

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

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**Alaska Pre-Kindergarten Project (AP3)  
Year Three Aggregate Report  
November 2012**



This report presents the aggregate child outcomes and aggregate program outcomes from the six Alaska Pre-Kindergarten Project school districts for FY2012.

## **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, 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.

Funding was set aside for use with intervention districts in the amount of \$300,000 (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 approximately 200 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 years one and two the same six districts received the same level of funding through the third year of the competitive grant. The six districts provided services to 211 children and their families in the fall 2011 through spring 2012 school year. This represents a decrease of 15% compared to year two and an increase of 5.5% over the 200 children served in the first year of the grant.

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

<b>District</b>	<b>Classrooms</b>	<b>Children</b>	<b>Grant Amount</b>
Anchorage	2	39	\$167,684
Bering Strait	4	47	\$362,828
Juneau	2	43	\$201,073
Lower Kuskokwim	2	30	\$337,732
Nome	2	35	\$219,539
Yukon Koyukuk	2	17	\$325,445
<b>Total</b>	<b>14</b>	<b>211</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 third year performance of the AP3 project in both child outcomes and in program outcomes.

In year three, as in previous years, 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**

### **Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4)**

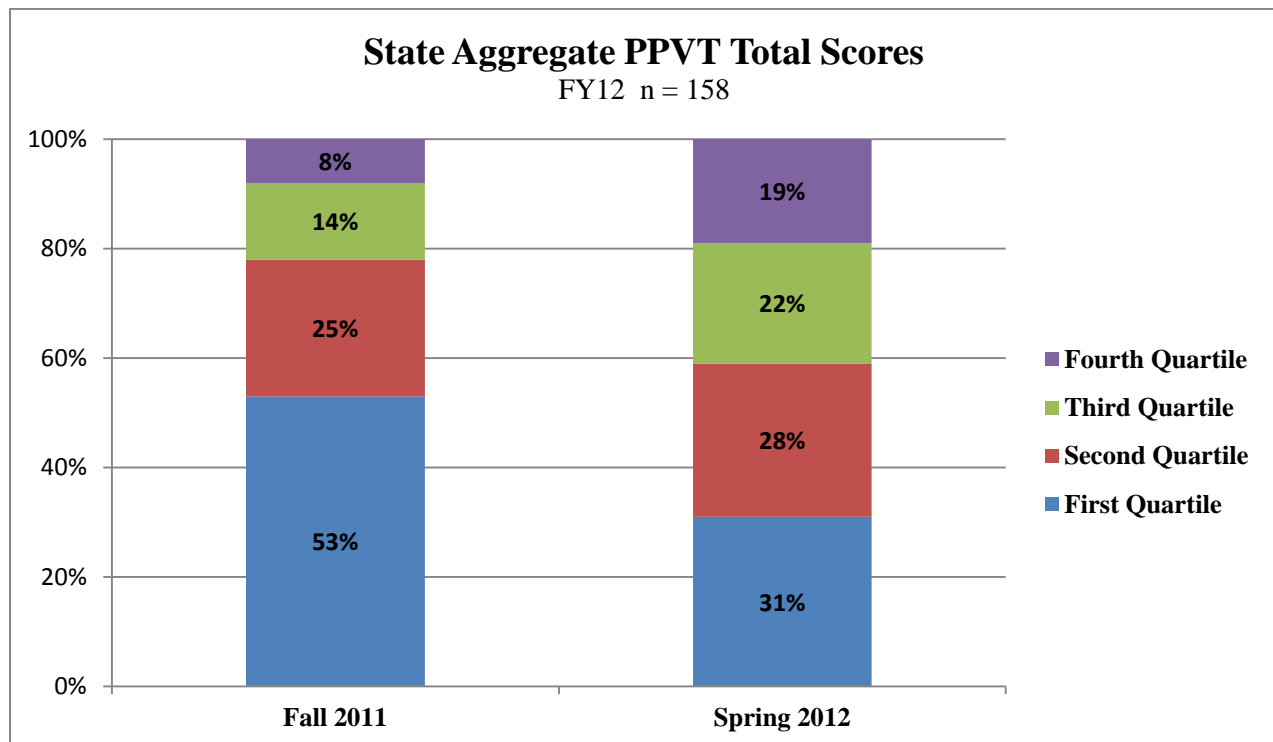
The PPVT provides information on vocabulary and receptive language development. It is a norm-referenced test designed to assess children's scholastic aptitude in terms of verbal ability from age 2 years 6 months, to age 7 years and 4 months. The PPVT is an English language assessment that has been in 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.

