



# California Adult Education

Labor Force Status	Morning		Afternoon		Evening	
	N	%	N	%	N	%
Employed	38,823	31.0	30,529	8.2	79,700	61.7
Unemployed	5,465	5.0	1,630	19.7	1,159	14.0
Retired	5,465	66.3	1,630	19.7	1,159	14.0
<b>Total</b>	<b>131,350</b>	<b>44.5</b>	<b>36,024</b>	<b>12.9</b>	<b>123,454</b>	<b>42.6</b>

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## The Relationship of Adult ESL Reading Performance to Instructional Time

*The purpose of this paper is to illustrate the relationship between ESL and ESL-Citizenship learner performance on CASAS reading tests and the amount of instruction learners received. The reading performance of 495,619 learners who were eligible for inclusion on the Federal Tables of Title II of the Workforce Investment Act (WIA Title II) and enrolled in English as a Second Language (ESL) and ESL-Citizenship classes from 1999 through 2003 in California were studied. A consistent positive monotonic relationship was found between the size of the average reading scale score gain and the amount of instructional time received — that is, ESL/ESL-Citizenship learners who received more instruction attained greater gains on CASAS reading tests than learners receiving less instruction. This finding was confirmed in each of the 24 sets of data reviewed.*

► **Research Question:** What is the relationship between ESL and ESL-Citizenship learner performance on CASAS reading tests and the amount of instruction learners received?

The reading performance of ESL and ESL-Citizenship adult learners over a four-year period was studied to see if there was a relationship between the magnitude of CASAS reading test scale score gains and the amount of instruction learners received. Reading scale score gains from 495,619 learners who were enrolled in WIA Title II ESL and ESL-Citizenship classes from 1999 until 2003 in California were analyzed.

### ► Methodology

For each of the four years of the study (1999-2000, 2000-2001, 2001-2002, and 2002-2003), the initial valid reading pretest scores were sorted into the six National Reporting System (NRS) Educational Functioning Levels or pretest reading scale ranges:

- < 180 ESL Beginning Literacy
- 181-200 ESL Beginning
- 201-210 ESL Intermediate Low
- 211-220 ESL Intermediate High
- 221-235 ESL Low Advanced
- 236-245 ESL High Advanced

These pretest scores were sorted into three ascending categories of instructional hours for each year and each NRS level:

- 12 to 74 hours
- 75 to 120 hours
- 121 or more hours

The mean scale score gain was computed for each instructional hour category, at each NRS level, and for each of the four years of the study. The initial data sets for each year were taken from the Dyna Reports of the CASAS Web pages.

### ► Results

From the data in Figure 1, average reading scale scores monotonically increased for each increase of instructional time.

### ► Additional Findings

In 64 out of a possible 72 data points observed (three instructional time categories x 4 years x 6 pretest scale score ranges), an increasing monotonic relationship of mean scale score gains in reading prevailed for each instructional time category at each NRS level across the four years — that is, the mean reading gain increased three times for each of the three instructional time categories at each of the six NRS levels. The deviations from this trend occurred mainly in data points at the very lowest NRS level (<180 ESL beginning literacy) and at the highest level (236-245 ESL high advanced).

Concomitant increases in enrollment in each of the 72 data points also occurred. (See Table 1 for more detailed data.) In 67 of the 72 data points, an increasing monotonic relationship occurred with an increase in enrollment for each year of the study — enrollment increased each year for each instructional time category at each NRS level.

This result was found on each of the six NRS levels for ESL and persisted across each of the four years of the study.

### ► Conclusions

The main finding of this study was that there is a strong positive relationship between the amount of instructional time ESL and ESL-Citizenship learners receive and the average scale score gains they attain on CASAS reading tests. These results were replicated on each of the six NRS levels and in each of the four years of the study.

