

**Agency:** Department of Education and Early Development**Project Title:****Project Type:** Other

# Alaska Pilot Pre-Kindergarten Project Expansion

**State Funding Requested:** \$973,000  
One-Time Need**House District:** Anchorage Areawide (16-32)**Brief Project Description:**

This project would expand the number of Alaska Pilot Pre-Kindergarten Project classrooms in Anchorage from two to up to thirteen.

**Funding Plan:**

Total Project Cost:	\$973,000
Funding Already Secured:	(\$0)
FY2013 State Funding Request:	<u>(\$973,000)</u>
Project Deficit:	\$0

*Funding Details:*

There are currently two Alaska Pilot Pre-Kindergarten Project classrooms operating in Anchorage at a cost of \$167,684 for one Fall through Spring school year. An additional \$1,000 is spent on program evaluation (pre- and post-assessments).

**Detailed Project Description and Justification:**

Child development research, neuroscience, and program evaluations demonstrate that the experiences a child has between birth and age five shape the developing brain's architecture and directly influence later life outcomes, including economic stability, work productivity, and mental health. Positive early childhood experiences also improve developmental and school readiness outcomes, increase K-12 achievement, and contribute to higher rates of high school graduation.

Currently, the Department of Education & Early Development operates two Alaska Pilot Pre-Kindergarten Project classrooms in the Anchorage School District, serving a total of 36 children. The two classrooms are located at Creekside Elementary School and Willow Crest Elementary School. Their hours of operation are three to five hours per day, four to five days per week.

This funding would add up to 11 pre-kindergarten classrooms, potentially providing pre-kindergarten for an additional 200 Anchorage children.

**Project Timeline:**

The classrooms would begin operating at the beginning of the school year in Fall 2012.

**Entity Responsible for the Ongoing Operation and Maintenance of this Project:**

Department of Education & Early Development

**Grant Recipient Contact Information:**

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Has this project been through a public review process at the local level and is it a community priority? ☐ Yes ☒ No

**State of Alaska**  
**Department of Education & Early Development**

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**Alaska Pilot Pre-Kindergarten Project (AP3)**  
**Year Two Report**



**January 2012**

## **Introduction**

In April of 2009, the Alaska Legislature provided EED with \$2,000,000.00 in General Funds for a pilot Pre-Kindergarten project (AP3). The application process was built on the lessons learned in the Alaska Community Preschool Project (ACPP was a federally funded model preschool project that served approximately 250 young children per year in seven communities around Alaska from FY 05 through FY 08). As in that project the AP3 offered bonus points in the Request for Application (RFA) for partnerships with other entities and for those willing to participate in Department-offered training. In the AP3 EED also required the use of certified teachers with an early childhood background along with specific pre- and post-assessments for outcomes for both the children and the program.

### **Selection of AP3 Grantees and Sites**

Requests for Applications (RFAs) were sent to all Alaska school districts in late April of 2009. Twenty-four districts submitted letters of intent and twelve of those districts submitted full applications. A five-person review team comprised of Department staff, University of Alaska staff, and Best Beginnings staff with early childhood backgrounds read, scored, deliberated and debated the merits of the applications. The department negotiated amounts with the top six scoring districts to enable the top half of the applicants to receive grant awards.

\$300,000.00 was set aside for use with intervention districts (as stated in the RFA), supporting early childhood work with two chronically underperforming districts; the Lower Yukon School District, and the Yupiit School District. The department provided each with \$150,000 for an early childhood specialist to implement coordination of existing early childhood programs and the districts to improve services and outcomes for 210 additional children.

All but two of the LYSD communities have Head Start programs providing center-based early care and education services for young children and families, so they also focused on providing materials, training and technical assistance to families in those two communities. Through their collaboration efforts more regular communication between the school district and the Head Start programs is occurring, and they have procured grant funds to develop and implement preschools in the two communities not served by Head Start.

In the Yupiit school district all three communities are served by multiple programs. Head start provides center-based early care and education services for children and families, the school district provides a language and literacy focused home visiting program, and a tribal entity provides cultural and native language supports by connecting staff and local elders to families in another home visiting model. The YSD early childhood specialist brings the three programs together for regularly scheduled meetings, trainings, and planning sessions to avoid duplication of services and to better support the needs of individual children and families. They have developed and implemented a summer transition program for the children coming to kindergarten in the fall. Both districts and their local early childhood partners participated in department provided trainings as well as the DEED Summer Literacy Institute.

As in year one the same six districts received the same level of funding through the second year of the competitive grant. The six districts provided services to 248 children and their families in the fall 2010 through spring 2011 school year. This represents an increase of 24% over the 200 children served in these districts in the first year of the grant.

### **Year Two Numbers of Children Served and Grant Amounts**

<b>District</b>	<b>Classrooms</b>	<b>Children</b>	<b>Grant Amount</b>
Anchorage	2	36	\$167,684
Bering Strait	4	49	\$362,828
Juneau	2	40	\$201,073
Lower Kuskokwim	2	29	\$337,732
Nome	2	40	\$219,539
Yukon Koyukuk	7	54	\$325,445
<b>Total</b>	<b>19</b>	<b>248</b>	<b>\$1,614,301</b>

The remaining \$85,699 provided the majority of the costs for program evaluations.

This report presents information on the second year performance of the AP3 project in both child outcomes and in program outcomes. It also includes data showing year two in comparison to year one. It is important to note that these are comparisons of different cadres or groupings of children and not a year to year comparison of the same children.

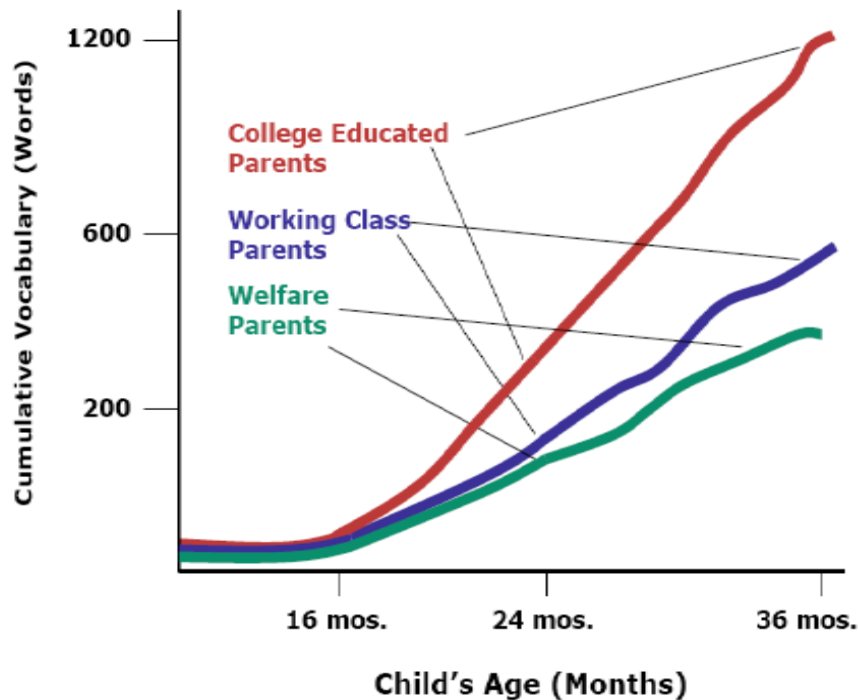
In year two, as in year one, child outcome data was gathered through the use of the Peabody Picture Vocabulary Test (PPVT) and the Developmental Indicators for the Assessment of Learning (DIAL – 3). Program outcomes were evaluated through the use of the Early Childhood Environmental Rating Scale (ECERS - R).

## **Determining Child Outcomes**

### **Why is Vocabulary Important?**

The following chart shows the vocabulary “gap” at three years of age between children living in poverty (approximately a 300 word vocabulary), those in working class families (approximately a 600 word vocabulary) , and those with college educated parents (approximately a 1200 word vocabulary). This gap at age three is similar to the gap we are seeing when children enter kindergarten. We can now see the gap beginning to form as early as 16 months.

## Disparities in Early Vocabulary Growth



Source: Hart & Risley (1995)

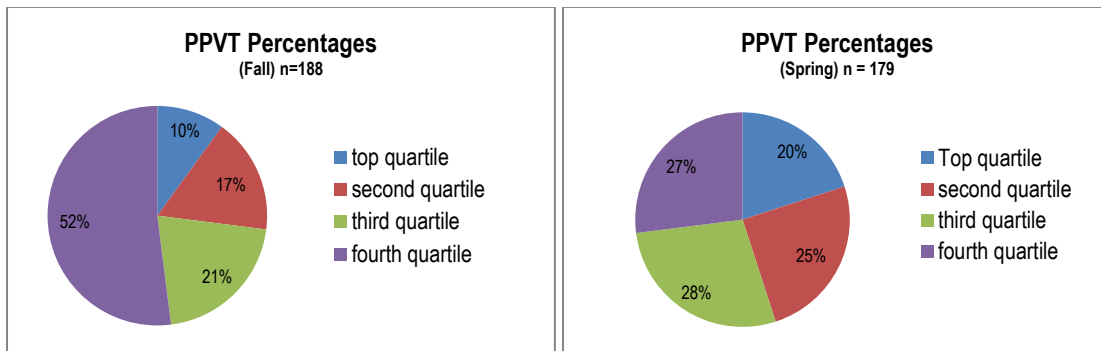
Today in America one in five children is living in poverty with rural areas showing an even higher percentage, and by percentage one third again as many of those rural children are living in deep poverty. Across our country four-year-old children from poor families are eighteen months behind other four-year-old children developmentally. These poverty statistics come from Mark Shriver M.P.A. Managing Director for U.S. Programs, Save the Children and from William O'Hare, Ph.D. President, O'Hare Data & Demographics Services LLC.