Each fall and spring, students' receptive English vocabulary is measured using the Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4). The results provided are for students who completed both fall and spring assessment data for the 2011-2012 school year.

Based on the national percentile rankings of the PPVT, the percentage of students in each quartile was as follows:

158 Students Total (n)	Fall 2011	% of (n)	Spring 2012	% of (n)
Fourth Quartile (75 <sup>th</sup> -100 <sup>th</sup> percentile)	13	8%	30	19%
Third Quartile (50 <sup>th</sup> -74 <sup>th</sup> percentile)	22	14%	34	22%
Second Quartile (25 <sup>th</sup> -49 <sup>th</sup> percentile)	39	25%	45	28%
First Quartile (0-24 <sup>th</sup> percentile)	84	53%	49	31%

In the spring, 11% more students scored in the fourth quartile than in the fall. The first quartile decreased by 22%.

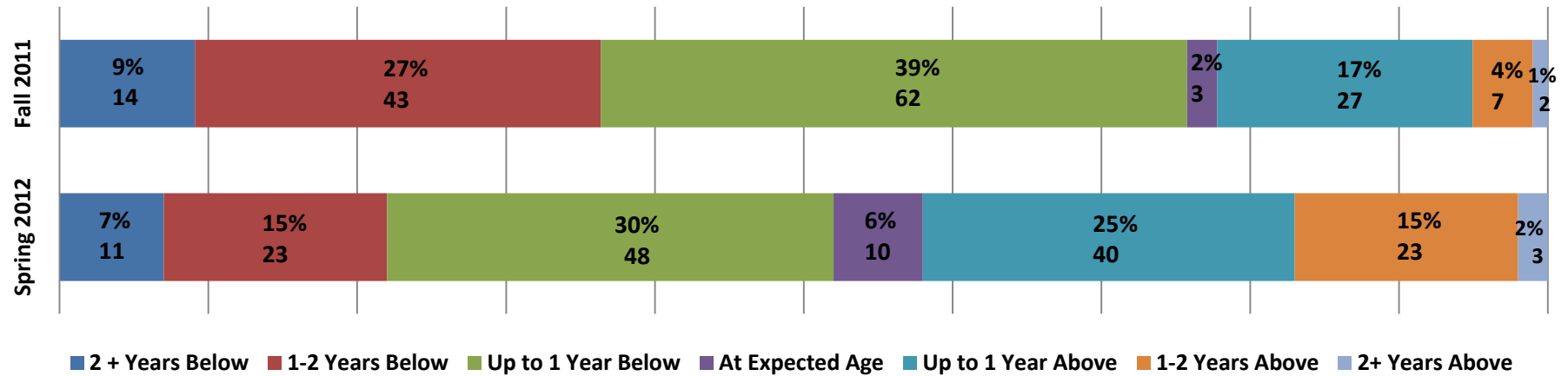


As well as percentile national comparison the PPVT provides an Age Equivalence compared to national norms for same age children. The chart below illustrates the number and percentage of children compared to those national norms along a continuum from more than 2 years below national norms to more than two years above national norms.

