

Northwest U.S. Inner City Research Site — Tables

Table D-1
 1996-2001 English Scores on the Student Oral Language Observation Matrix (SOLOM)
 (Measuring Comprehension, Fluency, Vocabulary, Pronunciation, and Grammar)
 by Number of Years Attending Two-way Dual Language Immersion Program:
 Quasi-longitudinal Analyses

Students' Primary Language	Total Number of Years in Dual Language Immersion Program	Mean Score (Maximum score 25)	Number of Students Tested (N)	Standard Deviation
English	1 year in program	24.49	72	1.81
	2 years in program	24.32	99	2.42
	3 years in program	23.98	62	2.41
	4 years in program	24.57	35	1.44
	5 years in program	24.78	23	1.04
	Total	24.36	291	2.09
Spanish	1 year in program	13.62	55	6.39
	2 years in program	16.42	83	5.13
	3 years in program	17.22	50	5.12
	4 years in program	17.44	27	4.53
	5 years in program	20.09	23	3.32
	Total	16.41	238	5.52
Total	1 year in program	19.78	127	6.97
	2 years in program	20.72	182	5.54
	3 years in program	20.96	112	5.11
	4 years in program	21.47	62	4.75
	5 years in program	22.43	46	3.40
	Total	20.78	529	5.63

Table D-2
 1996-2001 Spanish Scores on the Student Oral Language Observation Matrix (SOLOM)
 (Measuring Comprehension, Fluency, Vocabulary, Pronunciation, and Grammar)
 by Number of Years Attending Two-way Dual Language Immersion Program:
 Quasi-longitudinal Analyses

Students' Primary Language	Total Number of Years in Dual Language Immersion Program	Mean Score (Maximum score 25)	Number of Students Tested (N)	Standard Deviation
English	1 year in program	7.86	63	4.65
	2 years in program	8.04	97	4.49
	3 years in program	10.30	61	4.35
	4 years in program	13.66	35	4.56
	5 years in program	14.35	23	5.41
	Total	9.72	279	5.13
Spanish	1 year in program	21.49	55	5.54
	2 years in program	23.29	83	3.58
	3 years in program	23.50	50	3.75
	4 years in program	24.22	27	1.37
	5 years in program	23.74	23	3.37
	Total	23.07	238	4.05
Total	1 year in program	14.21	118	8.50
	2 years in program	15.07	180	8.65
	3 years in program	16.24	111	7.76
	4 years in program	18.26	62	6.35
	5 years in program	19.04	46	6.51
	Total	15.86	517	8.13

Table D-3
 2001 English Scores on the Student Oral Language Observation Matrix (SOLOM) by Grade
 (Measuring Comprehension, Fluency, Vocabulary, Pronunciation, and Grammar):
 Quasi-Longitudinal Analyses

Students' Primary Language	Grade in 2001	Mean Score (Maximum score 25)	Number of Students Tested (N)	Standard Deviation
English	Grade 5	24.84	25	.80
	Grade 4	24.90	49	.71
	Grade 3	24.67	36	1.41
	Grade 2	23.65	43	2.94
	Grade 1	24.03	38	2.16
	Total	24.39	191	1.91
Spanish	Grade 5	18.86	21	5.78
	Grade 4	19.46	26	4.56
	Grade 3	15.81	32	4.92
	Grade 2	16.80	46	5.30
	Grade 1	13.81	32	4.82
	Total	16.71	157	5.38
Total	Grade 5	22.11	46	4.93
	Grade 4	23.01	75	3.76
	Grade 3	20.50	68	5.66
	Grade 2	20.11	89	5.51
	Grade 1	19.36	70	6.26
	Total	20.93	348	5.45

Table D-4
 2001 Spanish Scores on the Student Oral Language Observation Matrix (SOLOM) by Grade
 (Measuring Comprehension, Fluency, Vocabulary, Pronunciation, and Grammar):
 Quasi-longitudinal Analyses