### Peabody Picture Vocabulary Test (PPVT)

The PPVT provides information on vocabulary and receptive language development. It is a norm-referenced test designed to assess children's scholastic aptitude in terms of verbal ability from age 2 years 6 months, to age 7 years and 4 months. The PPVT is an English language assessment that has been in use with large numbers of early childhood settings for many years. It is known for its correlation to later school success. This assessment allows for national comparison and for growth model use in a pre and post methodology.

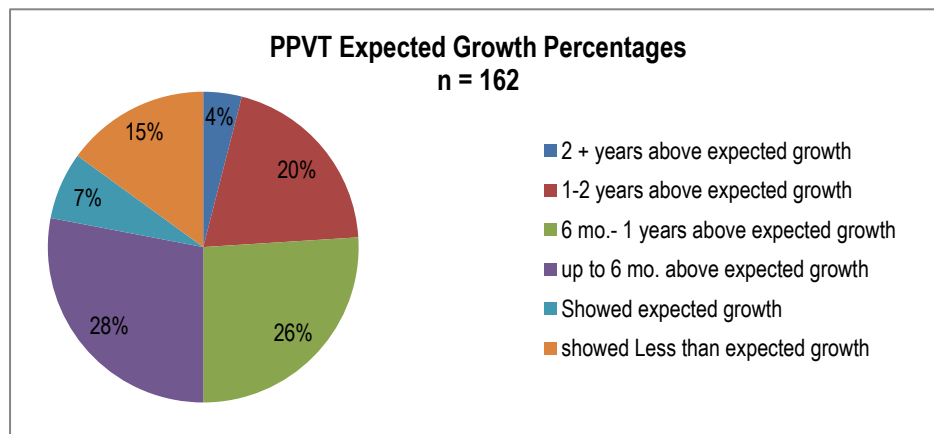
## State Aggregate PPVT Child Outcomes

These two charts illustrate the significant improvement in percentile ranking from fall to spring compared to same age peers nationally.



**18% of the children have moved from the bottom 2 quartiles to the top two.  
25% of the children have moved out of the bottom quartile.**

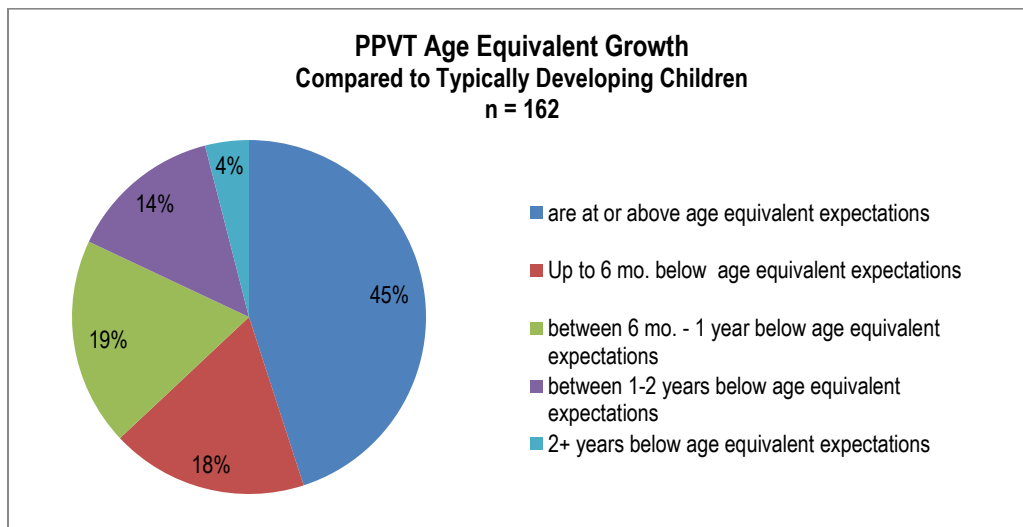
In terms of Age Equivalence, the PPVT data shows greater depth of growth of the students' vocabulary. The Age Equivalence data shows information on the children's (and the programs') success in closing gaps in vocabulary development.



The chart above illustrates children's actual growth in terms of months of growth, as compared to the expected growth for the time between assessments. As an example, 20% of children showed 19 to 31 months of growth in the seven months between the pre and post tests.

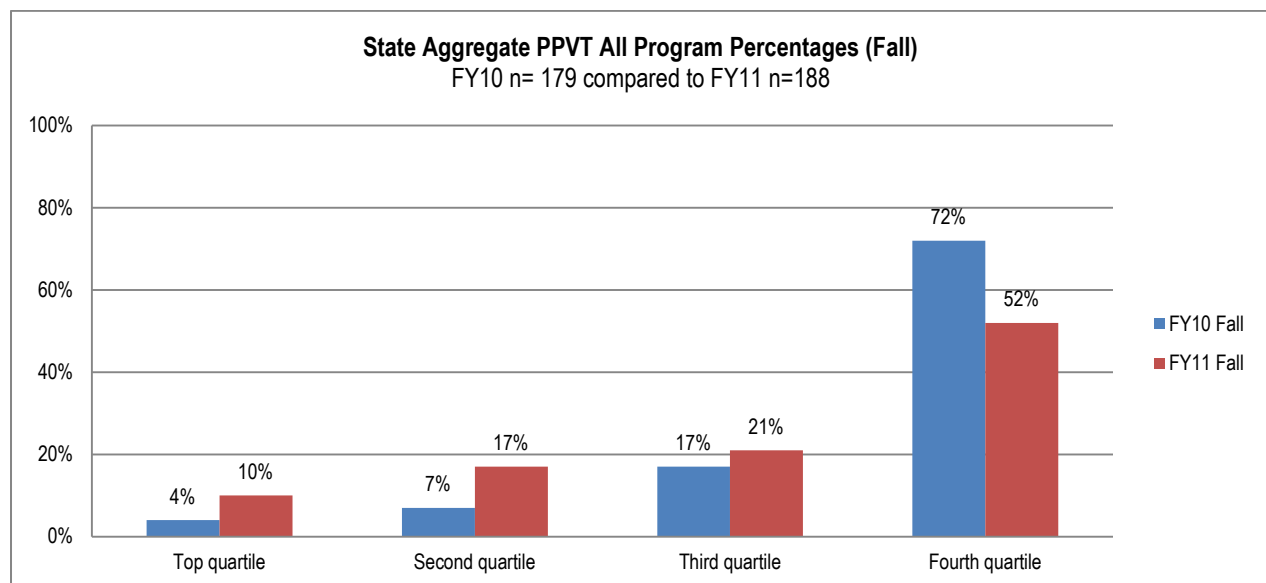
**78% of students have shown above-expected growth.**

A final analysis illustrates the students' growth in relation to an age-equivalent typically-developing child on a national level. As an example, at the end of the year 19% of the Pre-K children assessed scored six to twelve months below a typically developing child nationally.



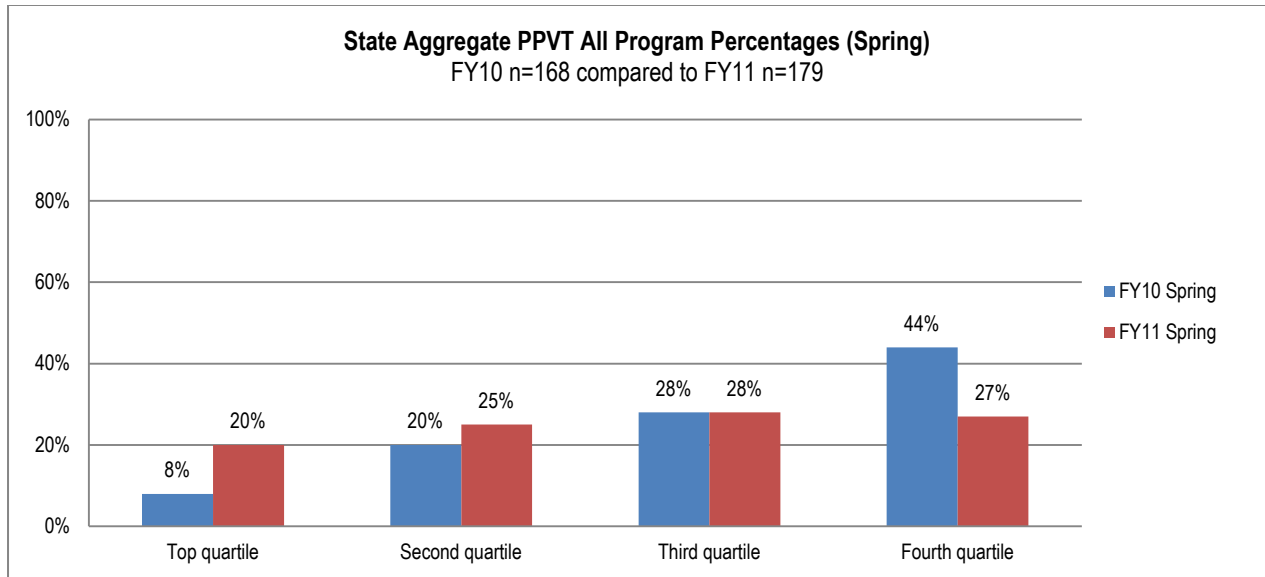
**45% of students are at or above age equivalent expectations compared nationally.**

