

# Estimated Participation and Hours in Early Care and Education by Type of Arrangement and Income at Ages 2 to 4 in 2010

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# Participation and Hours of Early Care and Education: 2010 Summary of Key Findings

# Preschool at age 4 (center-based programs)

- 3 million children (74%) attend preschool at age 4.
- 1 million low-income children (64%) attend preschool at age 4.
- 660,000 children in poverty (64%) attend preschool at age 4.\*
- 720,000 children (18%) have only parental care and education at age 4.
- 390,000 low-income children (24%) have only parental care and education at age 4.
- 200,000 children in poverty (19%) have only parental care and education at age 4.\*

# Preschool at age 3 (center-based programs)

- 2.2 million children (53%) attend preschool at age 3.
- 680,000 low-income children (41%) attend preschool at age 3.
- 470,000 children in poverty (45%) attend preschool at age 3.\*
- 1.2 million children (28%) have only parental care and education at age 3.
- 610,000 low-income children (46%) have only parental care and education at age 3.
- 360,000 children in poverty (35%) have only parental care and education at age 3.\*

# Preschool at age 2 (center-based programs)

- 1.4 million children (34%) attend preschool at age 2.
- 420,000 low-income children (26%) attend preschool at age 2.
- 470,000 children in poverty (25%) attend preschool at age 2.\*
- 1.6 million children (39%) have only parental care and education at age 2.
- 900,000 low-income children (55%) have only parental care and education at age 2.
- 560,000 children in poverty (54%) have only parental care and education at age 2.\*

# Family home day care (nonrelative which also includes nannies)

- 770,000 children (19%) receive non-relative care in a home at age 4, for nearly all of them (17%) this is a secondary arrangement (before or after a center).
- 620,000 children (15%) receive non-relative care in a home at age 3, for most of them (10%) this is a secondary arrangement.
- 680,000 children (17%) receive non-relative care in a home at age 2, for most of them (10%) this is their primary ECE arrangement.

# **Hours of ECE**

- About 35% of 3- and 4-year-olds in preschool attend for more than a 6 hour school day.
- Low-income children, especially those in poverty, attend preschool more hours per day.

# Secondary ECE arrangements

- 59% of children (53% in poverty) have a second ECE arrangement at age 4, 36% (28% in poverty) at age 3, and 21% (13% in poverty) at age 2.
- Most secondary arrangements are relative care.
- Secondary arrangements average 17 hours a week.

\*Estimates for children based on lowest income quintile adjusted to reflect poverty rate of 25%.

# Estimated Participation and Hours in Early Care and Education by Type of Arrangement and Income at Ages 2 to 4 in 2010

We estimate preschool program participation and hours of participation at ages 2, 3, and 4 for 2010. We break down these estimates to provide estimates by income quintile. The lowest income quintile includes most children in poverty and the two lowest quintiles represent children in low-income families (approximately the same as those who qualify for a free or reduced price school lunch. The highest income quintile is approximately those in families with annual incomes above \$100,000. We derive estimates for numbers of children in various arrangements for children in poverty by adjusting the numbers in the bottom quintile upward by 25% to reflect the increase in the poverty rate from 20% to 25% during the recession. We estimate participation in centers by type of center as well as in non-relative care (family home day care), relative care, and at home with a parent.

To produce the best possible estimates of participation, we combined information from multiple data sets. We believe that the resulting estimates are slightly conservative. Enrollment in centers could be slightly higher by one or two percentage points. These estimates are based on surveys and so are subject to sampling error; and this error is greater for each income quintile than for the population as a whole. As a rule of thumb for an entire age cohort many percentages have a confidence interval of about plus or minus 2.5% (e.g., 30% is 27.5&-32.5% and 70% is 67.5%-72.5%) though confidence intervals are smaller for extremes (e.g., 3% is 2-4%, 97% is 96%-98%). For income quintiles, the confidence intervals are about twice as large, plus or minus 5% or 6% down to plus or minus 2% because of the smaller sample sizes.

Our estimates differ from estimates widely reported elsewhere for two primary reasons. First, we report estimates for school-age cohorts. We define "4-year-olds" as children age-eligible to enter kindergarten in fall of 2011. Three-year-olds are children age-eligible for kindergarten in fall of 2012. Others have used current age which does not correspond to a school-age cohort and defines different populations depending on the time of year at which the survey is conducted. Second, as already noted we rely on multiple surveys and government program enrollment data, taking what we believe are the best estimates from each. In the report that follows, we explain both the results and our procedures. The estimates for enrollment by type of center-based program were constructed using information from public agencies on enrollments by age in Head Start, state-funded pre-K programs, and publicly funded preschool special education.