Students' Primary Language	Grade in 2001	Mean Score (Maximum score 25)	Number of Students Tested (N)	Standard Deviation
English	Grade 5	15.38	13	5.81
	Grade 4	13.61	38	4.75
	Grade 3	12.46	35	4.46
	Grade 2	9.67	43	4.75
	Grade 1	7.58	38	4.35
	Total		11.12	167
Spanish	Grade 5	24.71	21	.78
	Grade 4	23.31	26	3.82
	Grade 3	23.53	32	2.49
	Grade 2	24.09	46	1.53
	Grade 1	24.00	32	1.83
	Total		23.91	157
Total	Grade 5	21.15	34	5.82
	Grade 4	17.55	64	6.49
	Grade 3	17.75	67	6.65
	Grade 2	17.12	89	8.03
	Grade 1	15.09	70	8.92
	Total		17.32	324

Table D-5
 1999-2001 Spanish Reading Mean NCE Scores on the Spanish Assessment of Basic Education (SABE) for Recent-arriving Spanish-speaking Students in Two-way Dual Language Immersion Program: Cross-sectional Analyses

	2001 SABE NCE Scores Total Reading	2000 SABE NCE Scores Total Reading	1999 SABE NCE Scores Total Reading
Number of Students	29	25	23
Mean	52.821	68.276	68.500
Median	54.200	73.700	72.700
Standard Deviation	14.602	20.072	21.680

Table D-6

1999-2001 Spanish Reading Mean NCE Scores on the SABE for Recent-arriving Spanish-speaking Students in Two-way Dual Language Immersion Program by Grade in 2001: Cross-sectional Analyses

Grade in 2001		2001 SABE NCE Scores Total Reading	2000 SABE NCE Scores Total Reading	1999 SABE NCE Scores Total Reading
Grade 7 in 2001	Mean			58.100
	N			1
	Std. Deviation			.
Grade 6 in 2001	Mean			60.700
	N			5
	Std. Deviation			17.883
Grade 5 in 2001	Mean	36.050	68.400	70.107
	N	2	8	15
	Std. Deviation	15.203	20.096	24.123
Grade 4 in 2001	Mean	54.286	68.469	
	N	7	16	
	Std. Deviation	9.505	21.331	
Grade 3 in 2001	Mean	51.994		
	N	18		
	Std. Deviation	15.092		
Grade 2 in 2001	Mean		64.200	
	N		1	
	Std. Deviation		.	
Total	Mean	51.407	68.276	67.295
	N	27	25	21
	Std. Deviation	14.117	20.072	22.189

Table D-7
 1999-2001 English Reading Mean Scores on the Oregon Statewide Assessment
 for Grades 3 and 5 by Students' Primary Language: Cross-sectional Analyses

Students' Primary Language	Grade	State %tile	2001 Reading			2000 Reading			1999 Reading		
			Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
English	3	45	212.3	14.0	30	207.1	17.8	37	206.9	14.7	28
Spanish	3	41	211.0	12.9	12	-----	-----	0	204.3	3.9	4
English	5	29	215.9	11.7	17	213.6	12.6	31	222.0	15.6	13
Spanish	5	14	211.9	7.6	14	207.4	7.1	16	208.3	7.5	8

Table D-8
 English Reading Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Reading Scores for English Speakers in Grade 3

	2001 Reading Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	186.0	1	1.5	3.3	3.3
	187.0	1	1.5	3.3	6.7
	194.0	2	2.9	6.7	13.3
	196.0	1	1.5	3.3	16.7
	200.0	1	1.5	3.3	20.0
Score of 201	201.0	2	2.9	6.7	26.7
or above:	205.0	2	2.9	6.7	33.3
Student met	208.0	1	1.5	3.3	36.7
or					
exceeded	209.0	2	2.9	6.7	43.3
state					
standards	212.0	1	1.5	3.3	46.7
	214.0	3	4.4	10.0	56.7
	216.0	2	2.9	6.7	63.3
	218.0	2	2.9	6.7	70.0
	219.0	1	1.5	3.3	73.3
	221.0	1	1.5	3.3	76.7
	222.0	3	4.4	10.0	86.7
	229.0	1	1.5	3.3	90.0
	236.0	1	1.5	3.3	93.3
	237.0	1	1.5	3.3	96.7
	243.0	1	1.5	3.3	100.0
	Total	30			