## Year 1 & Year 2 Comparisons

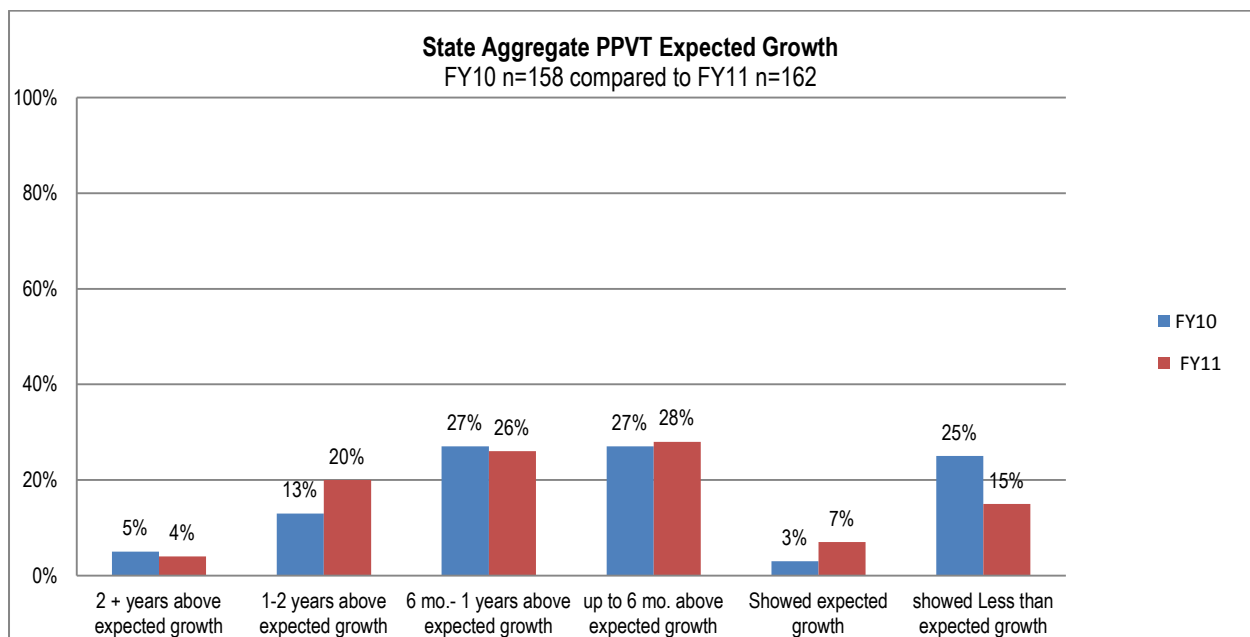


In year one a large majority of the children started in the bottom half on the English vocabulary assessment. While year two had a majority scoring in the bottom half as well, this group started with 16% more children in the top half.

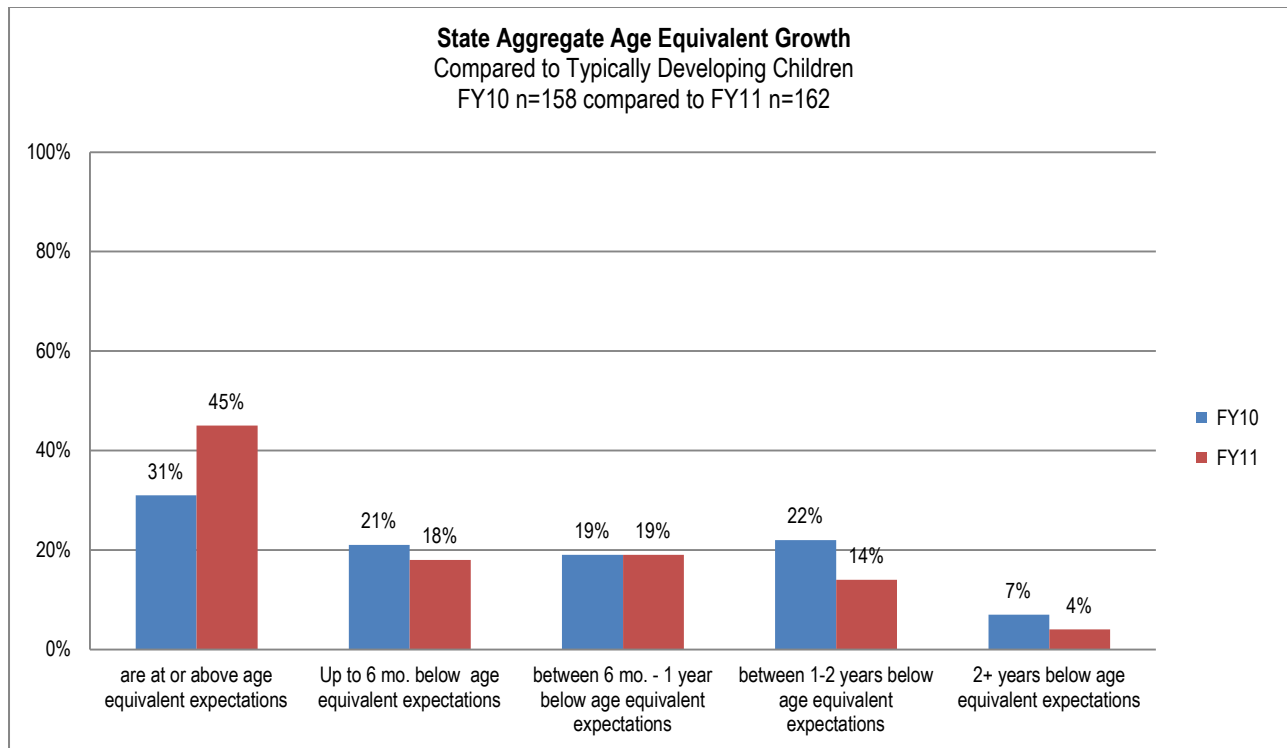




Year one saw 17% of the Pre-K children tested advance from the bottom half to the top half, with 28% leaving the bottom quartile. In year two 18% moved into the top half, ending the year with 45% of the children in the top half and 20% in the top quartile.



In terms of growth 72% of year one's children showed more months of growth than the number of months between the pre & post assessments. In year two 78% of the children showed more than expected growth. This chart tells us approximately three quarters of the AP3 children are closing gaps in English language and vocabulary development.



When compared to typically developing children their own age 31% of the children, at the end of year one scored at or above their age equivalent. At the end of year two 45% of the children performed at or above their age equivalent. This shows that at the end of the year over half of our children score below a typically developing child nationally.

## Developmental Indicators for the Assessment of Learning Third Edition (DIAL-3) State Aggregate Results

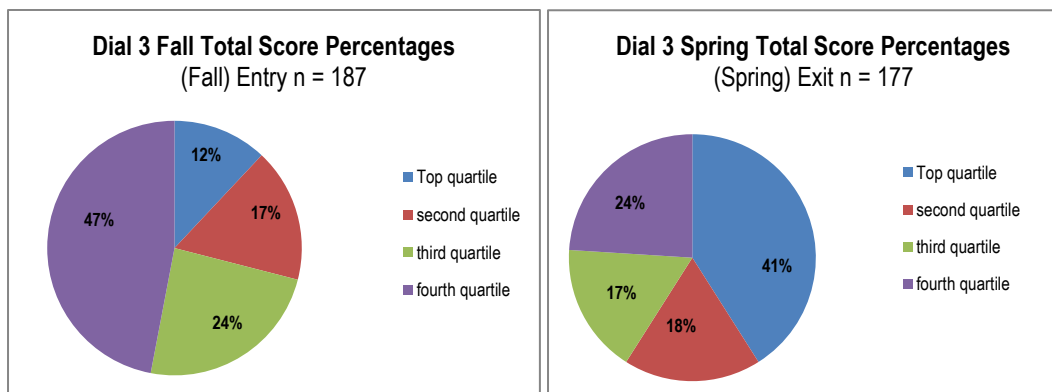
The DIAL-3 is a screening tool for cognitive developmental delays in children who are of ages 3 years, 0 months, to 6 years 11 months. Its three subtests are designed to assess developmental skills that are foundational for academic learning, including the following:

- the *Motor* skills subtest measures skills that are relevant for learning to write,
- the *Concepts* subtest measures skills that are relevant for learning arithmetic,
- the *Language* subtest measures skills that are relevant for learning to read.

