	58	.8	.9
	59	.12	
	60	.8	.9
	61	.12	
	62	.8	.9
	63	.12	
	64	.8	.9
	65	.12	
	TOTAL		
Tot. Sp. S.			
% Sp. Sur.			
Tot. Other			
% Other			
Tot. Ach.			
Tot. % Ach.			

DVR BILINGUAL TEST		SCHOOL:																
SOCIAL STUDIES-DOMINANT LANGUAGE-VERBAL																		
TEST	ITEM	23	24	26	29	30	32	66	67	68	69	70	71	72	TOTAL			
PERFORMANCE OBJECTIVES		.16	.16	.15	.16	.15	.15	.17	.2	.6	.2	.6	.2	.6	.7	.7	.7	.7
Tot. Sp. Sur.																		
% Sp. Sur.																		
Tot. Other																		
% Other																		
Tot. Ach.																		
Tot. % Ach.																		

APPENDIX C

SAMPLE OF DATA SHEET FOR ENTIRE AREA III VIP BY SCHOOL

USED TO RECORD RESULTS BASED ON

THE DVR BILINGUAL TEST

APPENDIX D
CHART SHOWING PERCENT ACHIEVEMENT OR REGRESSION OF
PERFORMANCE OBJECTIVES OF AREA III VIP
BY INDIVIDUAL PERFORMANCE OBJECTIVE AND TEST ITEM NUMBER
BASED ON RESULTS OF
THE DVR BILINGUAL TEST

PERCENTAGES OF STUDENTS ACHIEVING
INSTRUCTIONAL BEHAVIORAL OBJECTIVES
BASED ON THE RESULTS FROM THE DVR BILINGUAL TEST

	No. of Objective	% of Objectives Achieved By Students With Spanish Surnames		% of Objectives Achieved By Students With Other Surnames		% of Objectives Achieved By Total Students				
		Mid	Post	(+) (-)	Mid	Post	(+) (-)			
Language Arts Dominant Language Nonverbal	10	89.74	95.41	5.67	93.73	98.01	4.28	91.74	96.71	4.97
Language Arts Dominant Language Verbal	17	57.18	73.16	15.98	70.17	81.68	11.51	63.67	77.42	13.75
Language Arts Second Language Nonverbal	5	76.68	85.96	9.28	18.68	38.70	20.02	47.68	62.33	14.65
Language Arts Second Language Verbal	5	59.98	81.98	21.50	11.02	34.42	23.40	35.50	57.95	22.45

Number of Schools: 6
 Number of Classes: 7
 Mid-test Date: February 5, 1971
 Post-test Date: May 21, 1971

PERCENTAGES OF STUDENTS ACHIEVING
INSTRUCTIONAL BEHAVIORAL OBJECTIVES
BASED ON THE RESULTS FROM THE DVR BILINGUAL TEST

	No. of Objective	% of Objectives Achieved By Students With Spanish Surnames		% of Objectives Achieved By Students With Other Surnames		% of Objectives Achieved By Total Students				
		Mid	Post (+) (-)	Mid	Post (+) (-)	Mid	Post (+) (-)			
Social Studies Dominant Language Nonverbal	27	55.07	67.01	11.94	65.78	73.33	7.55	60.42	70.17	9.75
Social Studies Dominant Language Verbal	20	47.81	52.57	4.76	58.20	57.55	-.65	53.00	55.06	2.06

Number of Schools: 6
 Number of Classes: 7
 Mid-test Date: February 5, 1971
 Post-test Date: May 21, 1971

APPENDIX E
CHART SHOWING PERCENT ACHIEVEMENT OR REGRESSION OF
PERFORMANCE OBJECTIVES OF AREA III VIP
BY CATEGORY BASED ON RESULTS OF
THE DVR BILINGUAL TEST

PERCENTAGES OF STUDENTS ACHIEVING
LANGUAGE ARTS - DOMINANT LANGUAGE OBJECTIVES
BASED ON THE RESULTS FROM THE DVR BILINGUAL TEST