### PPVT Age Equivalence

Compared to same age national norms

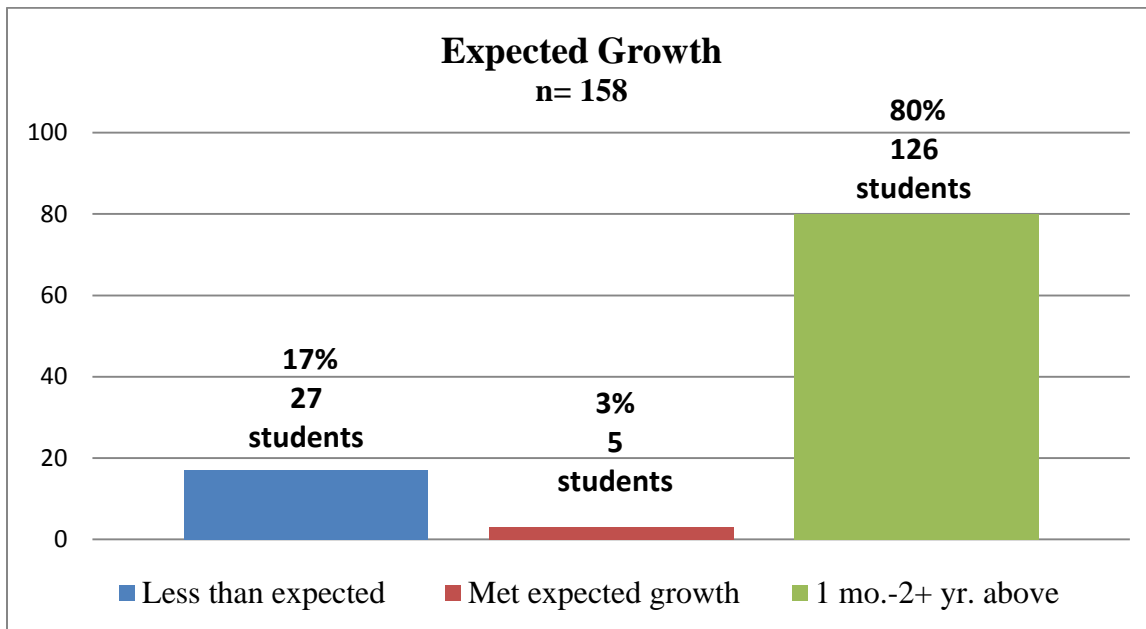
n = 158



	Fall 2011- Percentages	# of Students	Spring 2012- Percentages	# of Students
2+ Years Above	1%	2	2%	3
1-2 Years Above	4%	7	15%	23
Up to 1 year Above	17%	27	25%	40
At Expected Age	2%	3	6%	10
Up to 1 Year Below	39%	62	30%	48
1-2 Years Below	27%	43	15%	23
2+ Years Below	9%	14	7%	11

- 25% of students started the year at or above the expected age equivalence
- 75% of students started the year below the expected age equivalence
- 48% of students ended the year at or above expectations
- 52% of students ended the year below expectations

The final PPVT comparison is a growth model. It shows each child's growth in months compared to expected growth. If there are seven months between the pre and post we expect to see seven months of growth for the child. This comparison shows the number and percentage of children who exhibited less than expected growth, at expected growth, and above expected growth.



- **17%** of children showed less than the expected growth between the pre and post assessment tests
- **3%** of children met the expected age growth between the pre and post assessment tests
- **80%** of children exceeded the expectations and showed from 1 month to 2 or more years of growth more than the number of months between the pre and post assessments.

## Developmental Indicators for the Assessment of Learning, Third Edition (DIAL-3)

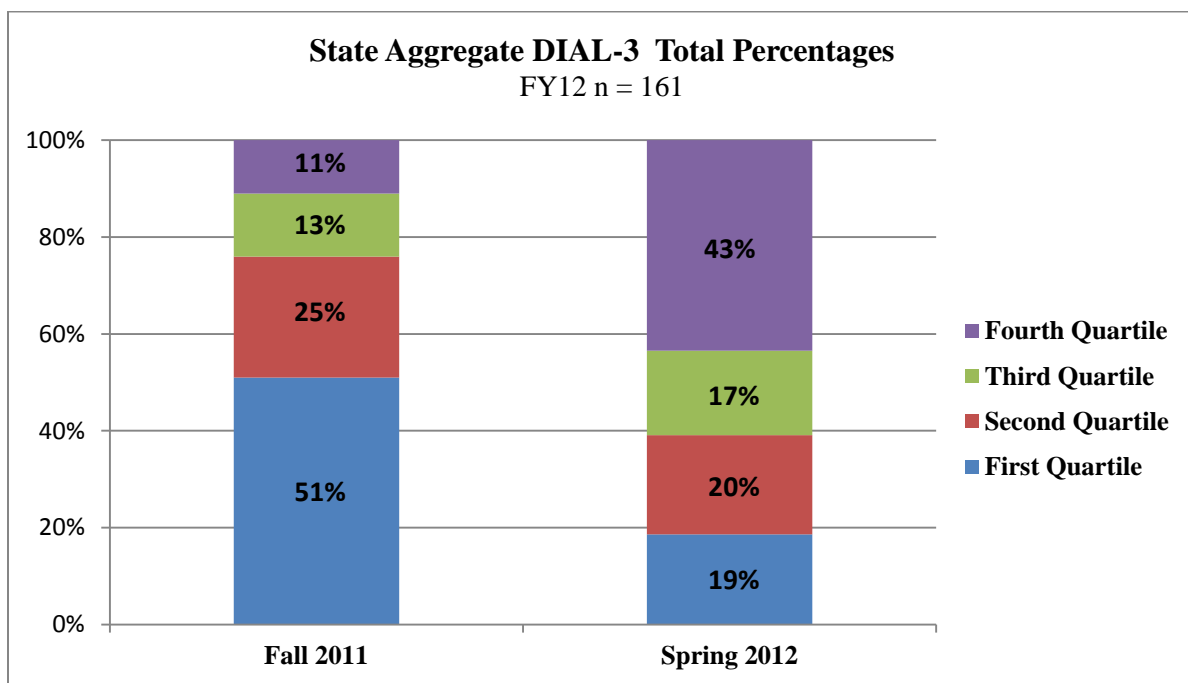
In the Fall 2011 and Spring 2012, students' developmental skills were measured using the *Developmental Indicators for the Assessment of Learning-Third Edition* (DIAL-3). The three performance areas tested were motor, concepts, and language. The results provided are for students who completed both fall and spring assessment data for the 2011-2012 school year.

