

**Activity 1: Forming Good Data Questions**

**Part I: Forming good data analysis questions.** The questions below were generated by a group of stakeholders from both early intervention and preschool special education to improve their programs. What are the strengths and weaknesses of each of these questions given the criteria that we just examined?

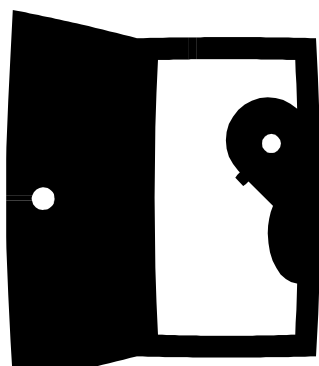
- Important to districts, programs, families and others
- Well defined
- Clear expectations for what you expect to find
- Clear which elements in your data will be needed

Question	Who is the audience for this question?	Strengths/weakness of how it is written.	How could you rewrite it to be better?
* Who has better outcomes?			
* What are they doing differently in programs where more children exit at age expectations in knowledge and skills?			
* How does the percent of children exiting at age expectations in knowledge and skills differ across subgroups like race ethnicity and average functioning at entry?			
* Why don't more families report that early intervention helps them help their child develop and learn?			

**Part II: Generating key questions.** Now, either write your own key question(s), or take one or more of the revised questions from Part I, that you would like to answer about what affects outcomes. For each question, fill-in who the audience would be and what kinds of data variables you would need to pull together to be able to answer it.

Question	Who is the audience for this question?	What data variables/elements would you need?

Activity 2  
NO PEEKING!



**Activity 2: Looking at Data**

Let’s look at data for a cooperative. Within the area that this cooperative serves, it is divided into 6 districts and serves a total of 151 children. All the districts are committed to program improvement and would like to look at their outcomes data to see how kids are doing on child outcomes and inform their program improvement activities. The evidence we will use is child outcomes data for the cooperative and districts. Inference will be related to comparisons between districts to the cooperative and each other. Action will be the identification of districts that may be performing higher or lower than others on child outcomes.

First, let’s look at the individual data for one of the districts, below. Think about how you could use this data to inform program improvement activities? How would you need to group or categorize the data for it to be more informative across districts?

**As you review the data in this activity consider the following questions and record your thoughts.**

Question	Corresponding Chart/Graph	Notes
1. How would you need to group or categorize the data for it to be more informative across districts? a. How could you simplify family income for comparing across districts and outcomes?	Chart 1	
2. How is the cooperative performing on child outcomes? a. Is it the same across all the outcomes and summary statements? If not, how does it differ?	Graphs 1-2	
3. Which districts have the best child outcomes? Which have the lowest? a. Is it the same across all the outcomes and summary statements? If not, how does it differ?	Graphs 3-8	
4. What additional data or information would you like to see?	All information presented so far	

**Chart 1. Individual Child Outcomes Data for District 2**

Child ID	District	Race/ Ethnicity	Outcome 1 Entry	Outcome 2 Entry	Outcome 3 Entry	Outcome 1 Exit	Outcome 2 Exit	Outcome 3 Exit	Outcome 1 Progress Category	Outcome 2 Progress Category	Outcome 3 Progress Category	Family Income	Disability	Language
10189	2	WHT	5	4	4	3	4	3	b	b	b	\$22,000	Dev Delay	English
10403	2	HIS	4	4	5	2	2	1	b	b	a	\$19,000	Dev Delay	DLL
10919	2	HIS	5	4	3	6	6	6	d	d	d	\$21,000	Dev Delay	DLL
11038	2	HIS	6	7	6	6	6	6	e	d	e	\$25,000	Speech- Lang Only	DLL
12034	2	HIS	3	3	2	6	6	6	d	d	d	\$56,000	Dev Delay	English
12034	2	WHT	3	3	2	6	6	5	d	d	d	\$31,000	Dev Delay	English
12040	2	WHT	5	5	5	5	5	5	b	b	b	\$62,000	ASD	English
12040	2	WHT	5	5	5	5	5	5	b	b	b	\$30,000	Dev Delay	English
13130	2	HIS	2	3	1	3	2	2	c	b	c	\$23,000	ASD	DLL
13965	2	HIS	4	2	2	3	3	3	b	c	c	\$19,000	Dev Delay	English
15272	2	BLK	3	7	6	5	7	7	c	d	e	\$21,000	Dev Delay	DLL
15494	2	BLK	1	2	1	1	1	1	a	a	a	\$19,000	ASD	DLL
15705	2	BLK	7	3	7	6	7	7	e	d	e	\$29,000	Speech- Lang Only	DLL
15708	2	BLK	4	3	7	6	6	7	d	d	e	\$27,000	Speech- Lang Only	English
15838	2	BLK	7	3	5	6	5	5	e	c	b	\$28,000	Dev Delay	English
16646	2	MULTI	6	4	5	6	5	5	e	c	b	\$65,000	Dev Delay	English
16913	2	WHT	3	3	3	6	6	7	d	d	d	\$75,000	Speech- Lang Only	English
17028	2	MULTI	4	4	4	7	6	6	d	d	d	\$67,000	Dev Delay	English
17437	2	WHT	3	4	4	6	7	6	d	d	d	\$21,000	Dev Delay	English

