### Part B State Annual Performance Report (APR) for FFY 2010

#### Monitoring Priority: FAPE in the LRE

**Indicator 7:** Percent of preschool children aged 3 through 5 with IEPs who demonstrate improved:

- A. Positive social-emotional skills (including social relationships);
- B. Acquisition and use of knowledge and skills (including early language/ communication and early literacy); and
- C. Use of appropriate behaviors to meet their needs.

(20 U.S.C. 1416 (a)(3)(A))

#### Measurement:

Outcomes:

- A. Positive social-emotional skills (including social relationships);
- B. Acquisition and use of knowledge and skills (including early language/communication and early literacy); and
- C. Use of appropriate behaviors to meet their needs.

Progress categories for A, B and C:

- a. Percent of preschool children who did not improve functioning = [(# of preschool children who did not improve functioning) divided by (# of preschool children with IEPs assessed)] times 100.
- b. Percent of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers = [(# of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.
- c. Percent of preschool children who improved functioning to a level nearer to sameaged peers but did not reach it = [(# of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it) divided by (# of preschool children with IEPs assessed)] times 100.
- d. Percent of preschool children who improved functioning to reach a level comparable to same-aged peers = [(# of preschool children who improved functioning to reach a level comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.
- e. Percent of preschool children who maintained functioning at a level comparable to same-aged peers = [(# of preschool children who maintained functioning at a level comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.

# Summary Statements for Each of the Three Outcomes (use for FFY 2009 reporting)

**Summary Statement 1:** Of those preschool children who entered the preschool program below age expectations in each Outcome, the percent who substantially increased their rate of growth by the time they turned 6 years of age or exited the program.

**Measurement for Summary Statement 1:** Percent = # of preschool children reported in progress category (c) plus # of preschool children reported in category (d) divided by [# of preschool children reported in progress category (a) plus # of preschool children reported in progress category (b) plus # of preschool children reported in progress category (c) plus # of preschool children reported in progress category (d)] times 100.

**Summary Statement 2:** The percent of preschool children who were functioning within age expectations in each Outcome by the time they turned 6 years of age or exited the program.

**Measurement for Summary Statement 2:** Percent = # of preschool children reported in progress category (d) plus [# of preschool children reported in progress category (e) divided by the total # of preschool children reported in progress categories (a) + (b) + (c) + (d) + (e)] times 100.

# Measurable and Rigorous Targets for Preschool Children Exiting in FFY 2010 and Actual Data for Preschool Children Exiting in FFY 2010

Summary Statements	Targets FFY 2010 (% of children)	Actual Data FFY 2010 (% of children)						
Outcome A: Positive social-emotional skills (including social relationships)								
<ol> <li>Of those children who entered or exited the program below age expectations in Outcome A, the percent who substantially increased their rate of growth by the time they exited the program</li> </ol>	83.6%	81.9%						
2. The percent of children who were functioning within age expectations in Outcome A by the time they exited the program	84.8%	73.5%						
Outcome B: Acquisition and use of knowledge and se language/communication and early literacy)	cills (includi	ng early						
<ol> <li>Of those children who entered or exited the program below age expectations in Outcome B, the percent who substantially increased their rate of growth by the time they exited the program</li> </ol>	76.2%	80.6%						
2. The percent of children who were functioning within age expectations in Outcome B by the time they exited the program	74.0%	64.0%						

Summary Statements	Targets FFY 2010 (% of children)	Actual Data FFY 2010 (% of children)
Outcome C: Use of appropriate behaviors to meet the	eir needs	
<ol> <li>Of those children who entered or exited the program below age expectations in Outcome C, the percent who substantially increased their rate of growth by the time they exited the program</li> </ol>	80.3%	79.3%
2. The percent of children who were functioning within age expectations in Outcome C by the time they exited the program	84.7%	69.4%