### Total Score

Based on the national percentile rankings of the DIAL-3, the percentage of students in each quartile of the *TOTAL SCORE* was as follows:

161 Students Total (n)	Fall 2011	% of (n)	Spring 2012	% of (n)
Fourth Quartile (76 <sup>th</sup> -100 <sup>th</sup> percentile)	18	11%	70	43%
Third Quartile (51 <sup>st</sup> -74 <sup>th</sup> percentile)	21	13%	28	17%
Second Quartile (26 <sup>th</sup> -50 <sup>th</sup> percentile)	40	25%	33	20%
First Quartile (0-25 <sup>th</sup> percentile)	82	51%	30	19%

In the spring, 32% more students were in the fourth quartile than in the fall. The first quartile decreased by 32%.

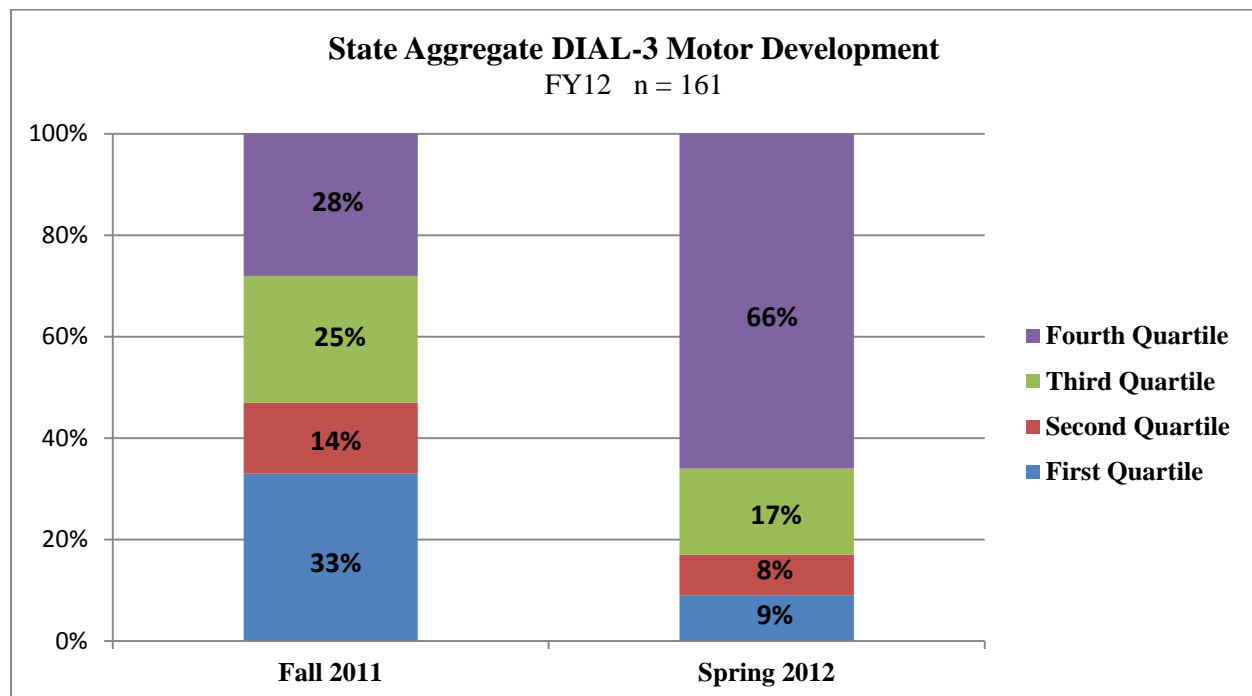


## Motor Skills

Based on the national percentile rankings of the DIAL-3, the percentage of students by quartile for *MOTOR SKILLS* was:

161 Students Total ( <i>n</i> )	Fall 2011	% of ( <i>n</i> )	Spring 2012	% of ( <i>n</i> )
Fourth Quartile (76 <sup>th</sup> -100 <sup>th</sup> percentile)	45	28%	106	66%
Third Quartile (51 <sup>st</sup> -75 <sup>th</sup> percentile)	40	25%	28	17%
Second Quartile (26 <sup>th</sup> -50 <sup>th</sup> percentile)	23	14%	13	8%
First Quartile (0-25 <sup>th</sup> percentile)	53	33%	14	9%

In the spring, 38% more students were in the fourth quartile than in the fall. The first quartile decreased by 24%.



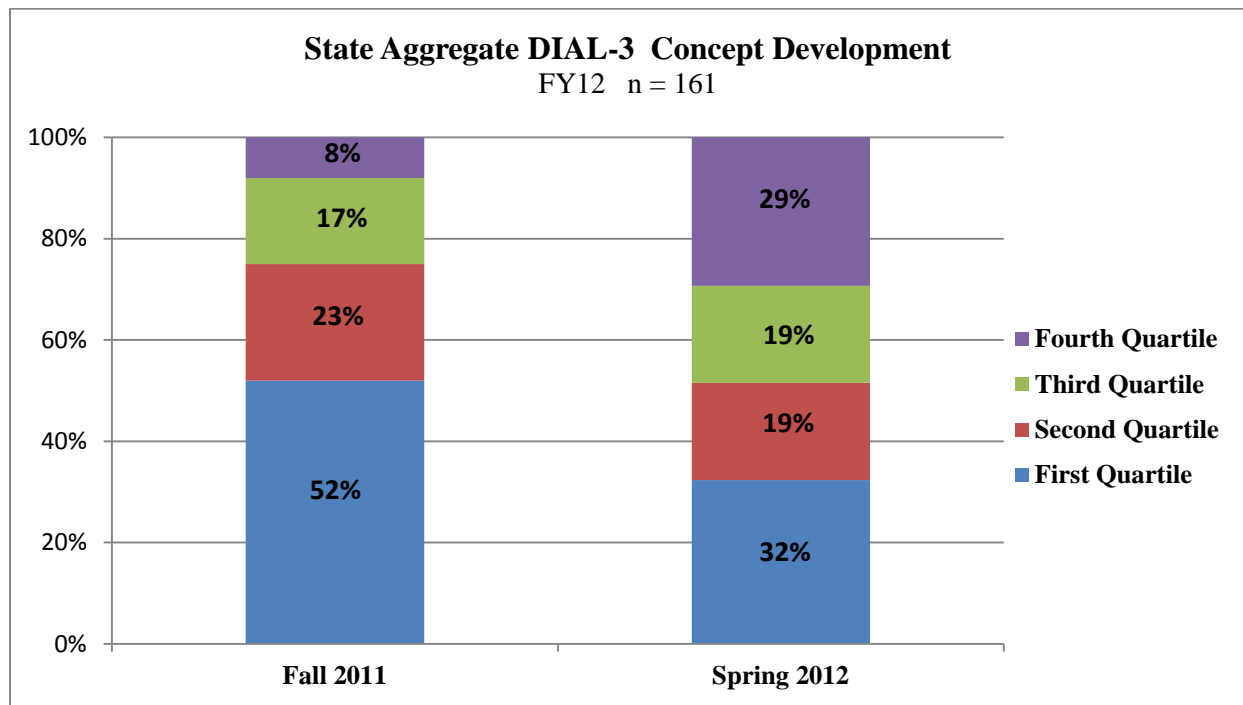


## Concept Skills

Based on the national percentile ranking of the DIAL-3, the percentage of students by quartile for *CONCEPT SKILLS* was:

161 Students Total ( <i>n</i> )	Fall 2011	% of ( <i>n</i> )	Spring 2012	% of ( <i>n</i> )
Fourth Quartile (76 <sup>th</sup> -100 <sup>th</sup> percentile)	13	8%	47	29%
Third Quartile (51 <sup>st</sup> -75 <sup>th</sup> percentile)	27	17%	31	19%
Second Quartile (26 <sup>th</sup> -50 <sup>th</sup> percentile)	37	23%	31	19%
First Quartile (0-25 <sup>th</sup> percentile)	84	52%	52	32%

In the spring, 21% more students were in the fourth quartile than in the fall. The first quartile decreased by 20%.