BLK= Black/African American

HIS= Hispanic/Latino

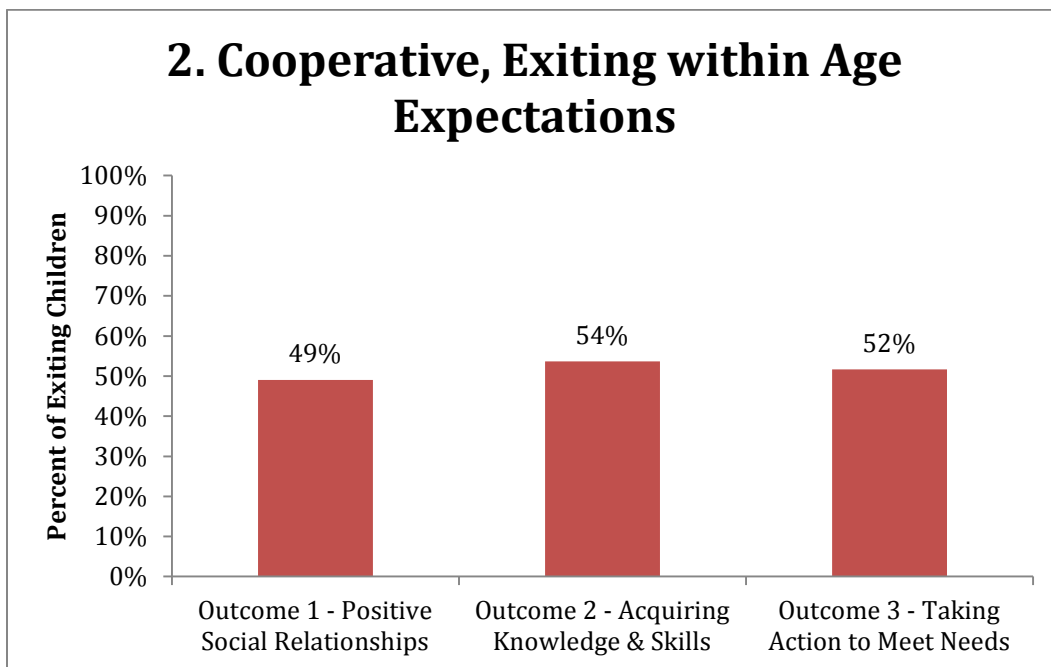
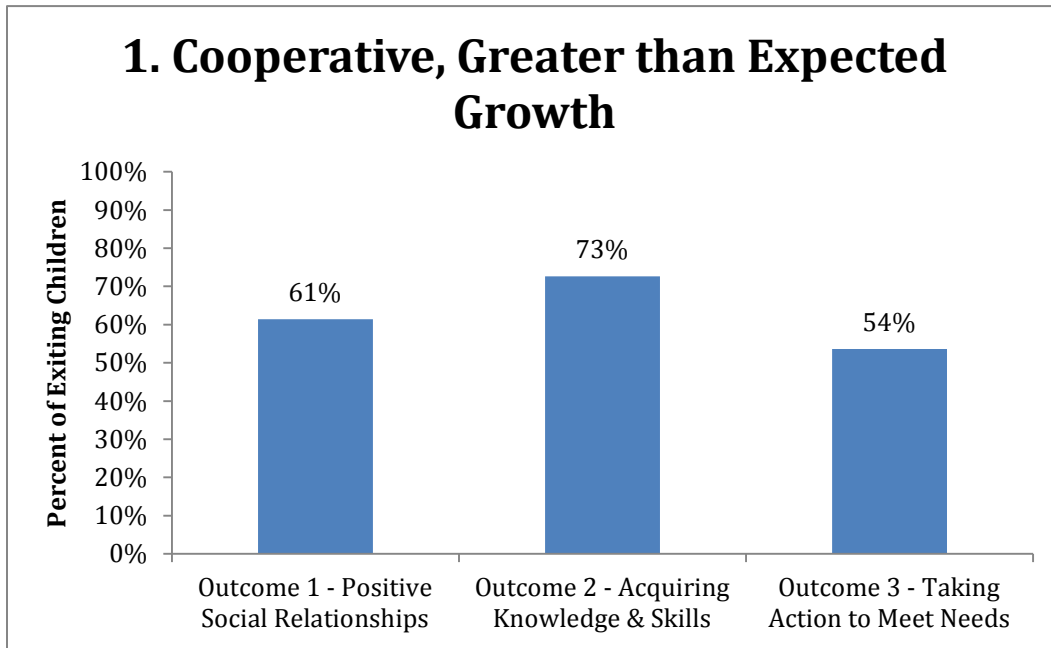
MULTI= Multi-racial (2 or more)