# Table 7.1 Outcome A Positive social-emotional skills (including socialrelationships)

Α.		sitive social-emotional skills (including social ationships):	Number of Children	% of Children
	a.	Percent of preschool children who did not improve functioning	96	2.5%
	b.	Percent of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers	t sufficient to move nearer to functioning comparable to 348	
	C.	Percent of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it	591	15.1%
	d.	Percent of preschool children who improved functioning to reach a level comparable to same-aged peers	1421	36.3%
	e.	Percent of preschool children who maintained functioning at a level comparable to same-aged peers	1455	37.2%
Tot	tal		3911	100.0%

Table 7.2 Outcome B Acquisition and use of knowledge and skills (includingearly language/communication and early literacy)

В.		quisition and use of knowledge and skills (including rly language/communication and early literacy):	Number of Children	% of Children
	a.	Percent of preschool children who did not improve functioning	116	3.0%
	b.	Percent of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers	435	11.1%
	C.	Percent of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it	859	21.9%
	d.	Percent of preschool children who improved functioning to reach a level comparable to same aged peers	1433	36.6%
	e.	Percent of preschool children who maintained functioning at a level comparable to same-aged peers	1075	27.4%
То	tal		3918	100.0%

### Table 7.3 Outcome C Use of appropriate behaviors to meet their needs

C.	Us	e of appropriate behaviors to meet their needs:	Number of Children	% of Children
	a.	Percent of preschool children who did not improve functioning	171	4.4%
	b.	Percent of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers	350	8.9%
	C.	Percent of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it	676	17.3%
	d.	Percent of preschool children who improved functioning to reach a level comparable to same aged peers	1316	33.6%
	e.	Percent of preschool children who maintained functioning at a level comparable to same-aged peers	1402	35.8%
То	tal		3915	100.0%

# Explanation of Progress or Slippage that Occurred for FFY 2010 as compared to baseline data

**Background:** The collection and reporting of data for Indicator 7 is administered by the Results Matter Early Childhood Assessment Program at the Colorado Department of Education. Results Matter is a statewide program that promotes ongoing documentation and assessment of child learning and development for a total of 45,000 children served in a variety of early childhood settings. These settings include Head Start, private for-profits, non-profits, faith based and home based programs. Results Matter is a comprehensive outcomes and accountability system consisting of multiple components:

- measurement and reporting of child and family outcomes;
- longitudinal analysis of achievement data;
- links to program quality indicators; and
- an extensive professional development and technical assistance system designed to support high quality assessment practices.

Results Matter promotes the use of data to inform decision making at multiple levels including classroom instruction, program improvement, local and state policy development and accountability reporting.

All preschool children supported with IDEA funds are assessed with observation based reliable and valid instruments as part of the Results Matter program. All assessment information, including observation notes and other forms of documentation, is entered online using secure systems hosted by the assessment vendors. These online assessment systems provide immediate access to child and group level status and progress data reports for teachers, local and state administrators. Conversion to the OSEP progress categories is achieved through an automated online process calibrated to each of the assessment tools on the Results Matter menu. The converted data are entered into the Early Childhood Outcomes Center's (ECO) summary statement calculator.

**Description of Report Population and Data Sets:** Data for 3,915 children is analyzed in this year's report reflecting an overall increase in complete OSEP data of 19% over FFY 2009. This vast improvement in completion rates is attributed to a systematic plan for Results Matter staff to monitor completion rates and data entry quality more intensively throughout each assessment period.



These efforts were applied to all program participants, but with particular focus to users of the Work Sampling System where low numbers persisted over several years. Local programs receive email reminders, face-to-face technical assistance, phone support, sample reports and periodic webinars with the assessment publishers. The two prong focus of this effort is to build administrator capacity to monitor and support data quality with their staff and to help teachers understand the importance of complete and reliable data. As a result, the Work Sampling System Completion rate increased by 73% from 657 children reported by WSS users in FFY 2009 to 1,138 children represented in FFY 2010. While a marked improvement and a testament to the commitment of state and local staff to continuous improvement, this weighted shift in assessment system data toward WSS has created unintended consequences in the overall analysis due to anomalies in the WSS conversion that will be described in more detail later in this report.