Table D-9
 English Reading Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Reading Scores for Spanish Speakers in Grade 3

	2001 Reading Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	193.0	2	3.7	16.7	16.7
	200.0	1	1.9	8.3	25.0
Score of 201	202.0	1	1.9	8.3	33.3
or above:	207.0	1	1.9	8.3	41.7
Student met	211.0	1	1.9	8.3	50.0
or					
exceeded	212.0	1	1.9	8.3	58.3
state					
standards	214.0	1	1.9	8.3	66.7
	218.0	1	1.9	8.3	75.0
	222.0	1	1.9	8.3	83.3
	224.0	1	1.9	8.3	91.7
	236.0	1	1.9	8.3	100.0
	Total	12			

Table D-10
 English Reading Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Reading Scores for English Speakers in Grade 5

	2001 Reading Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	195.0	1	1.3	5.9	5.9
	201.0	2	2.6	11.8	17.6
	203.0	1	1.3	5.9	23.5
	207.0	1	1.3	5.9	29.4
	214.0	1	1.3	5.9	35.3
Score of 215	216.0	1	1.3	5.9	41.2
or above:	217.0	2	2.6	11.8	52.9
Student met	218.0	1	1.3	5.9	58.8
or					
exceeded	219.0	2	2.6	11.8	70.6
state					
standards	220.0	1	1.3	5.9	76.5
	226.0	2	2.6	11.8	88.2
	230.0	1	1.3	5.9	94.1
	241.0	1	1.3	5.9	100.0
	Total	17			

Table D-11
 English Reading Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Reading Scores for Spanish Speakers in Grade 5

	2001 Reading Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	198.0	1	2.6	7.1	7.1
	202.0	1	2.6	7.1	14.3
	205.0	1	2.6	7.1	21.4
	207.0	1	2.6	7.1	28.6
	209.0	1	2.6	7.1	35.7
	210.0	1	2.6	7.1	42.9
	211.0	2	5.1	14.3	57.1
Score of 215	215.0	1	2.6	7.1	64.3
or above:	216.0	1	2.6	7.1	71.4
Student met	217.0	1	2.6	7.1	78.6
or					
exceeded	220.0	1	2.6	7.1	85.7
state					
standards	222.0	1	2.6	7.1	92.9
	224.0	1	2.6	7.1	100.0
	Total	14			

Table D-12
 1999-2001 Mathematics Mean Scores on the Oregon Statewide Assessment
 for Grades 3 and 5 by Students' Primary Language: Cross-sectional Analyses

Students ' Primary Languag e	Grad e	Stat e %tile	2001 Mathematics			2000 Mathematics			1999 Mathematics		
			Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
English	3	40	206.7	11.6	31	206.4	12.6	40	210.1	13.0	28
Spanish	3	25	201.6	11.3	31	197.4	6.8	22	198.5	7.3	27
English	5	36	217.0	9.8	17	214.5	8.3	31	226.6	14.6	13
Spanish	5	24	213.0	9.0	17	209.2	6.4	18	211.6	7.8	8

Table D-13

Mathematics Mean Scores on the Oregon Statewide Assessment:

Frequency Distribution of 2001 Mathematics Scores for English Speakers in Grade 3