WHT= White

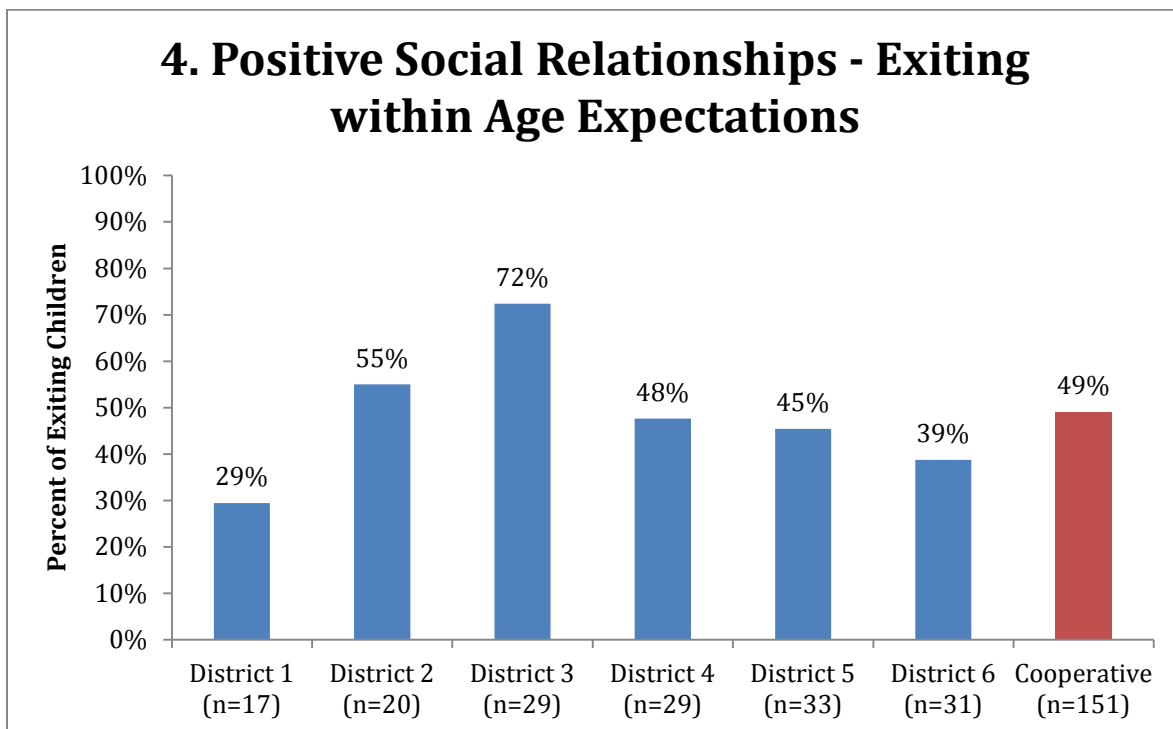
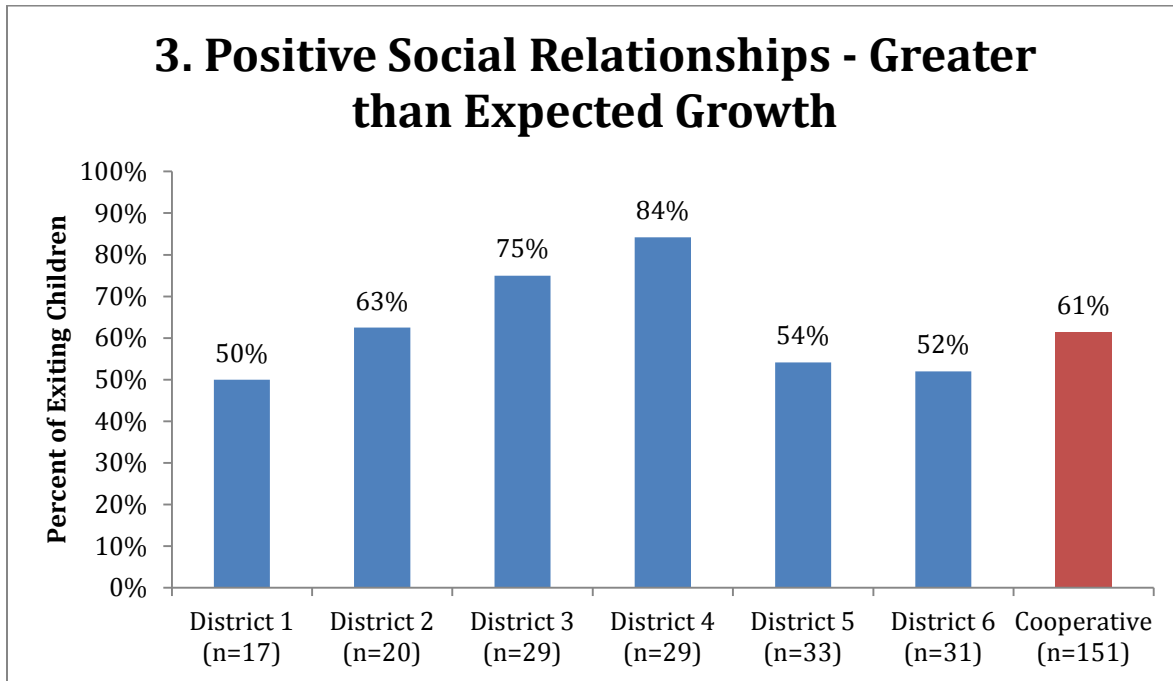
DLL= Dual Language Learner