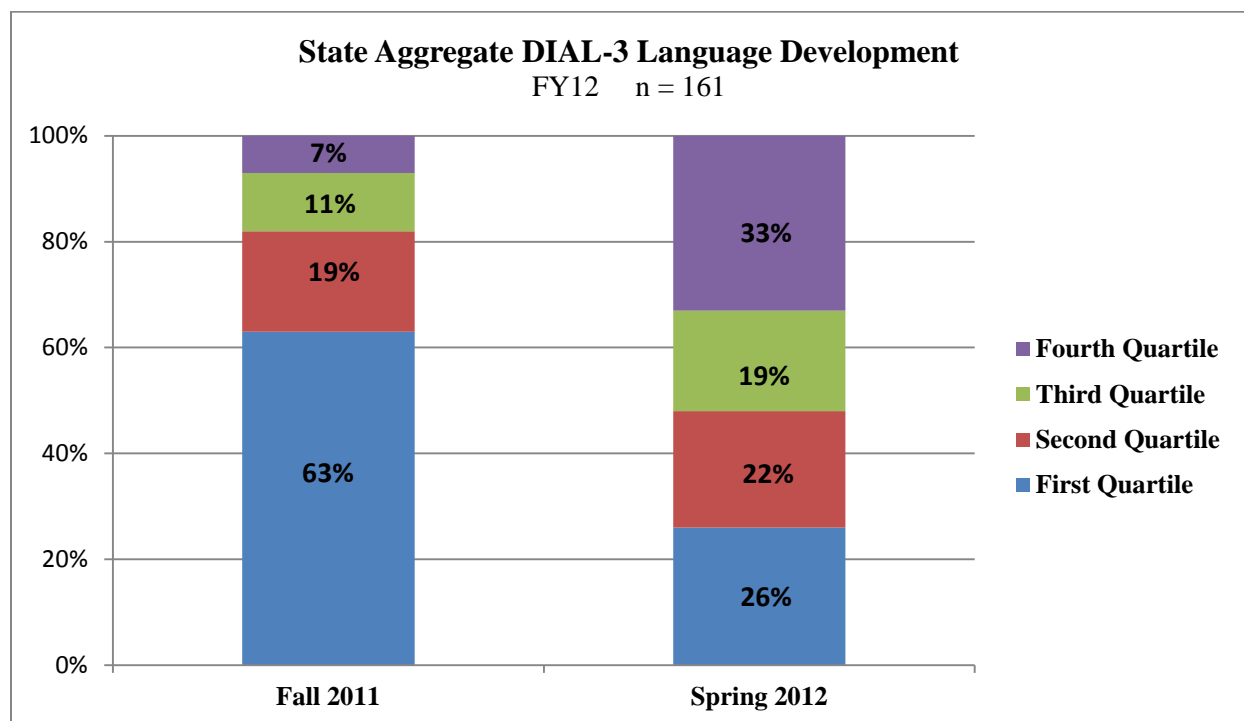


## Language Skills

Based on the national percentile ranking of the DIAL-3, the percentage of students by quartile for *LANGUAGE SKILLS* was:

161 Students Total (n)	Fall 2011	% of (n)	Spring 2012	% of (n)
Fourth Quartile (76 <sup>th</sup> -100 <sup>th</sup> percentile)	11	7%	53	33%
Third Quartile (51 <sup>st</sup> -75 <sup>th</sup> percentile)	18	11%	30	19%
Second Quartile (26 <sup>th</sup> -50 <sup>th</sup> percentile)	31	19%	36	22%
First Quartile (0-25 <sup>th</sup> percentile)	101	63%	42	26%

In the spring, 26% more students were in the fourth quartile than in the fall. The first quartile decreased by 37%.