No. of Objective in VIP	DVR Test Item Number	% Achieved Spanish Surname				% Achieved Other Surname				% Achieved Total			
		Mid		Post		Mid		Post		Mid		Post	
		(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
*3.1	15	89.85	3.43	93.28	3.43	95.28	98.71	3.43	95.56	95.99	3.43	95.99	3.43
3.2	43	64.14	9.14	73.28	7.71	85.57	93.28	7.71	74.85	83.42	8.57	83.42	8.57
3.3	11	78.00	7.14	85.14	7.14	78.85	91.85	23.00	78.42	89.14	10.72	89.14	10.72
4.1	14	27.42	27.58	55.00	27.58	36.85	72.57	35.72	32.13	63.42	31.29	63.42	31.29
4.2	16	58.71	12.00	70.71	12.00	80.57	80.71	.14	69.64	76.14	6.50	76.14	6.50
4.2	17	50.42	19.29	69.71	19.29	68.42	74.42	6.00	59.42	72.57	13.15	72.57	13.15
4.2	18	41.42	22.15	63.57	22.15	55.57	72.57	17.00	48.49	68.57	20.08	68.57	20.08
4.3	13	77.28	13.43	90.71	13.43	90.85	96.14	5.29	84.06	93.57	9.51	93.57	9.51
4.5	12	83.28	15.57	98.85	15.57	90.71	98.85	8.14	86.99	98.85	11.86	98.85	11.86
4.6	19	73.85	11.29	85.14	11.29	86.71	85.42	-1.29	80.28	85.14	4.86	85.14	4.86
4.7	19	73.85	13.71	85.14	13.71	82.28	84.14	1.86	76.21	83.85	7.64	83.85	7.64
4.7	20	70.14	23.00	83.85	23.00	65.85	80.71	14.86	58.13	77.57	19.44	77.57	19.44
4.7	21	50.42	29.57	73.42	29.57	71.28	88.71	17.43	62.64	86.28	23.64	86.28	23.64
4.7	22	54.00	7.14	83.57	7.14	78.85	91.85	13.00	78.42	89.14	10.72	89.14	10.72
5.1	11	78.00	.43	85.14	.43	98.85	100.00	1.15	99.21	100.00	.79	100.00	.79
*5.2	38	99.57	0	100.00	0	100.00	100.00	0	100.00	100.00	0	100.00	0
*5.2	39	100.00	.57	100.00	.57	98.85	99.14	.29	98.21	98.64	.43	98.64	.43
*5.2	40	97.57	.86	98.14	.86	97.71	100.00	2.29	98.42	100.00	1.58	100.00	1.58
*5.2	41	99.14	4.86	100.00	4.86	18.71	42.47	23.86	15.99	33.71	17.72	33.71	17.72
5.3	42	13.28	15.86	18.14	15.86	90.85	96.00	5.15	85.13	95.64	10.51	95.64	10.51
*6.1	34	79.42	9.00	95.28	9.00	96.71	100.00	3.29	93.85	100.00	6.15	100.00	6.15
*6.2	36	91.00	14.14	100.00	14.14	82.85	90.85	8.00	77.92	88.99	11.07	88.99	11.07
*6.2	37	73.00	1.14	87.14	1.14	96.71	100.00	3.29	94.85	97.07	2.22	97.07	2.22
*6.2	35	93.00	11.29	94.14	11.29	81.42	95.42	14.00	78.13	90.78	12.65	90.78	12.65
*6.3	33	74.85	86.14	86.14	86.14	81.42	95.42	14.00	78.13	90.78	12.65	90.78	12.65

* Non-Verbal Response

PERCENTAGES OF STUDENTS ACHIEVING
LANGUAGE ARTS - SECOND LANGUAGE OBJECTIVES
BASED ON THE RESULTS FROM THE DVR BILINGUAL TEST

No. of Objective in VIP	DVR Test Item Number	% Achieved Spanish Surname			% Achieved Other Surname			% Achieved Total		
		Mid	Post	(+) (-)	Mid	Post	(+) (-)	Mid	Post	(+) (-)
*7.1	8	93.00	96.42	3.42	57.85	82.28	24.43	75.42	89.35	13.93
*7.1	10	93.00	100.00	7.00	57.85	100.00	42.15	75.42	100.00	24.58
*7.1	5	70.14	76.00	5.86	6.57	6.57	0	38.35	41.28	2.93
*7.1	6	73.42	76.85	3.43	6.14	3.42	-2.72	39.64	40.13	.49
*7.1	9	70.14	80.57	10.43	4.14	3.42	-.72	37.14	41.99	4.85
7.2	1	83.28	93.85	10.57	44.71	72.85	28.14	63.99	83.35	19.36
7.2	2	63.00	89.00	26.00	7.28	57.28	50.00	35.14	73.14	38.00
7.2	3	46.57	78.14	31.57	1.14	19.71	18.57	23.85	48.92	25.07
7.2	4	48.42	71.42	23.00	0	14.85	14.85	24.21	43.13	18.92
7.3	7	58.42	75.00	16.58	2.00	7.42	5.42	30.21	41.21	11.00