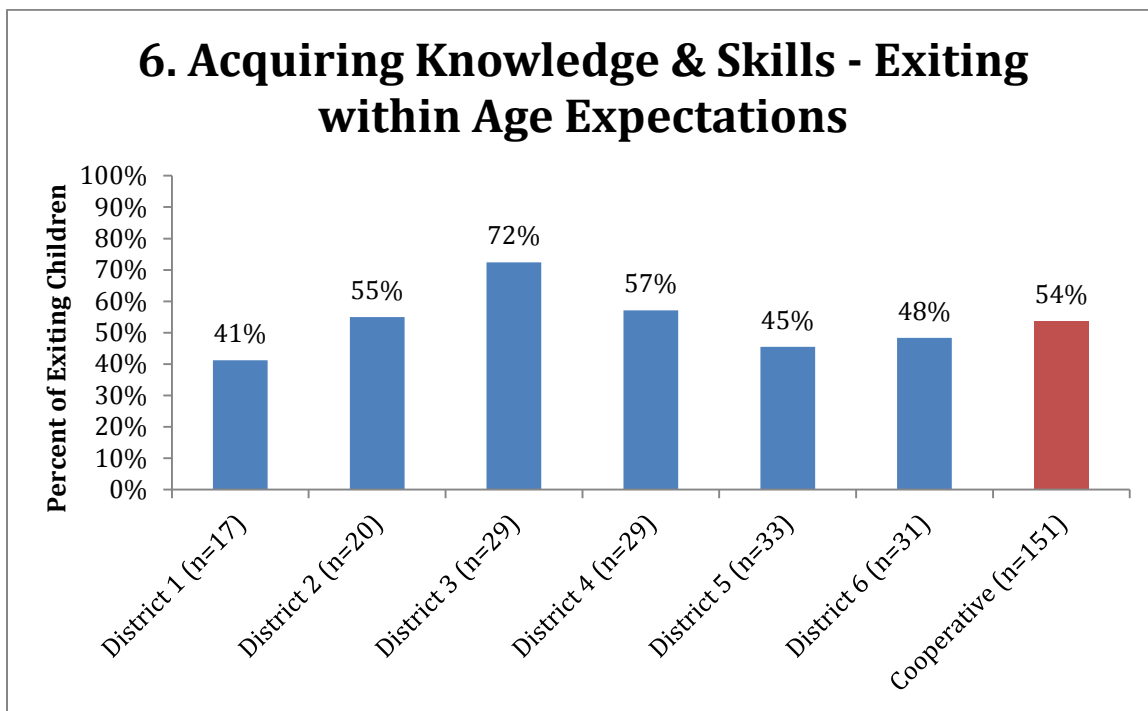
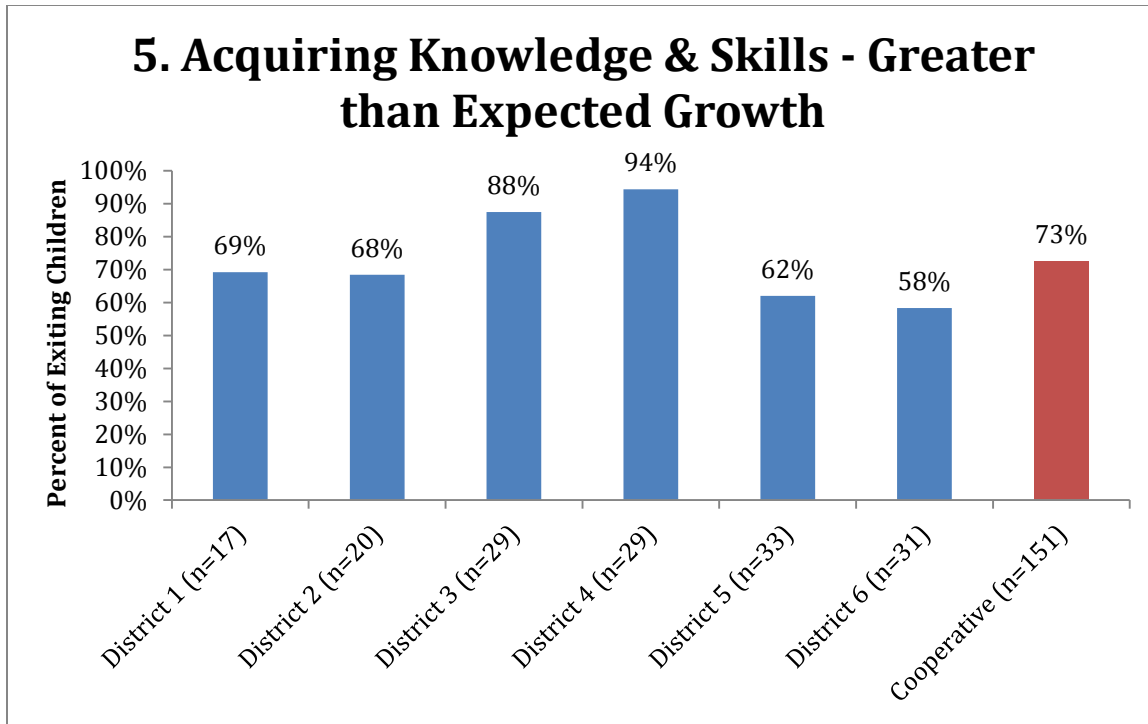
Next, let's look at the overall child outcomes data across the 6 districts for the cooperative. How is the cooperative doing on child outcomes? How is each district doing compared to the cooperative? What patterns do you notice in the child outcomes?