# **Overall Preschool Center Enrollment (Tables 1 and 2)**

In 2010, approximately 6.6 million between the ages of 2 and 5 attended a center-based preschool program. By age this breaks down as: 3 million at age 4, 2.2 million at age 3, and 1.4 million at age 2. Comparable numbers of low-income children are 1 million at age 4, nearly 700,000 at age 3, and more than 400,000 at age 2 for a total of roughly 2.1 million. In 2005, the bottom income quintile corresponded closely to children in poverty. However, the poverty rate for children under five had climbed to 25% by 2010 due to the recession. Therefore, to be more



precise for 2010 we estimated the numbers of children in poverty in various ECE arrangements by multiplying numbers for the lowest quintile by 1.25. We estimate the number of children in poverty attending centers in 2010 as roughly 660,000 at age 4, 470,000 at age 3, and 260,000 at age 2 for a total of about 1.4 million. As the economy improves, these numbers should fall back toward those in our tables as the numbers of children in poverty fall back toward pre-recession levels.

#### **Detailed Estimates of Participation for 2010**

Tables 1 and 2 present our estimates of ECE participation for preschoolers by age and family income. The first table reports rates as the percentage of each income group (5 quintiles) and for the total population. The second reports the absolute numbers. As can be seen participation rates rise steeply with age. Center-based participation increases even more by age than total non-parental ECE—for all but the highest income families (top 20%) who have very high rates of participation at both ages 3 and 4 and exceed 50% even at age 2. For the population as a whole, about three-quarters attend centers at age 4, more than half at age 3, and a third at age 2. These are total participation rates for centers (that is, not always the ECE arrangements in which children spend the most time per week). For relative and non-relative ECE we present estimates for primary (when this is where the child spends the most time outside the home) and secondary (when the child spends more time in another ECE arrangement) arrangements separately. For these reasons the estimates for these arrangements cannot be added up to get a total in any ECE arrangement. Note that the estimates for 2-year-olds rely only on data from the 2005 NHES survey updated using the 2010 census figures for numbers of children (as explained later).

Participation rates are presented by income quintile. The bottom quintile corresponds most closely to children in poverty. As key data for our estimates are from 2005 we continue to work with this bottom quintile to estimate the percentages of children in poverty participating in various arrangements, but multiply the numbers in the quintile by 1.25 to reflect the higher poverty rate in 2010. The bottom two quintiles correspond closely to families qualifying for a free or reduced-price lunch in the federal school lunch program. ECE participation varies gradually with family income, so that slight differences from the categories set out in Table 1 will not make much difference to percentages. As Table 1 shows, the really large differences in enrollment by income are for the top two income quintiles compared to everyone else, and at ages 2 and 3 between the top two quintiles, as well. The bottom three quintiles which encompass 60% of the population vary relatively little from each other in their participation rates, likely due to the availability of public programs and subsidies for low-income families, especially those in the bottom quintile.

We estimate participation rates for two broad categories of ECE—centers and non-center ECE and then break these down further by type. Total non-parental ECE participation is more than 80% (74% centers) for 4-year-olds, 70% (53% centers) for 3-year-olds and 60% (34%) for 2 year olds. (The total in any type of ECE can be calculated from Table 1 by subtracting the percentage in only parental care from 1.) These trends are remarkably linear by age from 2 to five—total



participation increases by about 10 percentage points per year of age and center participation increases by about 20 percentage points per year of age.

Tables 3 and 4 report estimated center enrollment for three major types of programs. Centers include programs under the auspices of the public schools, Head Start, and private preschools, nurseries, and child care centers. Parents most likely categorize programs by some combination of location, program name, and whether they pay for it or not. As a result, parental report contains substantial error. For our estimates, we combine under "public school" state-funded pre-K and preschool special education regardless of location (these may be provided by a private program under contract) as well as other programs provided through the public schools. Head Start is federally funded (for the most part, some states provide supplements), but can be operated by the public schools or a private agency. We report as "private" programs that are privately administered and do not receive public education or Head Start funds; they may receive public child care subsidies. Despite our best efforts to synchronize our estimates. Estimates by type of program are less accurate that overall estimates of center enrollment.