* Non-Verbal Response

PERCENTAGES OF STUDENTS ACHIEVING
SOCIAL STUDIES OBJECTIVES
BASED ON THE RESULTS OF THE DVR BILINGUAL TEST

No. of Objective in VIP	DVR Test Item Number	% Achieved Spanish surname				% Achieved Other Surname				% Achieved Total			
		Mid		Post		Mid		Post		Mid		Post	
		(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
*.1	50	90.14	6.71	96.85	97.71	100.00	2.29	93.92	98.42	4.50			
*.2	50	90.14	6.71	96.85	97.71	100.00	2.29	93.92	98.42	4.50			
*.2	66	46.42	8.72	55.14	70.57	81.28	10.71	58.49	68.21	9.72			
*.2	67	17.57	31.43	49.00	34.85	52.14	17.29	26.21	50.57	24.36			
*.2	68	11.00	3.57	14.57	12.14	15.42	3.28	11.57	14.99	3.42			
*.3	47	58.42	14.86	73.28	55.28	77.85	22.57	56.85	75.56	18.71			
.4	66	46.42	8.72	55.14	70.57	81.28	10.71	58.49	68.21	9.72			
.4	67	17.57	31.43	49.00	34.85	52.14	17.29	26.21	50.57	24.36			
.4	68	11.00	3.57	14.57	12.14	15.42	3.28	11.57	14.99	3.42			
*.5	48	30.42	11.86	42.28	78.00	66.28	-11.72	54.21	54.28	.07			
*.5	49	53.42	18.00	71.42	73.85	80.14	6.29	63.63	75.78	12.15			
.6	66	46.42	8.72	55.14	70.57	81.28	10.71	58.49	68.21	9.72			
.6	67	17.57	31.43	49.00	34.85	52.14	17.29	26.21	50.57	24.36			
.6	68	11.00	3.57	14.57	12.14	15.42	3.28	11.57	14.99	3.42			
.6	69	42.85	19.43	62.28	66.71	67.85	1.14	54.78	65.06	10.28			
.7	70	22.14	9.71	31.85	35.57	35.42	-.15	28.85	33.63	4.78			
.7	71	10.14	1.14	11.28	15.71	10.00	-5.71	12.92	10.64	-2.28			
.7	72	9.00	-4.72	4.28	12.28	5.85	-6.43	10.64	5.06	-5.58			
*.9	54	27.59	55.26	82.85	59.14	91.85	32.71	43.35	87.35	44.00			
*.9	56	51.85	-30.71	21.14	73.71	22.00	-51.71	62.78	21.57	-41.21			
*.9	58	43.57	24.85	68.42	52.71	84.57	31.86	48.14	76.49	-28.35			
*.9	60	55.85	-10.85	45.00	69.00	55.85	-13.15	62.42	50.42	-12.00			
*.9	62	51.14	15.57	66.71	60.14	83.28	23.14	55.64	74.99	19.35			
*.9	64	68.85	-4.71	64.14	82.28	80.71	-1.57	75.56	72.32	-3.14			