**Cooperative Data Overview**



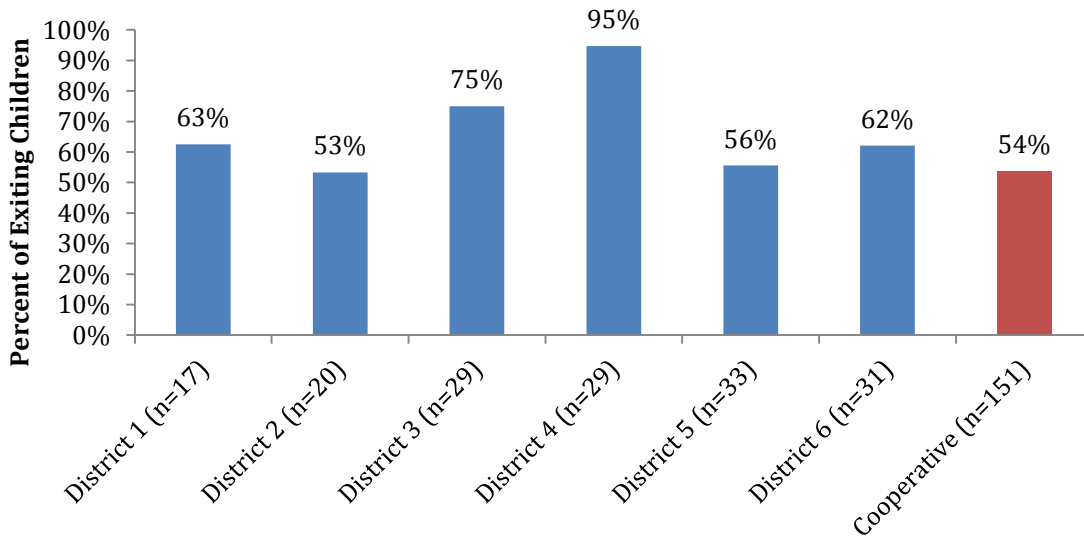
*Comparing Across Districts*



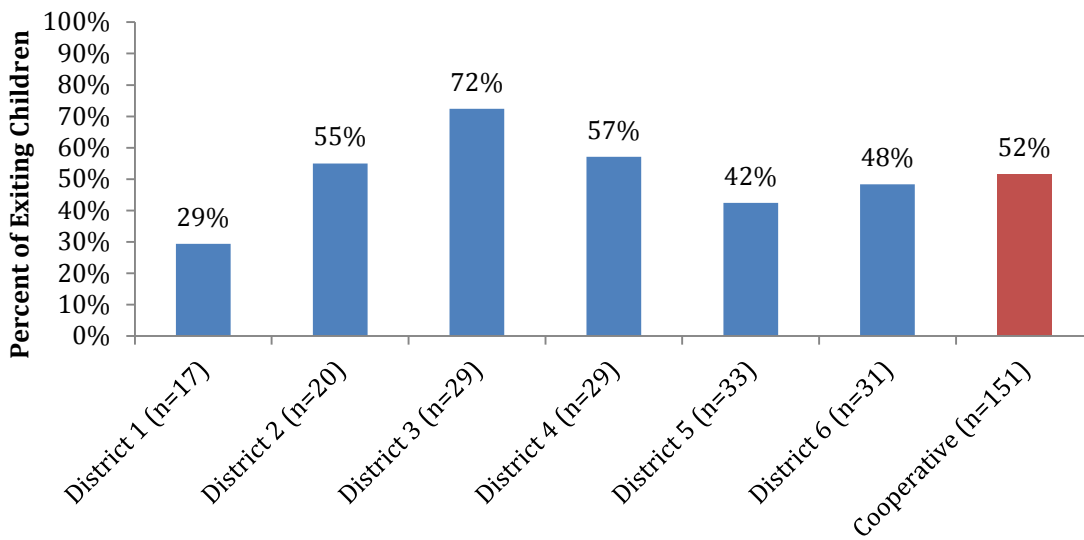




### 7. Taking Action to Meet Needs - Greater than Expected Growth

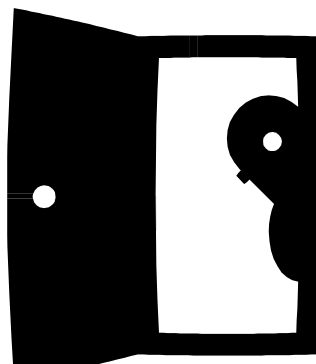


### 8. Taking Action to Meet Needs - Exiting within Age Expectations





Activity 3  
NO PEEKING!



**Activity 3: Comparing Child Outcomes by District Characteristics**

There are six districts in cooperative but each district operates pretty independently with varying curriculum and service approaches. Therefore, we will next consider how district