Non-center ECE is categorized as non-relative care, relative care, and parental care in the home. Non-relative and relative care could be in another home or the child's own home. Most nonrelative care is family home day care in the provider's home. As can be seen from Table 1, family home day care by non-relatives is primarily a secondary arrangement (probably before and after "school") at ages 3 and 4. Relative care is somewhat more common than non-relative care at ages 2 and 3 and is more likely to be a primary arrangement at all three ages.

The estimates for numbers and percentage of the population participating in ECE arrangements at age 2 are based solely on the 2005 NHES combined with census data on the total number of 2-year-olds. The use of 2005 data alone is unavoidable as the CPS does not include children under 3 in the school enrollment survey. However, there has been little growth in public provision for this age group so we believe that there has been little overall change in participation at age 2.

# Hours in ECE by Age, Income and Type of Arrangement

The average time per week for a child in all nonparental ECE is 28 hours at ages 3-5 and 30 hours at age 2. However, there is considerable variable within each age group and by type of arrangement. Table 5 reports estimated hours by primary ECE arrangement (the arrangement in which children spend the most time) at ages 3 and 4. Across all types of ECE, the most common situation is a part-day program of no more than 15 hours per week, followed by full-day arrangements (more than 6 hours per day). About a quarter of those participating have arrangement total hours for children in each of these categories are somewhat greater. Length of day clearly varies by type of arrangement. Preschool special education is most likely to be short part-day. Head Start is least likely to be short part day. Private programs are most likely to be for a full work day. The categories used Tables 5 and 6 (discussed below) are from the 2005



NHES and do not correspond precisely to those used earlier. In some respects they may be less accurate. For example, free private programs are likely to include parental report of state-funded pre-K provided in a private center as well as subsidized child care for which there was no co-pay.

We also estimate hours in primary arrangements by income. As can be seen in Table 6, hours vary substantially across income quintiles. At age 3, there is clear negative relationship between hours and income; the lower the family income the longer the hours a child in nonparental ECE spends in that arrangement. At age 4, the two lowest income quintiles have the lowest rates in arrangements of less than 15 hours, but variation in hours across the income quintiles is less regular across the other quintiles than at age 3. Participation rates in part-day, school-day, and full-day programs are remarkably similar by age for the total population despite considerable differences by age within income categories.

#### **Secondary ECE Arrangements**

Some children attend more than one ECE arrangement. This is particularly likely when the primary arrangement is part-day. Table 7 presents estimates of the rates by age family income based on the 2005 NHES. As can be seen about 60% of children have two or more ECE arrangements at age 4, just over 45% at age 3, and slightly more than 20% at age 2. Note that these are percentages of all children. Among those who have at least one ECE arrangement other than parental care, 72% at age 4, 64% at age 3, and 35% at age 2 have a second arrangement. The vast majority of the second arrangements at all ages. Family home day care is next most common. Numbers of children in each type of secondary arrangement are reported in Table 8.

Finally, we provide estimates of hours in secondary arrangements in Table 9. The average hours per week in a secondary arrangement for those using them is about 17 hours a week at all ages. Nonrelative secondary arrangements tend to used for more hours per week. Center-based secondary arrangements tend to be fewer hours—often these were special education services (determined from analysis within center by type not shown here).

#### Participation Rates by Language of Child

In addition to differences in ECE participation by income, there are differences in participation rates by such other family background characteristics as parent education, ethnicity, how long the family has been in the United States, and home language. These other family characteristics are to some extent correlated with income. In recent years, the demographics of the population have changed. Today, roughly one in five children under age 6 has at least one parent who is an immigrant. For about the same number, a language other than English (usually Spanish) is the primary language of the home. To supplement the numbers presented in Tables 1 and 2, Table 10 presents estimates (based on 2005 data) for variation in ECE participation *rates* by the child's dominant language (parental language yields essentially the same results).



Children for whom Spanish is the dominant language are more likely to be at home with a parent and less likely to be in a center at all three ages than are other children. Children speaking English and Spanish equally are more likely to be at home with a parent and less likely to be in a center than are other children at ages 2 and 3, but not at age 4. Results for children speaking English and a language other than Spanish equally should be viewed cautiously as there are relatively few children in the sample (and the population) in this category. Finally, children speaking a language other than English or Spanish are more likely than others to be in preschool centers and less likely than others to be at home with a parent at ages 3 and 4.