This assessment in a pre- and post-methodology allows a focus on prerequisite skills needed for later successful academic achievement. A total score based on the scores in all three areas is also given. The Dial - 3 data in terms of percentile, shows how children compare to their peers nationally.

## State Aggregate Results

### Total Score Fall & Spring



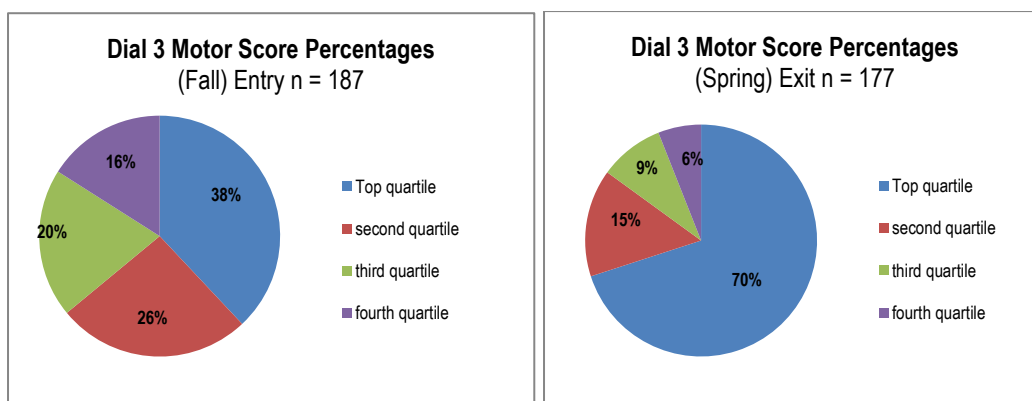
The charts above illustrate the large numbers of children entering the AP3 program significantly below their same age peers nationally, in the three areas tested, and the numbers of children showing significant improvement in percentile ranking compared to same age peers nationally.

**41% of the children are now in the top quartile, more than tripling the percentage of children at or above the 76<sup>th</sup> percentile.**

**23% of the children have moved out of the bottom quartile (almost half of the children who started the program in the bottom quartile have moved up).**

### Motor Development, Concept & Language Development Scores Fall & Spring DIAL – 3

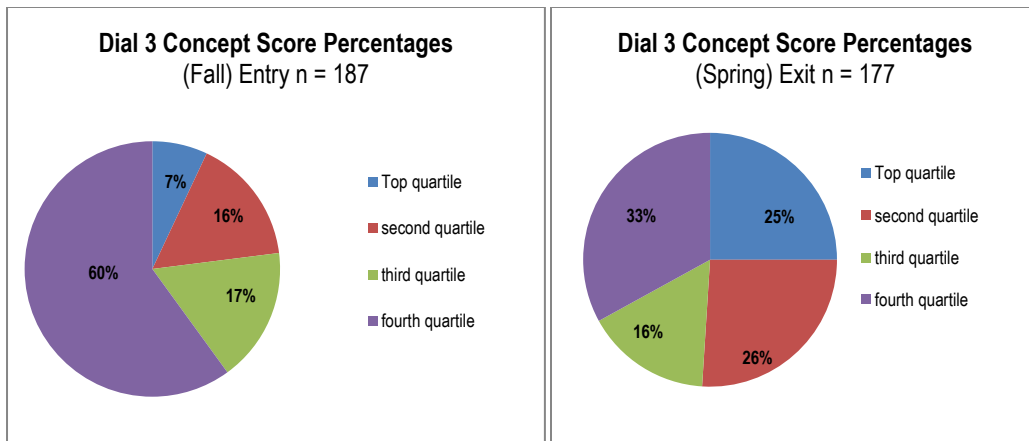
The following charts illustrate placement in the three measured areas of motor, concept, and language development for fall entry and spring exit.



The charts above show the large numbers of children entering the AP3 program significantly above their same age peers nationally in motor development and the improvement of children in the AP3 program.

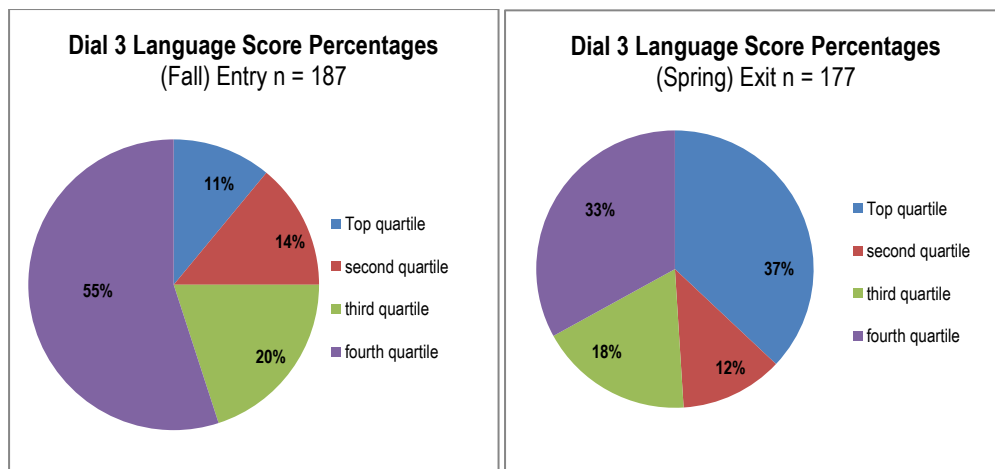
**64% of AP3 children are entering the program in the top two quartiles.**

**85% of AP3 children are finishing the program in the top two quartiles.**



The charts above show the large numbers of children entering the AP3 program significantly below their same age peers nationally in concept development, and the improvement of children participating in the AP3 program.

**77% of our AP3 children are entering the program in the bottom two quartiles**  
**51% of our AP3 children are finishing the program in the top two quartiles.**  
**28% have moved from the bottom two quartiles to the top two.**

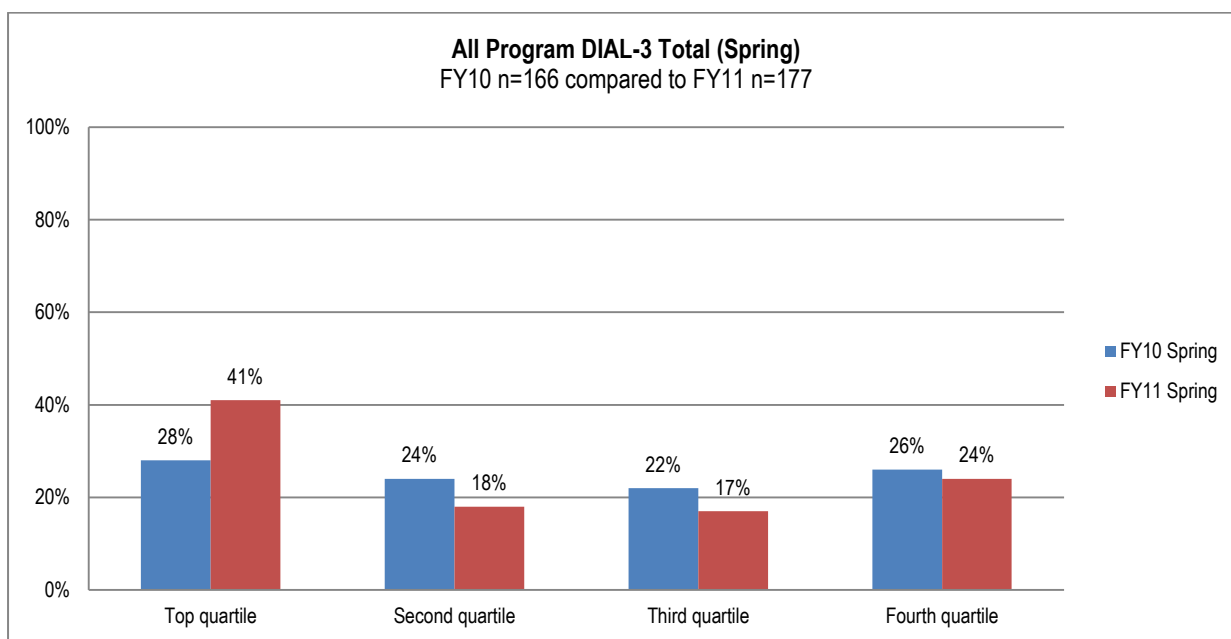
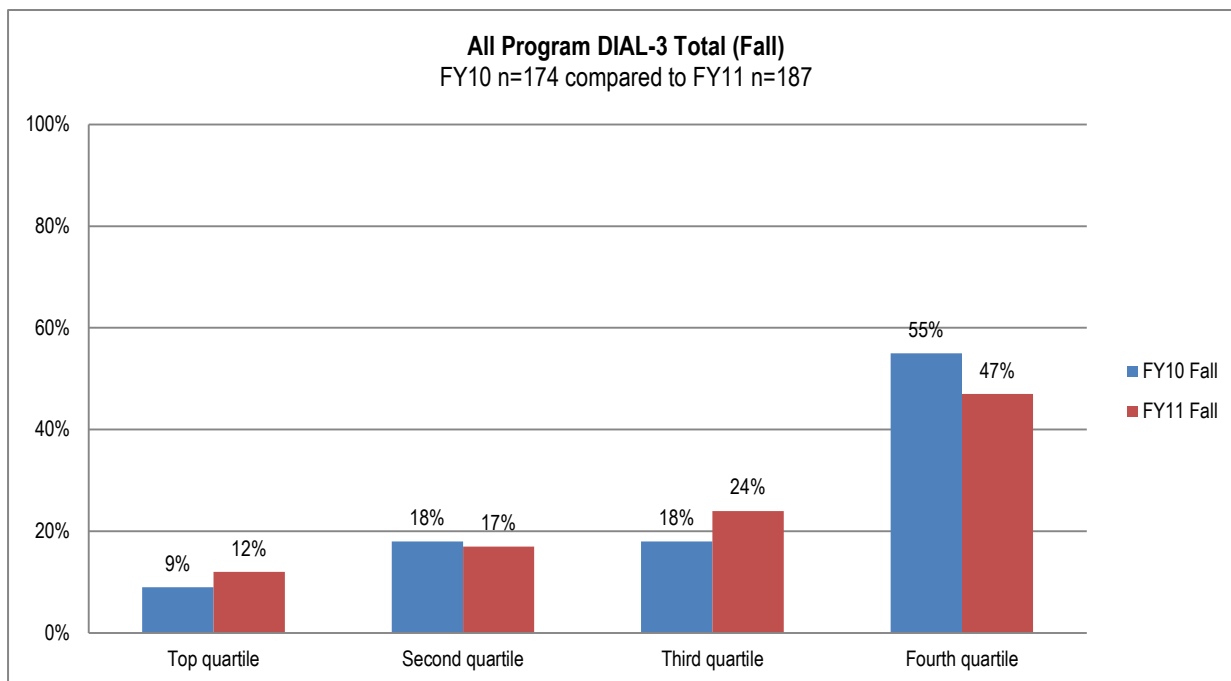