Results Matter participating programs have, since the program's inception in 2006, chosen from a menu of ongoing observation based assessment systems including the HighScope Child Observation Record (COR), the Work Sampling System (WSS) and the Creative Curriculum Developmental Continuum (CCDC). FFY 2010 marked a major change for the Results Matter program with the introduction of a new assessment system, Teaching Strategies GOLD (TS GOLD), to replace the CCDC. Programs using the CCDC were given the choice of transitioning to the new assessment in FFY 2010 or FFY 2011.



The common metric of the OSEP child outcomes ratings allows transitioning programs to use entry scores from the original assessment and exit scores from the new assessment. The phase-in of TS GOLD resulted in five separate data sets as illustrated in the following chart:



The assessment data included in this report reflects 3,915 preschool children, the majority of whom (87%) fall into the 4-5 year old age bracket. The ratio of 2/3 boys to 1/3 girls represented in the data set is consistent with prior year information.



Race and ethnicity breakdown mirrors Colorado state averages for all children birth through 17 years of age:



## Explanation of Progress or Slippage that Occurred for FFY 2010 as compared to baseline data

**Discussion of Results:** The analysis of Colorado's aggregate outcome data as it appears in the data tables above reveals minor to moderate slippage in five of the six summary statements and yet analyses of progress data in each of the assessment systems appears to reflect a positive growth trajectory in patterns expected across the developmental and academic domains. No appreciable difference in growth data was noted between FFY08, FFY09 and FFY10. OSEP category distribution was examined for each of the five assessment data sets and all but the WSS data yielded expected results. WSS results showed unusually high percentages in OSEP reporting category B and C and extremely low numbers in category E.

WSS	А	В	С	D	E
Outcome A	2.6%	17.4%	31.5%	39.6%	8.8%
Outcome B	2.7%	17.1%	43.9%	31.7%	4.6%
Outcome C	2.4%	17.3%	36.6%	37.4%	6.2%

Colorado had been working closely with Pearson researchers and programmers to identify ways to effectively and accurately convert WSS results to the outcome ratings and, ultimately, the reporting categories and summary statements. This has led to the identification of several barriers. First, while positive trends in fall to spring growth can be identified within the WSS assessment data, attempts to show changes in growth trajectories by performing gap analysis across populations of children have not yielded usable results in

WSS. Second, horizontal scaling and separate age band protocols make it a challenge to follow children across chronological age brackets. Finally, Colorado has not been successful in obtaining from the publisher an acceptable solution to the methodological problems in performing the OSEP outcome rating conversion online. For these reasons, the Results Matter team has concluded that the OSEP data derived from the Work Sampling System online process is not producing reliable or valid results and is not suitable for the State's purposes. This year's WSS data set makes up 29% of the State's "n" and, as illustrated to the right, appears to be skewing results. In order to more accurately report on progress or slippage, a comparison of 2010 adjusted (WSS excluded) results is compared to 2009 baseline data in the charts below.

WSS Data Only (n = 1138)	SS1	SS2
Outcome A	78.1%	48.5%
Outcome B	79.2%	36.3%
Outcome C	79.0%	43.7%
All Data WSS Included (n = 3,915)	SS1	SS2
Outcome A	81.9%	73.5%
Outcome B	80.6%	64.0%
Outcome C	79.3%	69.4%
All Data WSS Excluded (n = 2,777)	SS1	SS2
Outcome A	84.7%	83.8%
Outcome B	81.5%	75.4%
Outcome C	79.5%	80.0%



In Summary Statement 1, progress is evident for Outcome A and B with a slight slippage in Outcome C. In Summary Statement 2, progress is demonstrated for Outcome B, with minor slippage in Outcome A and more evident decline for Outcome C. While this decline in Outcome C, Summary Statement 2 percentage is cause for continued monitoring and deeper investigation, it is important to note that this decrease actually pulls Colorado data more into line with the national average. Because the calibration for OSEP outcomes conversion and the embedded algorithms for all of the assessments are still being refined, Colorado will monitor trends, working closely with the ECO Center and the assessment research staff while concurrently working with teachers on reliable assessment implementation and accurate data entry. The latter strategy is a particularly important factor to examine with so many Colorado educators transitioning to the new assessment. As with any new assessment, it will take time for TS GOLD users to learn about the new scale and practice reliable ratings thus affecting the level of confidence placed in the first few years of data. To begin the data quality monitoring process for the new assessment, Colorado asked researchers at Teaching Strategies Inc. to run further analyses on the 733 assessment records for children who were assessed with TS GOLD for both OSEP entry and exit.