# **Detailed Explanation of Procedures for Estimating Participation**

We used three primary sources of data on ECE participation to estimate 2010 participation rates for each type of ECE arrangement by income. One is the October Supplement to the Current Population Survey (CPS) which obtains survey data annually from parents on school enrollment by age of child. The CPS data are available for each year through 2010. The other is the spring 2005 National Household Education (NHES) survey which can be compared to the fall 2004 CPS as both apply to the same school year. In addition, we use government program data on enrollment rates for state-funded pre-K (collected directly by NIEER), preschool special education, and Head Start for 2010 to obtain more precise estimates of enrollment in centers by type than parents might be able to provide.

The CPS and NHES yield very different estimates of participation rates for center-based ECE. The NHES reports much higher rates. As the NHES is a much more detailed survey of ECE arrangements than is the CPS, we judge it to provide more accurate estimates of participation, especially for private arrangements that might not be considered "school." In addition, it is much more likely that a survey would miss some participation because the survey did not probe deeply enough or ask the right questions than that parents would misreport participation that did not occur so we would tend to accept larger estimates as more accurate.

Unfortunately, the most recent NHES data available today are from spring of 2005. Comparing these NHES data to the CPS for fall of 2004, the estimates for center-based enrollment at age 3 are 50% from the NHES and 38% from the CPS. At age 4 the center-based estimates are 74% from the NHES and 67% from the CPS. The higher rates from the NHES are almost entirely due to a higher level of reported participation in private centers. Participation rates for public programs are quite similar between the two surveys. A plausible explanation for this is that the CPS is a brief survey of "school enrollment," while the NHES is an exhaustive survey of all possible ECE arrangements. In addition to providing more complete information on center participation, the NHES also provides estimates of participation in home-based ECE, another advantage of incorporating this data source into our estimation procedure.

The primary concern with using data from the NHES 2005 is that changes in participation have occurred since then. To see how much change has taken place we compared the CPS 2004 to the CPS 2010. Overall, center-based enrollments are only 1 percentage point higher at age 3 and



2 percentage points higher at age 4 in 2010 compared to 2004. Of course, this could be an underestimate, if there had been a larger increase in private ECE arrangements than in public arrangements. Our sense is that the private sector has not expanded more rapidly. This is consistent with labor force participation rates for women with young children which have been roughly constant over that time and have declined since 2000.

A 1 to 2 percentage point error due to change over time is relatively trivial compared to the error in the CPS due methodology that is implied by a comparison to the NHES. Thus, we use the NHES 2005 to estimate the overall level of center-based participation. However, we use the CPS 2010 to estimate public program participation within the overall totals. Private center participation is calculated by subtracting the 2010 public participation estimates from the 2005 total participation rates. Government program data from 2010 are highly consistent with the CPS 2010 public program estimates. An implication of our estimates is that much of the increase in participation rates in public programs drew from children who would have attended private centers and not just from those who would have been in family home day care or at home with a parent. However, this is one of the less certain conclusions from our estimation procedures.

The comparison of CPS estimates over time also suggests that the estimates we provide will remain useful for the next several years because there is little overall change in center enrollment from year to year. Changes in the public-private share of enrollment have been somewhat larger from year to year, but NIEER data show that growth in public programs slowed during the recession. In any case, NIEER directly estimates public program participation rates each year and these could be used to update the estimates presented here in the future.

Throughout this report our estimates are for the *percentage* and *numbers* of each age group in each ECE arrangement. Even if there was little change in participation rates in centers between 2004 and 2010 there was an increase in absolute numbers of children enrolled because of population growth. The preschool population increased by about 5% between the 2010 and 2000 censuses. As a result, it is quite possible that the share of enrollment in private centers declined somewhat while the absolute numbers enrolled in private centers did not. However, it is important to keep in mind that private centers are counted under public school in our estimates enrollment when they provide state funded pre-K, and in some states (e.g., Florida and New Jersey) private programs provide most state funded pre-K. In this case, children can from a parent's perspective be in one program (one ECE arrangement) for 8 hours a day, but from a policy perspective be a public program for 2.5 hours per day and a private program 5.5 hours per day—this would not show up in our estimates as a child with two arrangements, however.