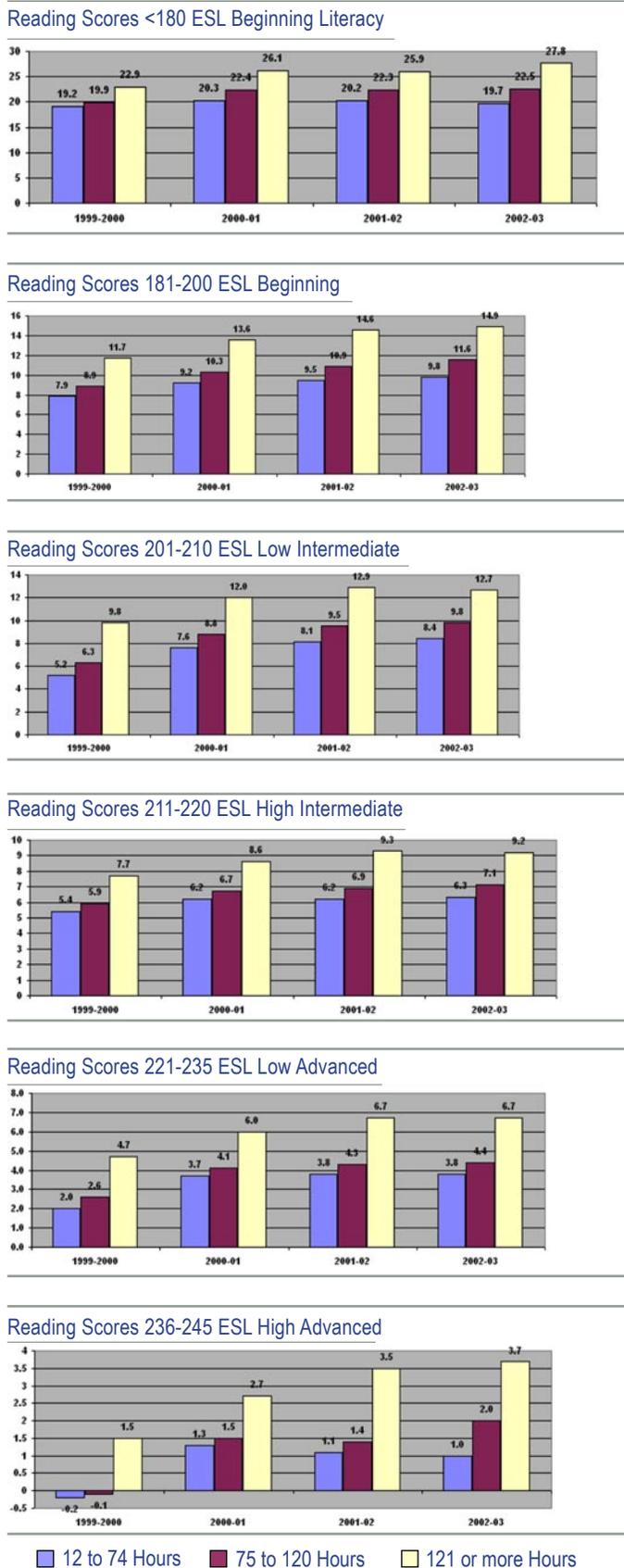
Ancillary findings indicate that an apparent positive relationship in the reading performance of ESL and ESL-Citizenship learners, in part, could have resulted from the policy changes accompanying the implementation of WIA Title II. Positive increases in gain scores within each instructional time category and increases in the number of persisting learners within each of those categories provides an indication of the positive benefits that could be attributed to the continuous improvement efforts and the implementation of pay-for-performance policy adopted by California.

### ► References

CASAS. *Dyna Reports. Research and Reports. State Reports. California 2004.* www.casas.org.

**Developed by** Comprehensive Adult Student Assessment System (CASAS) under contract with the California Department of Education.

**Figure 1**  
Relationship of CASAS Reading Scale Score Gains with the Amount of Instructional Time Received in Six Score Ranges



**Table 1**  
Mean Reading Learning Gains for ESL/ESL-Citizenship by Hours of Instruction

Reading Pretest Scale Score Ranges	Hours of Instruction							
	<180 ESL Beginning Literacy		12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N	Mean	N
1999-2000	19.2	1067	19.9	882	22.9	1036		
2000-01	20.3	2229	22.4	1526	26.1	1811		
2001-02	20.2	2298	22.3	1290	25.9	1584		
2002-03	19.7	2939	22.5	1410	27.8	1852		

181-200 ESL Beginning	Hours of Instruction					
	12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N
1999-2000	7.9	6349	8.9	5105	11.7	5487
2000-01	9.2	11985	10.3	8145	13.6	9380
2001-02	9.5	13211	10.9	8664	14.6	9959
2002-03	9.8	14988	11.6	8623	14.9	10610

201-210 ESL Low Intermediate	Hours of Instruction					
	12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N
1999-2000	5.2	9450	6.3	7989	9.8	10120
2000-01	7.6	15104	8.8	11616	12.0	14879
2001-02	8.1	16757	9.5	12123	12.9	15829
2002-03	8.4	17815	9.8	12662	12.7	16989

211-220 ESL High Intermediate	Hours of Instruction					
	12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N
1999-2000	5.4	4109	5.9	4008	7.7	4898
2000-01	6.2	6803	6.7	5866	8.6	7813
2001-02	6.2	7540	6.9	6399	9.3	8813
2002-03	6.3	8021	7.1	6537	9.2	9615

221-235 ESL Low Advanced	Hours of Instruction					
	12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N
1999-2000	2.0	4976	2.6	4756	4.7	6001
2000-01	3.7	7668	4.1	6716	6.0	9083
2001-02	3.8	8685	4.3	7217	6.7	10439
2002-03	3.8	9085	4.4	7287	6.7	11229

236-245 ESL High Advanced	Hours of Instruction					
	12 to 74 Hours		75 to 120 Hours		121 or more Hours	
Program Years	Mean	N	Mean	N	Mean	N
1999-2000	-0.2	617	-0.1	580	1.5	677
2000-01	1.3	943	1.5	900	2.7	1111
2001-02	1.1	1035	1.4	979	3.5	1271
2002-03	1.0	1097	2.0	937	3.7	1279