Specifically, the researchers looked at raw assessment data to identify any irregular scoring patterns that indicated either massive growth not explained by documentation or higher than average baseline scores. They examined data based on all test items and ran the same analysis based only on the test items that specifically make up the three outcomes and did not find any evidence of scoring anomalies. The researchers concluded that Year 1 Colorado TS GOLD raw assessment data is reliable. In their opinion, the slightly higher than expected summary statement percentages indicate that the current cut scores are still not calibrated correctly and expect to have this issue resolved by the end of December 2011.

#### Required response to FFY 2009 APR

None required.

#### **Discussion of Improvement Activities**

- 1. Local data discussions have been held to help build capacity of local participants to understand and appropriately use child assessment data.
- 2. Results Matter staff completed systematic completion checks and feedback reports to providers after each checkpoint.
- 3. 619 staff provided regional workshops on using data to inform instruction and intervention.
- 4. Results Matter engaged stakeholders in multiple discussions about challenges with the WSS assessment data. Those using WSS included three large metropolitan school districts as well as numerous small and moderately sized programs. Stakeholders expressed growing concern with the quality and lack of utility with their own WSS data. The Results Matter Advisory Committee met to discuss implications and drafted a letter to the publisher asking for information on timelines for resolving the OSEP calculation challenges as well as for assistance with several other concerns. The publisher was unable to respond by the 30 day deadline imposed and the Advisory Committee voted in June to remove WSS from the Results Matter menu of assessments.

- 5. With a large number of programs already transitioning to TS GOLD and an anticipated 95% of programs selecting this assessment by fall of 2012, the quality of Colorado's data will weigh heavily in state data reporting and the State is committed to high quality practices in this new system. This year, the following policies were put into place:
  - a. All users must complete four online professional development modules on the reliable use of TS GOLD. FFY 2010 Results: 1,527 early childhood providers successfully completed this training.
  - All program administrators must complete a two day intensive training on TS GOLD that focuses on supporting teachers to use the assessment reliably.
     FFY 2010 Results: 300 administrators attended this two day training.
  - c. All lead teachers must complete the TS GOLD Inter Rater Reliability Certification process. FFY 2010 Results: 756 teachers passed the multi phase test.
- 6. Colorado continues to evaluate the overall validity of all the assessment data obtained through Results Matter and to take action to improve the quality of the assessment and accuracy of the data entry. Efforts to improve assessment quality have included
  - a. continued extensive face-to-face and web based learning opportunities;
  - b. on-site technical assistance; and
  - c. increased efforts to build capacity for administrators to monitor and impact assessment quality throughout their programs.
- 7. Colorado worked closed with all assessment publishers to refine formulas used in the OSEP automated online reporting systems and will continue to concentrate on fine tuning the process over the next two years.

Colorado established improvement activities for this indicator through FFY 2012. Below is a list of the improvement activities that took place with the progress and updated information for each of these activities.