Government program enrollment data provide a useful basis for comparison to the survey data as parents can have difficulty accurately reporting a program's auspices. Location is not always a good guide as a public school can operate Head Start and child care (e.g., as a jobs training program). Head Start agencies and private centers can provide state-funded pre-K. We compared official program data with the survey data. The results are highly consistent. Parent reported Head Start is somewhat higher than federally funded enrollment (13% v. 11%), but



Head Start receives supplemental funding from other sources so the difference is not all error. Parent reported public school is expected to be higher because it includes enrollment by schools that provide pre-K with local school and federal Title I funds, including schools in the 11 states that do not fund pre-K. Again, the difference seems reasonable.



	Quintiles of Income								
Туре	Ι	II	III	IV	V	Total			
Age 2									
Center	25.1	26.3	26.1	38.5	56.6	34.5			
Relative Primary	14.4	15.0	21.6	14.2	15.4	16.1			
Non-Relative Primary	6.0	3.3	11.4	16.6	12.6	10.0			
Relative Secondary	0.2	1.5	2.6	3.4	6.9	2.9			
Non-Relative Secondary	6.3	3.7	8.3	4.7	9.7	6.5			
Parent Only	54.4	55.5	40.9	30.8	15.5	39.4			
Age 3									
Center	45.4	37.0	42.7	58.6	82.5	53.2			
Relative Primary	14.7	21.0	15.5	9.9	5.0	13.2			
Non-Relative Primary	4.9	3.0	7.0	9.5	2.2	5.3			
Relative Secondary	4.8	1.3	5.9	4.5	10.5	5.4			
Non-Relative Secondary	6.4	9.7	5.7	11.0	15.3	9.6			
Parent Only	35.1	39.1	34.8	22.1	10.3	28.3			
Age 4									
Center	64.4	64.2	68.8	84.7	89.9	74.4			
Relative Primary	15.8	5.2	5.8	2.1	1.3	6.1			
Non-Relative Primary	0.4	2.4	2.0	2.6	1.4	1.8			
Relative Secondary	2.3	4.8	5.1	7.8	7.0	5.4			
Non-Relative Secondary	16.8	14.9	19.3	16.0	18.6	17.1			
Parent Only	19.3	28.2	23.5	10.6	7.4	17.8			

#### Table 1. Estimated ECE Participation Rates 2010.



#### Table 2. ECE Participation Numbers 2010

	Quintiles of Income								
Туре		II		IV	V	Total			
Age 2									
Center	205,795	215,122	213,655	315,414	463,838	1,413,824			
Relative Primary	118,123	122,564	177,381	116,197	126,128	660,392			
Non-Relative Primary	49,343	26,909	93,656	135,854	102,833	408,595			
Relative Secondary Non-Relative	1,989	12,594	21,279	27,818	56,144	119,825			
Secondary	51,531	30,440	68,058	38,757	79,554	268,341			
Parent Only	446,074	454,841	334,719	251,961	126,595	1,614,190			
Age 3									
Center	374,256	305,174	352,441	483,288	680,593	2,195,751			
Relative Primary	120,916	172,938	128,231	81,714	41,286	545,085			
Non-Relative Primary	40,552	24,694	57,532	78,018	18,069	218,864			
Relative Secondary Non-Relative	39,438	10,841	48,662	36,938	86,961	222,841			
Secondary	53,104	79,904	47,037	90,674	125,847	396,566			
Parent Only	289,266	322,186	286,874	182,091	85,146	1,165,564			
Age 4									
Center	524,335	522,707	559,564	689,307	731,217	3,027,131			
Relative Primary	128,921	42,598	46,928	17,122	10,807	246,377			
Non-Relative Primary	3,404	19,214	16,341	20,890	11,621	71,470			
Relative Secondary Non-Relative	18,888	39,070	41,097	63,500	57,315	219,871			
Secondary	136,571	121,414	157,401	129,963	151,365	696,713			
Parent Only	157,143	229,245	190,916	86,506	60,164	723,975			



	Quintiles of Income						
Туре	I	II	III	IV	V	Total	
Age 2							
Public	1.6	1.5	2.5	2.7	1.2	1.9	
Head Start	5.5	5.9	1.5	0.7	0.0	2.7	
Private	18.5	19.6	23.0	35.1	55.4	30.3	
Total	25.6	27.1	27.0	38.5	56.6	35.0	
Age 3							
Public	5.0	13.9	15.1	13.9	12.6	12.1	
Head Start	19.6	9.4	7.1	0.6	0.8	7.	
Private	20.8	14.4	20.5	44.1	69.1	33.8	
Total	45.4	37.8	42.7	58.6	82.5	53.4	
Age 4							
Public	28.6	26.6	44.0	37.7	29.6	33.3	
Head Start	29.3	22.8	3.6	5.1	0.0	12.	
Private	6.5	14.8	21.1	41.9	60.3	28.	
Total	64.4	64.2	68.8	84.7	89.9	74.	