* Non-Verbal Response



PERCENTAGES OF STUDENTS ACHIEVING
SOCIAL STUDIES OBJECTIVES
BASED ON THE RESULTS OF THE DVR BILINGUAL TEST

No. of Objective in VIP	DVR Test Item Number	% Achieved Spanish surname			% Achieved Other Surname			% Achieved Total		
		Mid	Post	(+) (-)	Mid	Post	(+) (-)	Mid	Post	(+) (-)
*.10	51	50.42	61.57	11.15	41.85	48.28	6.43	46.13	54.92	8.79
*.10	52	26.00	42.28	16.28	24.00	34.42	10.42	25.00	38.35	13.35
*.10	53	24.00	39.71	15.71	25.00	36.42	11.42	24.50	38.06	13.56
*.12	55	56.42	76.57	20.15	59.00	90.85	31.85	57.71	83.71	26.00
*.12	57	63.00	51.00	-12.00	66.42	49.28	-17.14	66.71	50.14	-14.57
*.12	59	37.00	70.14	33.14	43.14	85.71	42.57	40.07	77.92	37.85
*.12	61	46.71	43.85	-2.86	66.14	49.00	-17.14	56.92	46.42	-10.50
*.12	63	38.28	62.28	24.00	37.71	77.57	39.86	37.99	69.92	31.93
*.12	65	59.71	48.28	-11.43	80.00	57.71	-22.29	69.85	52.99	-16.86
.14	44	92.57	95.00	2.43	94.85	98.71	3.86	93.71	96.85	3.14
.14	45	84.57	95.85	11.28	92.14	96.42	4.28	88.35	96.13	7.78
.14	46	69.42	74.57	5.15	71.28	70.42	-.86	70.35	72.49	2.14
*.15	25	75.00	80.71	5.71	91.57	97.57	6.00	83.28	89.14	5.86
*.15	27	91.14	98.57	7.43	96.71	100.00	3.29	93.92	99.28	16.00
*.15	28	86.57	95.85	9.28	95.42	98.71	3.29	90.99	97.28	6.29
*.15	26	78.42	91.00	12.58	86.71	96.42	9.71	82.56	93.71	11.15
*.15	29	90.42	96.00	5.58	96.71	100.00	3.29	93.56	98.00	4.44
*.15	30	73.57	95.14	21.57	93.14	100.00	6.86	83.35	97.57	14.22
*.16a	15	89.85	93.28	3.43	95.28	98.71	3.43	92.56	95.99	3.43
*.16b	23	29.28	55.42	26.14	44.71	66.28	21.57	36.99	60.85	23.86
*.16c	24	13.14	39.00	25.86	29.57	40.28	10.71	21.35	39.64	18.29
*.17a	31	46.42	74.14	27.72	54.71	73.14	18.43	50.56	73.64	23.08
.17b	32	56.28	78.57	22.29	74.71	77.28	2.57	65.49	77.92	12.43

* Non-Verbal Response

Table 7
Agreement among Subjects' Clusters - Social Clusters

Subject	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	94.7 (81.6)	78.6 (52.2)	66.7 (44.3)	50.0 (30.0)	50.0 (30.0)	50.0 (30.0)	51.3 (24.6)	61.3 (46.2)	67.2 (46.2)	67.2 (46.2)	59.7 (48.2)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)
2	87.5 (68.5)	67.2 (41.3)	61.7 (38.1)	73.0 (50.0)	73.0 (50.0)	73.0 (50.0)	73.0 (50.0)	67.2 (46.2)	67.2 (46.2)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)
3	87.5 (68.5)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
4	75.0 (50.0)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)
5	75.0 (50.0)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)
6	75.0 (50.0)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
7	75.0 (50.0)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)	57.5 (44.5)
8	87.5 (68.5)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
9	75.0 (50.0)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)	71.4 (52.3)
10	87.5 (68.5)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)	67.2 (46.2)
11	75.0 (50.0)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
12	87.5 (68.5)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
13	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)
14	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)
15	87.5 (68.5)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
16	87.5 (68.5)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
17	62.5 (40.3)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)	61.7 (38.1)
18	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)

Note: The Subject's percentage of matching clusters is in regular type, the counterpart's percentage is in parentheses, and the differences (the Subject's percentage less the counterpart's percentage) is in parentheses. The statistics show the amount of error in comparison for each cluster. The statistics show the amount of error in comparison for each cluster. The statistics show the amount of error in comparison for each cluster. The statistics show the amount of error in comparison for each cluster. The statistics show the amount of error in comparison for each cluster.

Table 5
 Agreement among Subjects' Cluster-Cluster Relations to Total Instability

Subject	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1		71.1 (14.7)	70.5 (14.7)	71.4 (14.7)	70.6 (14.7)	70.5 (14.7)	71.1 (14.7)	71.1 (14.7)	70.5 (14.7)	70.5 (14.7)	71.1 (14.7)	70.5 (14.7)	70.5 (14.7)	71.1 (14.7)	70.5 (14.7)	70.5 (14.7)	71.1 (14.7)	70.5 (14.7)
2	71.1 (14.7)		66.0 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
3	66.0 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
4	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
5	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
6	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
7	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
8	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
9	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
10	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
11	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
12	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
13	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
14	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
15	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)	70.5 (14.7)
16	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)	70.5 (14.7)
17	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)		70.5 (14.7)
18	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	70.5 (14.7)	

Note: 1. Subject's percentage of matching clusters is in regular type, the counterpart's percentage is underlined, and the difference (the subject's percentage minus the counterpart's percentage) is in parentheses. The statistics show the amount of agreement between subjects with higher identification numbers and subjects with lower identification numbers (e.g., the percentage of Subject 1's clusters matching Subject 2's clusters) rather than the corresponding comparison for their counterparts. The statistics do not give identical data from reciprocal comparisons between subjects with lower identification numbers and subjects with higher numbers (e.g., the percentage of Subject 2's clusters matching Subject 1's) as well as comparisons for their counterparts.