## 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	Spring 12
<b>Overall Score:</b>	3.76	4.69	5.44	5.02
<b>Space and Furnishings</b>	3.06	4.08	5.22	4.45
<b>Personal Care Routines</b>	2.64	3.33	4.46	3.74
<b>Language-Reasoning</b>	4.10	5.43	5.98	5.12
<b>Activities</b>	3.16	4.33	5.04	4.45
<b>Interaction</b>	4.54	4.80	5.87	5.94
<b>Program Structure</b>	4.26	5.41	5.65	5.69
<b>Parents and Staff</b>	5.44	6.13	6.24	6.35

These scores represent significant programmatic growth.

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

School	Fall 09	Spring 10	Spring 11	Spring 12
<b>Creekside Elementary, ASD</b>	4.32	4.40	6.46	5.76
<b>Willow Crest Elementary, ASD</b>	4.80	5.03	6.48	6.00
<b>Mikelnguut Elitnaurviat, Bethel, LKSD</b>	3.17	5.38	5.17	5.31
<b>Stebbins, BSSD</b>	3.18	3.50	3.15	3.79
<b>Savoonga, BSSD</b>	4.00	4.62	6.68	6.54
<b>Brevig Mission, BSSD</b>	4.12	5.29	4.83	4.20
<b>Shishmaref, BSSD</b>	3.74	3.54	4.93	4.17
<b>Allakaket, YKSD</b>	3.31	3.24	5.78	4.22
<b>Minto, YKSD</b>	4.90	4.76	5.64	3.69
<b>Nome, Blueberry Classroom, NPS</b>	3.09	5.57	4.93	4.93
<b>Nome, Salmonberry Classroom, NPS</b>	3.95	4.60	6.17	6.12
<b>Gastineau Elementary School, JSD</b>	2.83	5.12	4.83	4.93
<b>Glacier Valley Elementary School, JSD</b>	2.98	5.57	6.10	5.63

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

## **Alaska Pre-Kindergarten Project (AP3): 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.
  - One-hundred twenty-three of 158 children enrolled in year three of the AP3 program scored below average in vocabulary skills tested by the PPVT at the time they entered the program (78 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 5.02 out of 7 at the end of year three. This represents an 18% improvement in program quality on these measures through the course of the pilot.
- 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.
  - One-hundred twenty-six of the 158 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 (80 percent)
  - Ninety-four of 158 children enrolled at the time of the post-test still tested below average for vocabulary (59 percent).
- 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.
  - Thirty-nine out of 161 children tested on the pre-test overall assessment for developmental skills (DIAL) scored above average (24 percent)
  - Sixty-three out of 161 children tested on the post-test for developmental skills scored below average (39 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.
- The data also show 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.

The goal of the program outcomes assessment process was to advance early care and education throughout the state of Alaska, by supporting and educating early educators on how to increase the quality of their care and foster stronger relationships between parents, teachers and their early care and education program.

Overall programs that had consistent teachers and principals over the three year span showed the greatest growth and sustainability over the course of the project. Newer programs or those that had significant rates of teacher turnover seemed to struggle with making sustainable changes to the classroom environment. In general, completing the ECERS-R assisted many programs to have a better understanding of how to provide high quality early care and education through an early childhood perspective. In completion of the ECERS-R assessment, most programs were very receptive to change and set goals on their Quality Improvement Plans (QIP's) to make changes to their classroom and teaching practices. Most programs increased their score on the ECERS-R or maintained a higher score. This shows their dedication to providing high quality and in their program's ability to overcome many challenges to make quality improvements. Consultation work revolved around supporting programs to meet the goals they identified in their individual QIP's which was done through on-site visits, phone calls, and Skype. Most of the programs reported that consultation was helpful and the support they received from their supervisors was a critical component for their continuous improvement and success. Programs that utilized consultation more frequently showed greater improvements in overall scores within their program.

### **Fiscal Year 2013 and Future Program Issues**

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

School year 2012/2013 begins the latest round of the Alaska Pre-Kindergarten (AK Pre-K) two-year competitive grant competition among districts. Below is a list of the successful grantees by district who will work with their communities to show continuous improvement in child and program outcomes.

- Lower Kuskokwim SD, Anchorage SD, Mat-Su SD, Nome SD, Juneau SD, Yukon Koyukuk SD, North Slope SD and Dillingham SD

These eight districts will provide services to approximately 350 children in 17 communities. 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.