#### Table 3. ECE Participation Rates in Center-Based Care by Type 2010.



	Quintiles of Income									
Туре		I		IV	V	Total				
Age 2										
Public	13,268	12,547	20,796	21,751	10,131	78,493				
Head Start	45,386	48,565	12,127	5,807	-	111,885				
Private	151,201	160,550	188,325	287,801	453,751	1,241,630				
Total	209,855	221,663	221,248	315,359	463,882	1,432,007				
Age 3										
Public	40,912	114,678	124,895	114,547	103,749	498,781				
Head Start	161,382	77,795	58,654	5,000	6,940	309,771				
Private	171,946	119,078	168,885	363,732	569,914	1,393,554				
Total	374,239	311,551	352,433	483,279	680,603	2,202,106				
Age 4										
Public	232,744	216,849	358,417	306,916	240,604	1,355,530				
Head Start	238,360	185,545	29,386	41,137	-	494,428				
Private	53,182	120,256	171,793	341,214	490,597	1,177,042				
Total	524,286	522,650	559,597	689,266	731,201	3,027,001				

#### Table 4. ECE Participation Numbers in Center-Based Care by Type 2010.



Type/Hours	<15	15-30	>30	Total
Age 3				
Head Start	24.6	40.6	34.8	100.0
Special Education	46.9	29.6	23.5	100.0
Public School	42.7	24.9	32.5	100.0
Private-fee	44.4	17.8	37.8	100.0
Private-free	36.6	25.6	37.8	100.0
Total	40.8	23.3	36.0	100.0
Age 4				
Head Start	27.0	37.7	35.3	100.0
Special Education	49.5	34.9	15.6	100.0
Public School	33.9	33.7	32.4	100.0
Private-fee	42.6	20.1	37.3	100.0
Private-free	32.4	24.6	43.0	100.0
Total	38.0	27.2	34.9	100.0

# Table 5. Weekly hours in primary care arrangement by type of center-based care (2005).



Quintiles of Income/Hours	<15	15-30	>30	Total
Age 3				
First	28.1	27.6	44.3	100.0
Second	33.5	26.5	40.0	100.0
Third	40.9	23.0	36.2	100.0
Fourth	43.7	18.1	38.2	100.0
Fifth	55.4	23.0	21.6	100.0
Total	40.8	23.3	36.0	100.0
Age 4				
First	20.2	30.9	48.9	100.0
Second	27.9	35.3	36.8	100.0
Third	50.4	25.4	24.2	100.0
Fourth	48.4	22.3	29.3	100.0
Fifth	40.6	22.4	37.0	100.0
Total	38.0	27.2	34.9	100.0

# Table 6. Weekly hours spent in the primary ECE arrangement by income quintile (2005).



	Income Quintiles						
Туре	1	2	3	4	5	Total	
Age 2							
Center	0.00	0.43	0.00	1.22	6.17	0.96	
Non-Relative	1.65	2.44	5.82	8.60	23.00	6.10	
Relative	11.61	8.93	17.73	15.66	27.82	14.39	
None	86.75	88.19	76.45	74.53	43.01	78.55	
Total	100.00	100.00	100.00	100.00	100.00	100.00	
Age 3							
Center	0.76	0.51	2.40	6.77	3.15	2.47	
Non-Relative	9.77	2.57	11.62	11.81	28.27	10.48	
Relative	17.84	20.58	17.50	27.65	40.91	22.80	
None	71.63	76.34	68.48	53.77	27.67	64.24	
Total	100.00	100.00	100.00	100.00	100.00	100.00	
Age 4							
Center	5.01	7.37	4.50	8.59	9.99	6.93	
Non-Relative	5.69	9.85	12.14	20.19	20.11	12.90	
Relative	42.01	29.71	38.52	43.70	50.63	39.05	
None	47.30	53.08	44.84	27.51	19.28	41.12	
Total	100.00	100.00	100.00	100.00	100.00	100.00	