These Language charts show the large numbers of children entering the AP3 program significantly below their same age peers nationally in language development, and the improvement the children made in the AP3 program.

**75% of AP3 children are entering the program in the bottom two quartiles.**  
**49% of AP3 children are finishing the program in the top two quartiles.**

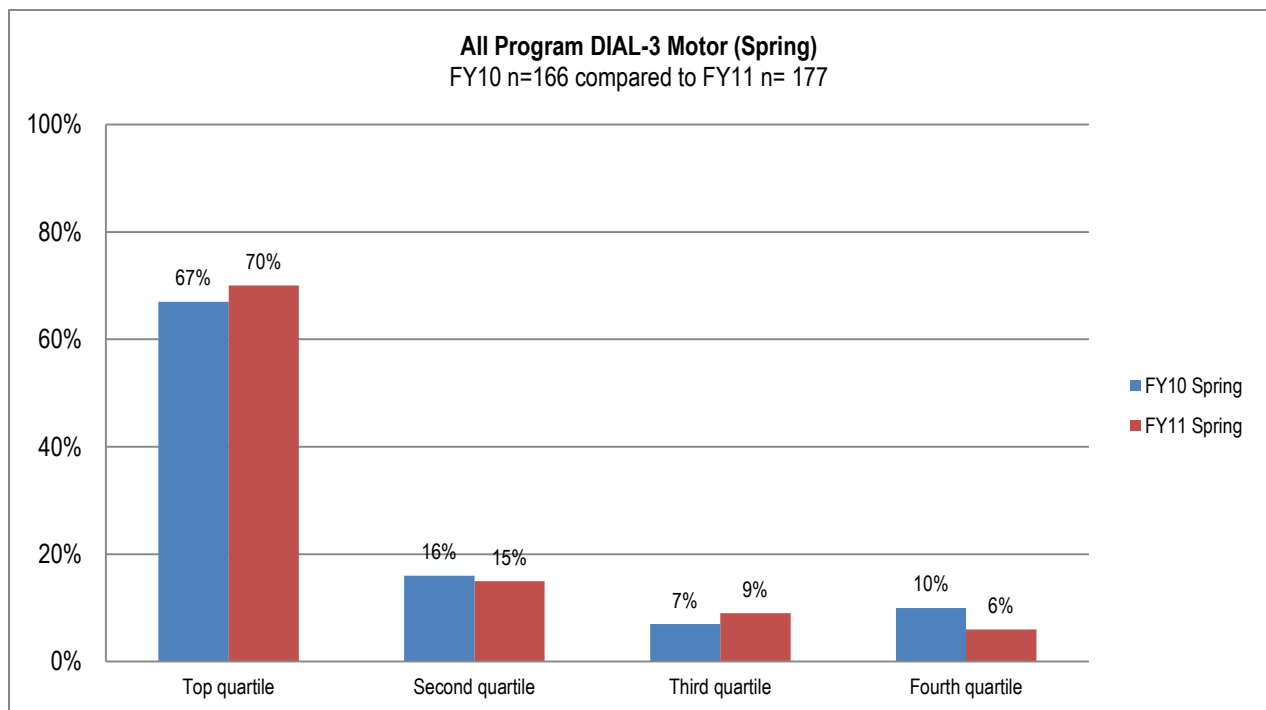
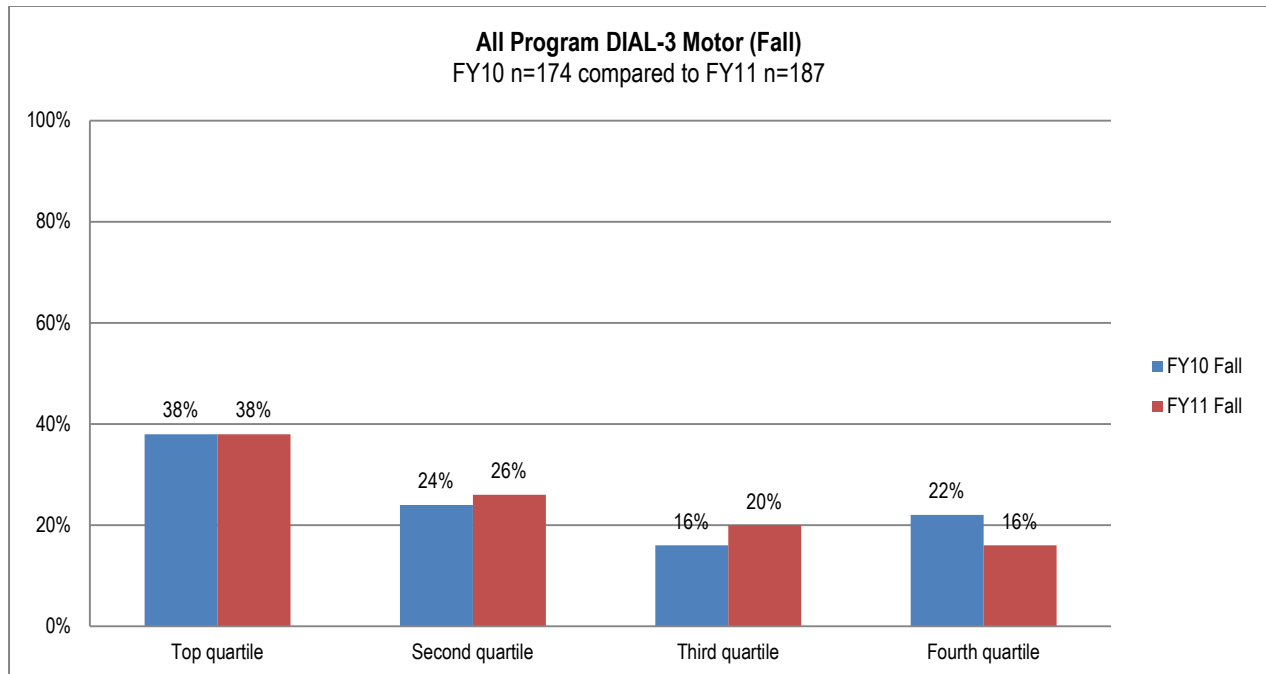
## Year 1 & Year 2 Comparisons