	2001 Math Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	185.0	1	1.5	3.2	3.2
	193.0	1	1.5	3.2	6.5
	197.0	3	4.4	9.7	16.1
	198.0	2	2.9	6.5	22.6
	199.0	1	1.5	3.2	25.8
	200.0	2	2.9	6.5	32.3
Score of 201	201.0	4	5.9	12.9	45.2
or above:	202.0	1	1.5	3.2	48.4
Student met	203.0	1	1.5	3.2	51.6
or	204.0	1	1.5	3.2	54.8
exceeded	207.0	2	2.9	6.5	61.3
state	208.0	2	2.9	6.5	67.7
standards	211.0	1	1.5	3.2	71.0
	213.0	1	1.5	3.2	74.2
	214.0	1	1.5	3.2	77.4
	216.0	1	1.5	3.2	80.6
	219.0	4	5.9	12.9	93.5
	229.0	1	1.5	3.2	96.8
	243.0	1	1.5	3.2	100.0
	Total	31			

Table D-14
 Mathematics Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Mathematics Scores for Spanish Speakers in Grade 3

	2001 Math Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	179.0	1	1.9	3.2	3.2
	183.0	1	1.9	3.2	6.5
	184.0	1	1.9	3.2	9.7
	186.0	2	3.7	6.5	16.1
	189.0	1	1.9	3.2	19.4
	193.0	1	1.9	3.2	22.6
	194.0	1	1.9	3.2	25.8
	195.0	1	1.9	3.2	29.0
	196.0	1	1.9	3.2	32.3
	197.0	1	1.9	3.2	35.5
	198.0	2	3.7	6.5	41.9
	199.0	2	3.7	6.5	48.4
	200.0	1	1.9	3.2	51.6
Score of 201	205.0	1	1.9	3.2	54.8
or above:	207.0	1	1.9	3.2	58.1
Student met	208.0	2	3.7	6.5	64.5
or					
exceeded	209.0	1	1.9	3.2	67.7
state					
standards	210.0	1	1.9	3.2	71.0
	211.0	2	3.7	6.5	77.4
	212.0	1	1.9	3.2	80.6
	213.0	1	1.9	3.2	83.9
	214.0	3	5.6	9.7	93.5
	216.0	1	1.9	3.2	96.8
	222.0	1	1.9	3.2	100.0
	Total	31			

Table D-15
 Mathematics Mean Scores on the Oregon Statewide Assessment:
 Frequency Distribution of 2001 Mathematics Scores for English Speakers in Grade 5

	2001 Math Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	198.0	1	1.3	5.9	5.9
	204.0	1	1.3	5.9	11.8
	207.0	2	2.6	11.8	23.5
	211.0	1	1.3	5.9	29.4
	212.0	1	1.3	5.9	35.3
Score of 215	215.0	1	1.3	5.9	41.2
or above:	216.0	1	1.3	5.9	47.1
Student met	217.0	1	1.3	5.9	52.9
or					
exceeded	219.0	3	3.9	17.6	70.6
state					
standards	226.0	1	1.3	5.9	76.5
	228.0	1	1.3	5.9	82.4
	230.0	2	2.6	11.8	94.1
	231.0	1	1.3	5.9	100.0
	Total	17			

Table D-16
 Mathematics Mean Scores on the Oregon Statewide Assessment
 Frequency Distribution of 2001 Mathematics Scores for Spanish Speakers in Grade 5

	2001 Math Scores	Frequency	Percent	Valid Percent	Cumulative Percent
	192.0	1	2.6	5.9	5.9
	199.0	1	2.6	5.9	11.8
	202.0	1	2.6	5.9	17.6
	209.0	3	7.7	17.6	35.3
	210.0	1	2.6	5.9	41.2
	214.0	1	2.6	5.9	47.1
Score of 215					
or above:	216.0	1	2.6	5.9	52.9
Student met	217.0	2	5.1	11.8	64.7
or					
exceeded	219.0	2	5.1	11.8	76.5
state					
standards	221.0	3	7.7	17.6	94.1
	226.0	1	2.6	5.9	100.0
	Total	17			

Table D-17: State Department of Education Summary of Reading and Math Achievement
Comparing Grant School, the School District, and the State
in Grades 3 and 5