Activity	Timeline	<b>Results or Progress</b>		Stat	us*	
			* Sta Nota O=0 C=0 R=R D=0	atio Dngo Com Revi	ns: oing pleto sed;	e;
			0	С	R	D

Activity	Timeline	Results or Progress	Status* *Status Notations: O=Ongoing; C=Complete; R=Revised; D=Deleted		e;	
<ol> <li>Provide briefings about the Results Matter child and family outcomes initiative for broad stakeholder groups.</li> </ol>	FFY 2010 FFY 2011 FFY 2012	<ul> <li>Provided briefings for the following stakeholder groups:</li> <li>School district leadership teams: Jeffco, Douglas, Canon City, Adams County</li> <li>Early Childhood Council Coordinators</li> <li>Boulder Early Childhood Council</li> <li>Boulder elementary principals</li> <li>Boulder preschool teachers</li> <li>State Board of Education</li> <li>Colorado School for the Deaf and Blind</li> <li>Presented at:</li> <li>Early Childhood 2010 national meeting</li> <li>National Association for the Education of Young Children</li> </ul>	o x x	x	R	D
<ol> <li>Strengthen reliable use of assessment by</li> </ol>	FFY 2010	Provided 14 regional observation skills training	х	x		

	Activity	Timeline	Results or Progress		Status* *Status Notations: O=Ongoing; C=Complete; R=Revised; D=Deleted			
providing ongoing observation, documentation and assessment instrument training as well as training in use of the online assessment	FFY 2011 FFY 2012	1,527 teachers and classroom assistants completed four online professional development modules for Teaching Strategies GOLD	o X	c x	R	D		
	systems for providers and administrators.	providers <b>756</b> teachers completed		x	x			
			<ul> <li>Provided local assessment training:</li> <li>4 X Creative Curriculum Developmental Continuum</li> <li>1 X Work Sampling System</li> <li>2 X HighScope COR</li> <li>8 days of Teaching Strategies GOLD Administrator Training</li> </ul>	×	x			
3.	Collect and analyze data for use at the federal, state and local levels to inform families, child- level planning, local	FFY 2010 FFY 2011 FFY 2012	Extensive planning for connection of child outcomes data to Colorado State Longitudinal Data System	x				
	program level training and statewide technical assistance.		Performed analysis of Head Start data including data quality and outcomes analysis for children funded through 619		x			

	Activity	Timeline	Results or Progress	Not O= C= R=	atus tatio Ong Com Revi Dele	ons: oing plete sed;	e;
4.	Develop and implement professional development resources on linking assessment to planning instruction and intervention.	FFY 2012	Postponed to 2012/2013 program year.	0	С	R X	D
5.	Improve completion rate of assessments in programs where High/Scope Child Observation Record the Work Sampling System is used.	FFY 2010	Changed focus on completion rates from HighScope COR to programs using the Work Sampling System resulting in a 73% increase in complete assessment data for exiting children		x	x	
6.	Improve Data Quality: Conduct in-depth analysis of data and develop a plan for sharing information and supporting quality improvement efforts with local stakeholders	FFY 2010 FFY 2011 FFY 2012	Conducted 11 local trainings on data quality.	x	x		
7.	Support transition to Teaching Strategies GOLD for quality assessment implementation	FFY 2010 FFY 2011 FFY 2012	See PD activites in #2 above	x	x		

### **Resources Used to Support Activities**

- State PreKindergarten consultants shared staff 50/50 for preschool program and Results Matter
- ECO Center
- NECTAC
- SLDS Grant
- Teaching Strategies Inc., HighScope Foundation, Pearson Early Learning
- Partnerships with other states: Nebraska, Pennsylvania, New Hampshire, etc.

### <u>Revisions, with Justification, to Proposed Targets / Improvement Activities /</u> <u>Timelines / Resources for FFY2010</u>

### Continued Improvement Activities Pertinent to TS GOLD Implementation

	Activity		Action Steps	Timeline	Resources
1.	Support programs transitioning from Work Sampling System to Teaching Strategies GOLD	•	Provide administrator training Promote use of professional development modules Support completion of Inter Rater Reliability certification for all lead teachers Work with publisher to import child demographic and entry outcome ratings from Work Sampling to TS GOLD Provide ongoing TA for local teams	2011/2012 and ongoing	Teaching Strategies Shared PreK state staff Local partners
2.	Finalize OSEP conversion procedures for TS GOLD assessment data	•	Continue to collaborate on research and data discussions Provide feedback to publisher Support reliable use of assessment	June, 2012	Teaching Strategies ECO Center NECTAC