### DIAL – 3 Total Score



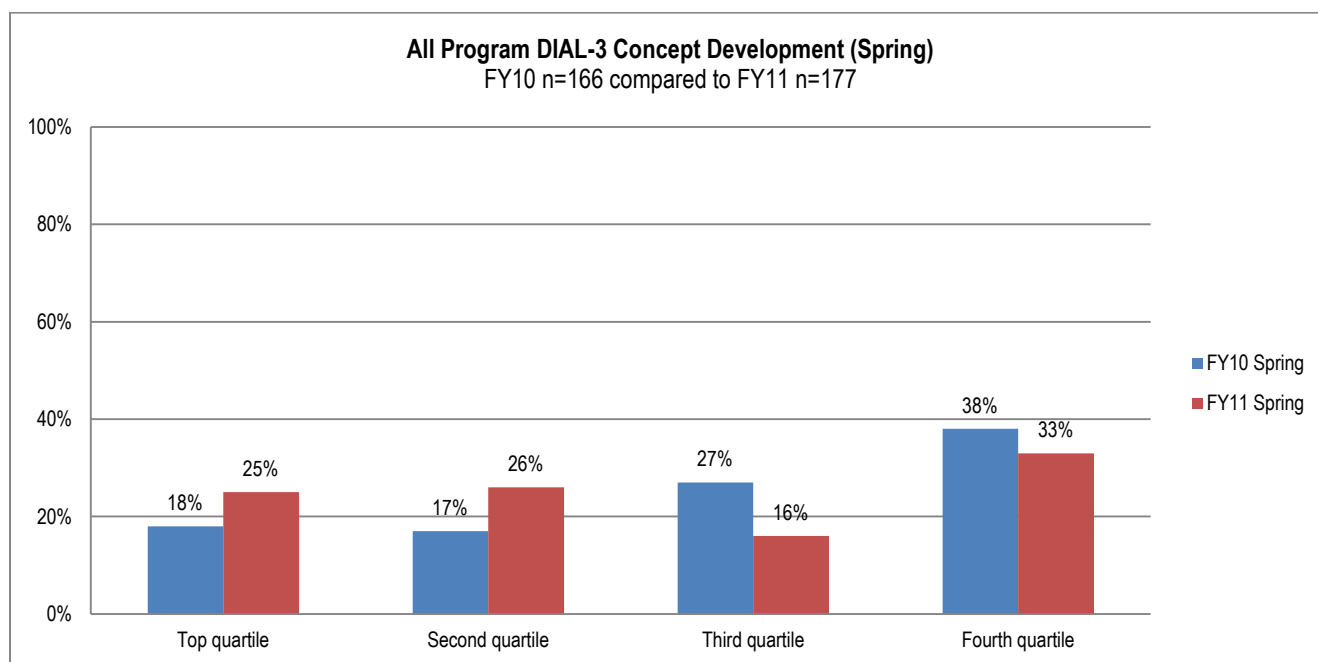
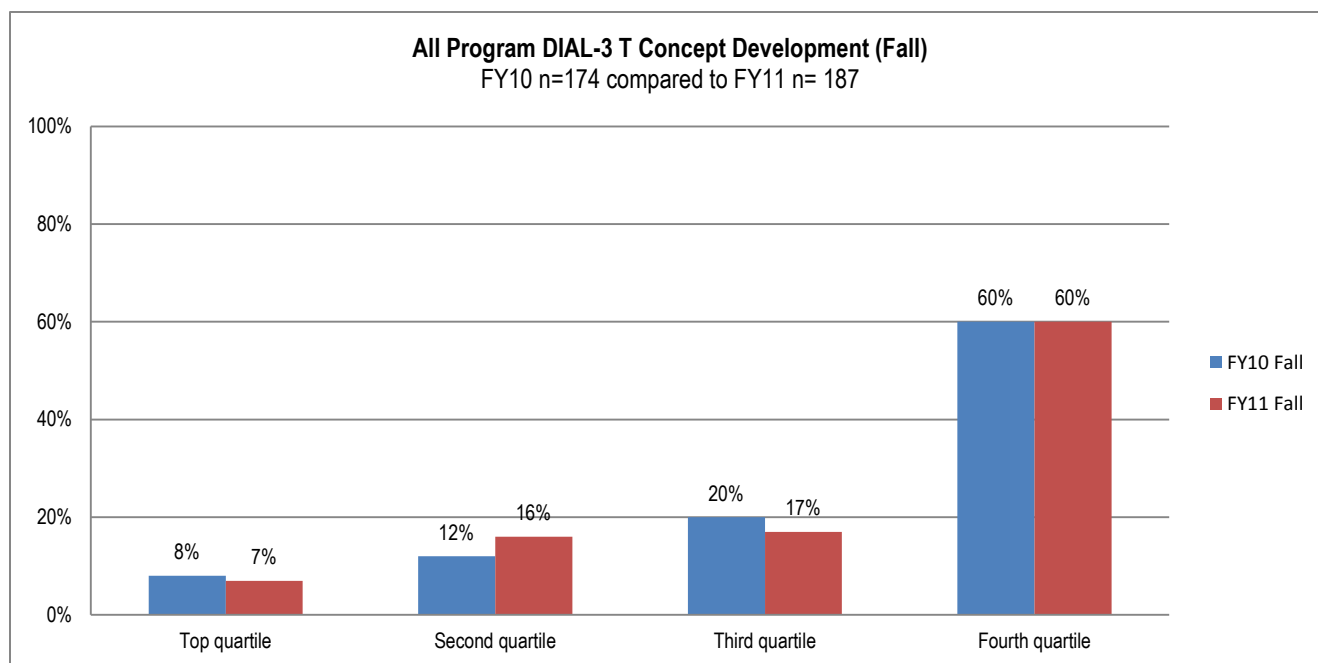
In both years a large majority of AP3 children started the year in the bottom half by percentile. The majority of the children ended the year in the top half. In year two 23% exited the bottom quartile and 29% advanced into the top quartile. In total, 30% of the children left the bottom half and moved into the top half.

## DIAL – 3 Motor Score



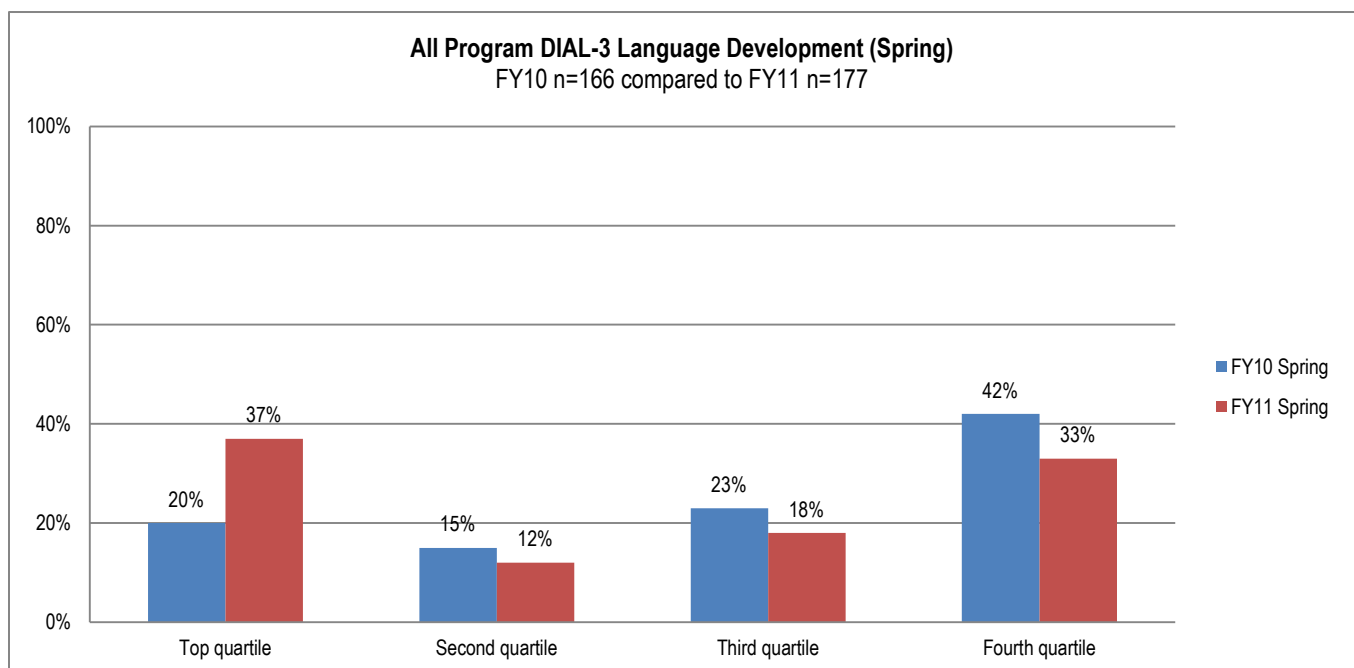
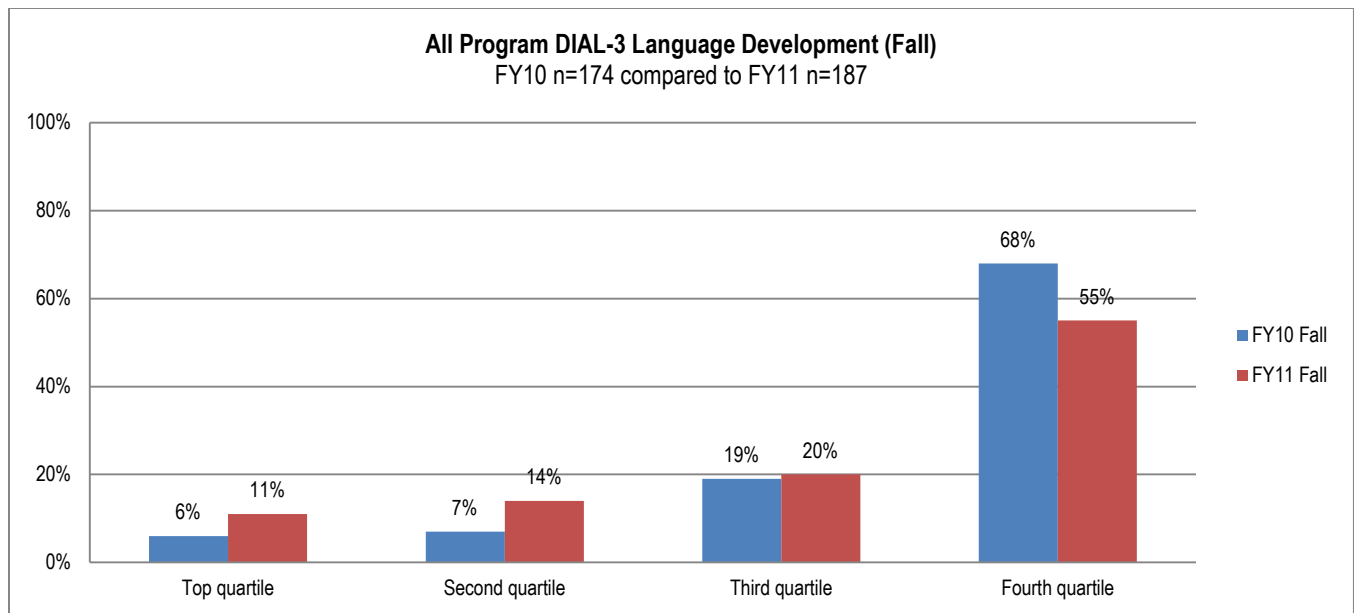
In both years the Pre-K children began the year ahead, and outperformed their typical peers in motor development. At the end of the year 67% of year one children, and 70% of year two AP3 children scored in the top quartile. The AP3 children started both years with a large number in the top quartile with an additional 29% and 32% percent respectively joining their top quartile peers by the end of the year.