#### Table 7. Participation Rates in Secondary ECE Arrangements 2005/2010.



Income Quintiles								
Туре	1	2	3	4	5	Total		
Age 2								
Center	-	3,559	-	9,997	50,581	64,136		
Non-Relative	13,479	20,009	47,672	70,434	188,459	340,053		
Relative	95,131	73,196	145,277	128,316	227,953	669,873		
None	710,817	722,617	626,421	610,688	352,418	3,022,961		
Total	819,427	819,380	819,370	819,435	819,411	4,097,023		
Age 3								
Center	6,297	4,245	19,818	55,832	26,022	112,214		
Non-Relative	80,567	21,204	95,872	97,440	233,245	528,328		
Relative	147,191	169,798	144,386	228,129	337,532	1,027,036		
None	590,991	629,852	565,002	443,635	228,294	2,457,774		
Total	825,046	825,098	825,078	825,036	825,094	4,125,352		
Age 4								
Center	40,779	59,944	36,604	69,937	81,257	288,522		
Non-Relative	46,264	80,167	98,794	164,305	163,654	553,184		
Relative	341,874	241,778	313,473	355,628	412,023	1,664,776		
None	384,924	431,961	364,905	223,874	156,899	1,562,564		
Total Source: NIEEF	813,842 R calculatio	813,850 ons based	813,777 I on NHES	813,744 2005 and	813,834 d Census	4,069,046 2010.		

# Table 8. Numbers of Children in Secondary ECE Arrrangements 2010.



<5	5-10	>10	Total	Mean
36.76	51.07	12.17	100.00	7.32
6.78	15.81	77.42	100.00	25.80
15.76	32.53	51.71	100.00	12.78
3.04	6.14	90.83	100.00	16.24
35.78	32.87	31.36	100.00	7.20
24.69	15.28	60.03	100.00	20.02
15.50	23.85	60.65	100.00	17.68
7.01	7.85	85.14	100.00	17.64
16.75	28.00	55.26	100.00	12.87
12.69	15.04	72.27	100.00	20.57
15.58	20.09	64.33	100.00	17.07
8.88	11.73	79.39	100.00	17.34
	36.76 6.78 15.76 3.04 35.78 24.69 15.50 7.01 16.75 12.69 15.58	36.76       51.07         6.78       15.81         15.76       32.53         3.04       6.14         35.78       32.87         24.69       15.28         15.50       23.85         7.01       7.85         16.75       28.00         12.69       15.04         15.58       20.09	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6.78       15.81       77.42       100.00         15.76       32.53       51.71       100.00         3.04       6.14       90.83       100.00         35.78       32.87       31.36       100.00         24.69       15.28       60.03       100.00         15.50       23.85       60.65       100.00         7.01       7.85       85.14       100.00         12.69       15.04       72.27       100.00         15.58       20.09       64.33       100.00

#### Table 9. Hours in Secondary Arrangements (2005).



# Table 10. ECE Participation Rates by Primary and Secondary types, by Child's Language (2005).

	CHILD'S PREDOMINANT LANGUAGE								
			English						
_			&	English &					
Туре	English	Spanish	Spanish	Other	Other	Total			
Age 2									
Center Primary	35.7	14.7	16.2	51.3	40.0	33.4			
Relative Primary	13.9	13.7	16.0	24.1	11.3	13.9			
Non-Relative Primary	13.1	7.2	4.2	6.1	5.3	12.0			
Relative Secondary	7.2	1.5	0.9	0.0	0.0	6.2			
Non-Relative Secondary	3.1	0.4	2.0	0.0	0.0	2.7			
None	37.4	64.4	63.6	18.6	43.4	40.8			
Age 3									
Center Primary	52.7	26.6	26.9	47.0	71.4	50.5			
Relative Primary	12.5	14.9	16.2	4.3	18.9	12.9			
Non-Relative Primary	7.0	5.0	11.2	0.0	0.0	6.7			
Relative Secondary	10.0	3.6	7.8	9.5	0.0	9.2			
Non-Relative Secondary	5.3	2.2	0.0	0.0	0.0	4.8			
None	27.8	53.5	45.7	48.7	9.8	29.9			
Age 4									
Center Primary	75.5	50.9	73.6	62.7	86.6	73.5			
Relative Primary	5.4	9.8	9.9	0.0	1.8	5.7			
Non-Relative Primary	2.3	3.1	0.0	0.0	0.0	2.3			
Relative Secondary	18.5	4.4	3.8	18.9	2.6	16.8			
Non-Relative Secondary	5.3	7.6	3.5	0.0	3.6	5.4			
None	16.8	36.2	16.5	37.3	11.6	18.5			