Percentage of Hispanic Students Meeting or Exceeding State Standards in 2001

Grade	Subject	Grant School		School District		State	
		# students	Percentage	# students	Percentage	# students	Percentage
3	Reading	12	80%	240	65%	2465	66%
3	Math	19	53%	225	44%	2261	50%
5	Reading	17	27%	172	40%	1819	51%
5	Math	11	34%	190	38%	1881	47%

Percentage of White Students Meeting or Exceeding State Standards in 2001

Grade	Subject	Grant School		School District		State	
		# students	Percentage	# students	Percentage	# students	Percentage
3	Reading	22	79%	1529	85%	26314	87%
3	Math	18	62%	1401	76%	24374	79%
5	Reading	17	63%	1405	75%	25943	80%
5	Math	18	67%	1365	72%	25154	77%

Percentage of Total Students Meeting or Exceeding State Standards in 2001

Grade	Subject	Grant School		School District		State	
		# students	Percentage	# students	Percentage	# students	Percentage
3	Reading	38	81%	1979	81%	32272	84%
3	Math	38	55%	1812	68%	29789	75%
5	Reading	28	48%	1778	69%	30823	77%
5	Math	31	47%	1759	65%	30132	73%

Table D-18

Summary of 2001 English Reading Mean Scores on the Oregon Statewide Assessment (SWA):
Grant Students Meeting State Assessment Standards in English Reading for Grades 3 and 5
by Students' First Language

Students' Primary Language	Years in Two-way Dual Language Immersion Program	# Students not meeting SWA ENGLISH READING standards in 2001	# Students meeting SWA ENGLISH READING standards in 2001	# Students exceeding SWA ENGLISH READING standards in 2001	Total	% students meeting or exceeding standards in Grades 3 & 5
English	1-5	12	21	14	47	74%
Spanish	1-5	11	11	4	26	58%

Table D-19

Summary of 2001 Mathematics Mean Scores on the Oregon Statewide Assessment (SWA):
Grant Students Meeting State Assessment Standards in Mathematics for Grades 3 and 5
by Students' First Language

Students' Primary Language	Years in Two-way Dual Language Immersion Program	# Students not meeting SWA MATH standards in 2001	# Students meeting SWA MATH standards in 2001	# Students exceeding SWA MATH standards in 2001	Total	% students meeting or exceeding standards in Grades 3 & 5
English	1-5	20	20	8	48	58%
Spanish	1-5	25	21	2	48	48%

Table D-20

Hierarchical Linear Regression Analyses: Effects of Socioeconomic Status and Years in Bilingual Program on Native-Spanish Speakers' Academic Achievement

Test	SES R-square minimum value	SES R-square maximum value	Years in Program R-square minimum value	Years in Program R-square maximum value
SOLOM - English	10.6% * +	11.7% * +	14.0% * +	15.1% * +
SOLOM - Spanish	0.2%	0.3%	0.8%	0.8%
SWA - Reading	3.0%	3.5%	5.8% +	6.3% +
SWA - Mathematics	3.4%	4.0%	0.7%	1.3%

Legend: * indicates statistical significance at $p < .05$
 + indicates practical significance (R^2 increment $> 5\%$)

Table D-21

Hierarchical Linear Regression Analyses: Effects of Socioeconomic Status and Years in Bilingual Program on Native-English Speakers' Academic Achievement

Test	SES R-square minimum value	SES R-square maximum value	Years in Program R-square minimum value	Years in Program R-square maximum value
SOLOM - English	4.1% *	4.2% *	0.1%	0.1%
SOLOM - Spanish	1.8%	2.4%	19.5% * +	20.1% * +
SWA - Reading	7.4% +	10.6% +	5.7% +	8.8% * +
SWA - Mathematics	6.0% +	8.1% +	1.9%	4.1%

Legend: * indicates statistical significance at $p < .05$
 + indicates practical significance (R^2 increment $> 5\%$)