## DIAL – 3 Concept Score



In concept development a large majority of the children started in the bottom half by percentile. Year one saw 15% of those children move from the bottom half to the top half. In year two 51% ended the year in the top half, with 28% moving from the bottom half to the top half.

## DIAL – 3 Language Score



In language development at least three quarters of the Pre-K children began in the bottom half by percentile. Year one shows that 22% moved out of the bottom half into the top half. Year two shows that 24% moved out of the bottom half into the top half, ending the year with 49% of the children in the top half.



## Determining Program Outcomes

### Early Childhood Environment Rating Scale-Revised Edition (ECERS-R)

The Early Childhood Environment Rating Scale-Revised Edition (ECERS-R) is a 43- item scale designed for use in classroom-based early childhood care and education programs serving children aged two to six years. It is organized into seven scales: Space and Furnishings, Personal Care Routines, Language-Reasoning, Activities, Interaction, Program Structure, and Parents and Staff. Each scale has additional subscales, with multiple items that must be passed to receive a given score. Each subscale is scored on a seven-point scale, with benchmarks established for 1 = Inadequate, 3 = Minimal, 5 = Good, and 7 = Excellent. Programs that pass some of the items that are part of the benchmark for a 3, but not all of them, are scored a 2 on that subscale. Similarly programs that fall between good and excellent are scored a 6.

### Results: State Aggregate ECERS – R Program Outcomes

State Aggregate	Fall 09	Spring 10	Spring 11
<b>Overall Score:</b>	3.76	4.69	5.44
<b>Space and Furnishings</b>	3.06	4.08	5.22
<b>Personal Care Routines</b>	2.64	3.33	4.46
<b>Language-Reasoning</b>	4.10	5.43	5.98
<b>Activities</b>	3.16	4.33	5.04
<b>Interaction</b>	4.54	4.80	5.87
<b>Program Structure</b>	4.26	5.41	5.65
<b>Parents and Staff</b>	5.44	6.13	6.24

These scores represent significant programmatic growth. The AP3 programs as a whole continued to show improvement across all seven subscales of the ECERS in year two.

### Results: Scoring Summary ECERS – R District Outcomes

The overall scores for the 13 classrooms showed a strong foundation in quality preschool environments. The lowest average score was a 3.15 and the highest average score was a 6.68. These scores show the programs are meeting typical licensing requirements and have implemented many quality standards. With intentional planning, training, and consultation, these programs have shown improvement in meeting those higher quality standards. The ECERS – R standards are linked to improved child outcomes in math, language and literacy, as well as positive social and behavioral outcomes.

<b>Anchorage School District</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	4.56	4.72	6.47
<b>Space and Furnishings</b>	3.63	3.82	5.56
<b>Personal Care Routines</b>	2.80	2.20	5.70
<b>Language-Reasoning</b>	4.88	5.75	7.00
<b>Activities</b>	4.00	4.52	6.78
<b>Interaction</b>	5.90	4.70	7.00
<b>Program Structure</b>	4.75	5.54	6.50
<b>Parents and Staff</b>	6.67	7.00	7.00

These scores represent significant programmatic growth. The Anchorage AP3 programs began the grant working towards an overall rating of good (5) and showing growth in five of the seven individual areas assessed on the ECERS.

At the end of the pilot (year two) the Anchorage AP3 programs showed high growth in all areas, in particular in Language and Reasoning, and Activities, with the highest score possible received in Parents and Staff, Interactions, and Language and Reasoning.

ASD Pre-K program goals will be to maintain and where possible continue the growth of the first two years.

<b>Bering Strait School District</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	3.76	4.24	4.78
<b>Space and Furnishings</b>	3.19	3.56	4.72
<b>Personal Care Routines</b>	2.8	3.15	3.75
<b>Language-Reasoning</b>	3.88	5.25	4.81
<b>Activities</b>	2.97	4.01	4.58
<b>Interaction</b>	4.35	3.9	5.05
<b>Program Structure</b>	4.5	4.06	4.25
<b>Parents and Staff</b>	5.42	6.08	6.04

These scores represent solid programmatic growth. The BSSD AP3 programs began the project working towards an overall rating of minimal to good (5) and by the end of year two showing growth in six of the seven individual areas assessed on the ECERS.

The BSSD program goal for year three of the AP3 will be to continue improvement to 5 or above on the overall measure, with a focus on continued growth especially in Personal Care Routines, Interactions, and Program Structure. Additional work in Stebbins on replicating gains made in Savoonga, Shishmaref, and in Brevig Mission will also be targeted.

<b>Juneau School District</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	2.91	5.40	5.46
<b>Space and Furnishings</b>	2.75	5.00	5.37
<b>Personal Care Routines</b>	1.80	3.40	3.90
<b>Language-Reasoning</b>	3.38	6.25	6.50
<b>Activities</b>	3.06	4.23	5.22
<b>Interaction</b>	2.10	7.00	6.40
<b>Program Structure</b>	2.54	6.38	6.62
<b>Parents and Staff</b>	4.34	6.50	5.00

These scores represent significant programmatic growth. The Juneau AP3 programs began the Pilot project working to move from below a minimal rating towards an overall rating of good (5) and showing growth in the seven individual areas assessed on the ECERS.

Not only did they show growth in all areas, but they achieved more than two points of growth on the seven point scale in Space and Furnishing, Personal Care routines, and Activities. Language and Reasoning gained 3 points, and in the areas of Interaction, and Program Structure they showed growth of over four points on the seven point scale.

The goal for year three will be to continue improvement from the good rating on the overall measure towards a rating of excellent. The JSD Pre-K program will focus on continued growth especially in Personal Care Routines, and Parents and Staff.

<b>Lower Kuskokwim School District: Mikelnguut Elitnaurviat (Bethel)</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	3.17	5.38	5.17
Space and Furnishings	2.25	4.50	4.00
Personal Care Routines	1.20	2.60	2.60
Language-Reasoning	4.50	6.00	6.00
Activities	3.10	5.90	5.80
Interaction	3.60	5.80	5.80
Program Structure	2.33	6.50	5.50
Parents and Staff	5.33	6.50	6.50

The LKSD AP3 program began the pilot working to move from a minimal rating towards an overall rating of good (5) and showing growth in the seven individual areas in year one. Year two's assessment on the ECERS showed maintenance in most areas with some fall back in Space and Furnishings and Program Structure.

The goal for year three will be to continue improvement from the good rating on the overall measure towards a rating of excellent. The LKSD Pre-K will focus on continued growth especially in Program Structure, Personal Care Routines, and Space and Furnishings. In year three LKSD is opening a second classroom in the program using no additional state Pre-K funding.

<b>Nome Public Schools</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	3.52	5.09	5.55
<b>Space and Furnishings</b>	3.13	4.57	5.81
<b>Personal Care Routines</b>	3.20	3.50	3.46
<b>Language-Reasoning</b>	4.50	5.50	6.25
<b>Activities</b>	2.22	4.50	4.34
<b>Interaction</b>	4.70	6.20	5.30
<b>Program Structure</b>	4.04	6.00	5.87
<b>Parents and Staff</b>	2.67	6.25	6.91

These scores represent significant programmatic growth. The Nome AP3 programs began the AP3 grant working to move from a minimal rating towards an overall rating of good (5) and showing growth in the seven individual areas assessed on the ECERS.

Not only did they show growth in all areas, but they achieved growth in Parents and Staff of over four points on a seven point scale. They also achieved more than two points of growth in Overall, Space and Furnishings and Activities. Language and Reasoning, and Program Structure both showed gains of a full point or more on the seven point scale. The Nome AP3 program goal for year three will be to continue improvement from the good rating on the overall measure towards a rating of excellent. NPS will focus on continued growth especially in Interactions, Activities, and Personal Care Routines.

<b>Yukon Koyukuk School District</b>	<b>Fall 09</b>	<b>Spring 10</b>	<b>Spring 11</b>
<b>Overall Score:</b>	4.05	4.45	5.71
<b>Space and Furnishings</b>	3	3.94	5.75
<b>Personal Care Routines</b>	2.9	4.15	5.40
<b>Language-Reasoning</b>	4	4.88	6.50
<b>Activities</b>	3.48	4.12	4.36
<b>Interaction</b>	5.45	3.7	6.50
<b>Program Structure</b>	5.17	5.6	6.50
<b>Parents and Staff</b>	5.46	5.42	6.33

These scores represent significant programmatic growth. The Yukon – Koyukuk AP3 programs began the project working to move from an above minimal rating towards an overall rating of good (5) and showing growth in six of the seven individual areas assessed on the ECERS. At the end of the Pilot (year two) they showed high growth in all areas, in particular in Language and Reasoning, Space and Furnishings, and Personal Care Routines.

The goal for year three will be to continue improvement towards excellent (7) on the overall measure, with a focus on Parents and Staff, and Activities.

## Results: Scoring Summary ECERS – R Site Outcomes

School	Fall 09	Spring 10	Spring 11
Creekside Elementary, ASD	4.32	4.40	6.46
Willow Crest Elementary, ASD	4.80	5.03	6.48
Mikelnguut Elitnaurviat, Bethel, LKSD	3.17	5.38	5.17
Stebbins, BSSD	3.18	3.50	3.15
Savoonga, BSSD	4.00	4.62	6.68
Brevig Mission, BSSD	4.12	5.29	4.83
Shishmaref, BSSD	3.74	3.54	4.93
Allakaket, YKSD	3.31	3.24	5.78
Minto, YKSD	4.90	4.76	5.64
Nome, Blueberry Classroom, NPS	3.09	5.57	4.93
Nome, Salmonberry Classroom, NPS	3.95	4.60	6.17
Gastineau Elementary School, JSD	2.83	5.12	4.83
Glacier Valley Elementary School, JSD	2.98	5.57	6.10

Each program varied in their strengths and areas of improvement, but there were some trends common across all of the programs. While most programs showed continuous improvement across the two year pilot, a few showed dips or fall back in some areas reflecting the specific changes seen at each particular assessment. At the end of year two all but one site showed gains. The AP3 programs began the pilot above minimal and ended with eight sites approaching excellent or above good, four approaching good, and one above minimal.

### Why is the ECERS - R a Valuable tool?

The ECERS-R was developed at the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill. It was designed for use in preschool, kindergarten, and childcare classrooms serving children two and a half through five years of age. It can be used by directors for program improvement and staff supervision, by teaching staff for self- assessment, and by agency staff, or other over-site entities staff, for monitoring. The tool has a long history of research demonstrating that quality as measured by the ECERS has good predictive validity and a well-established reliability that makes it particularly useful for research and program evaluation.

The ECERS – R has a high rate of predictive validity. Research has shown the link between the quality of children’s early care environments and their academic and cognitive outcomes (Sammons, et al., 2003a). Below are some examples of research that links the ECERS – R to child outcomes in math, language and literacy and social /behavioral outcomes.

Specifically, in math research findings indicate that there is a positive relationship between the social interaction subscale on the ECERS-R and children’s early number concept development (Sammons, et al., 2003a). Additionally, higher quality scores on the ECERS are associated with higher scores on the *Woodcock-Johnson-R* (Woodcock 11& Johnson, 1990) math achievement applied problems subset (Peisner-Feinberg, et al., 2001), and the Teaching and Interactions factor of the ECERS-R is related to

children's performance on the Woodcock-Johnson-R math achievement applied problem subset during Pre-Kindergarten and kindergarten (Burchinal, et al., 2008).

Scores on the Environment Rating Scales have been shown to be predictive of children's language and literacy performance. Specifically, higher quality is associated with children's development of receptive language, print awareness, and book knowledge. Children in higher quality environments as assessed by the ECERS-R tend to display higher scores overall on the PPVT-III for children in Early Head Start (Love, et al., 2004). Similarly, other studies have noted an association between higher scores on the ECERS and children's scores on the PPVT-R, indicating greater receptive language abilities (Peisner-Feinberg, et al., 2001). Children's print awareness scores on Concepts About Print (Zill & Resnick, 1998) and greater book knowledge are associated with higher quality in Smart Start preschool as assessed by the ECERS (Bryant, et al., 2003). Ratings on the ECERS-R have been shown to be related to children's expressive language development in prekindergarten (Mashburn, et al., 2008). Additionally, the Teaching and Interactions factor is related to children's expressive language scores on the *Oral Expression Scale (OWLS)* and receptive language scores on the *Peabody Picture Vocabulary Test (PPVT-III)* (Burchinal, et al., 2008).

Several important social outcomes have been shown to be related to ECERS-R scores. Specifically, there is a positive relationship between scores on the social interaction subscale and children's scores on a measure of independence, concentration, cooperation, and conformity skills in preschool (Sammons, et al., 2003b). Additionally, there is a positive relationship between classroom scores on the language and reasoning subscale and children's cooperation and conformity skills (Sammons, et al., 2003b). Other studies have found a relationship between the total score on the ECERS-R and children's socio-emotional development (Montes, Hightower, Brugger, & Moustafa, 2005). Using the ECERS-R and the *Teacher-Child Rating Scale (T-CRS 2.1)* (Hightower, et al., 1986) in urban centers serving low-income children, Montes and colleagues (2005) found that higher quality classrooms were associated with a significant decrease in socio-emotional risk factors for children (e.g., lack of behavior control, poor social skills). Also using the *Teacher-Child Rating Scale*, there is a relationship between the Teaching and Interactions factor of the ECERS-R and children's social competence scores (a composite including assertiveness, frustration tolerance, task orientation, and peer social skills)

## **Alaska Pre-Kindergarten Pilot Project: What We Have Learned**

The AP3 child and program data has shown the majority of the children enrolled in the program come to the program behind typically-developing peers. High numbers of children in the program exceed expected growth. The PPVT, DIAL - 3 & ECERS - R data, coupled with observations, facilitation, and training provided by EED support the following conclusions:

- Quality early childhood programs can help Alaska's children to be ready for school and K-12 success.
  - 137 of 188 children enrolled in programs funded by this project scored below average in vocabulary skills tested by the PPVT at the time they entered the program (73 percent)
  - The programs in this project have shown improvement in quality on the 7 point Early Childhood quality measure (ECERS). Their aggregate overall scores have grown from 3.76 out of 7 at the start of the program to 5.44 out of 7 at the end of year two. This represents a 24% improvement in program quality on these measures over the first two years.

- While the AP3 Pre-K children are generally making large strides in their development and a large number are closing the gap, there are still children performing below expectations.
  - 127 of the 162 children in this project who had both pre- and post- vocabulary tests demonstrated growth that was greater than the growth expected for children of this age (78 percent)
  - 99 of 179 children enrolled at the time of the post-test still tested below average for vocabulary.
- For those children who are behind to close the gap by their third grade assessments, continuous growth should begin in early childhood and be sustained through the primary grades.
  - 55 out of 187 children tested on the pre-test overall assessment for developmental skills (DIAL) scored above average (29 percent)
  - 73 out of 177 children tested on the post-test for developmental skills scored below average (41 percent)
- The unprecedented level of cooperation, coordination, and collaboration between Head Start programs and school districts is leading to improved alignment, transition and some common planning, training and assessment beyond the required tools of the program and beyond initial partnerships. More community level alignment work is needed.
- The data also shows that school districts, Head Starts, and other early care and education programs can work together with parents and community to meet challenging standards, gather and utilize data for continuous improvement, and positively affect the learning and development of young children.

While this pilot was a large first step there is still much more that can be accomplished.

- When funded, the next round of Alaska Pre-Kindergarten (AK Pre-K) will offer a new competition among districts who will work with their communities to show continuous improvement in both child and program outcomes. Child outcome focus will be placed on the children's language and concept development, and the use of a new assessment tool that is in full alignment with the Alaska Early Learning Guidelines. Program improvement will focus on connections across classroom, school, and community systems looking to accomplish the following:
  1. Enhance the intentionality of the interactions between the adults and the children in the classroom to better provide instructional, emotional, and classroom organizational supports for children's learning and development;
  2. Build on the connections between standards, assessment, curricula, and data to guide the activities and interventions provided in the classroom;
  3. Strengthen alignment with and transition to kindergarten and K-12;
  4. Improve outreach to parents, communities and the programs that serve young children under four years of age;

5. Share what is working for programs in the AK Pre-K with each other and with other early childhood programs.

EED will continue to provide support, training and technical assistance, and facilitation to aid program improvement.