characteristics may relate to differences in child outcomes. The evidence we will use is child outcomes data for the districts examined by several district characteristics. Inference will be related to comparisons between these different districts characteristics and how they relate to differences in child outcomes. Action will be the identification of factors that may be contributing differences in districts’ child outcomes and potential improvement strategies.

**As you review the data in this activity consider the following questions and record your thoughts.**

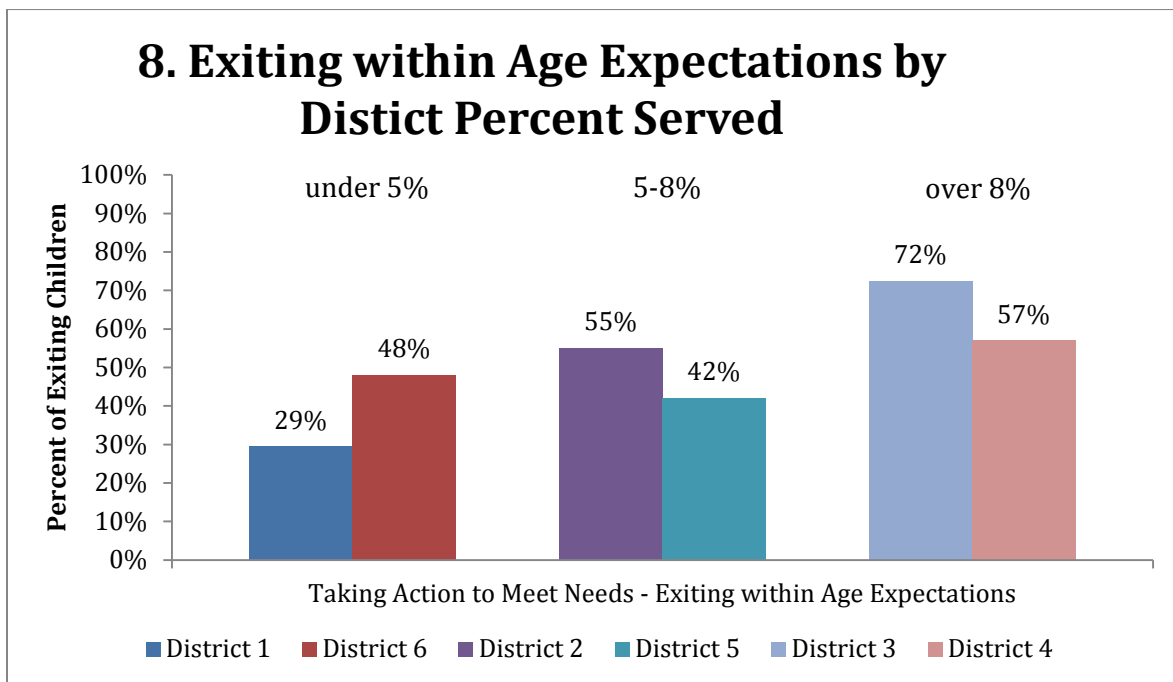
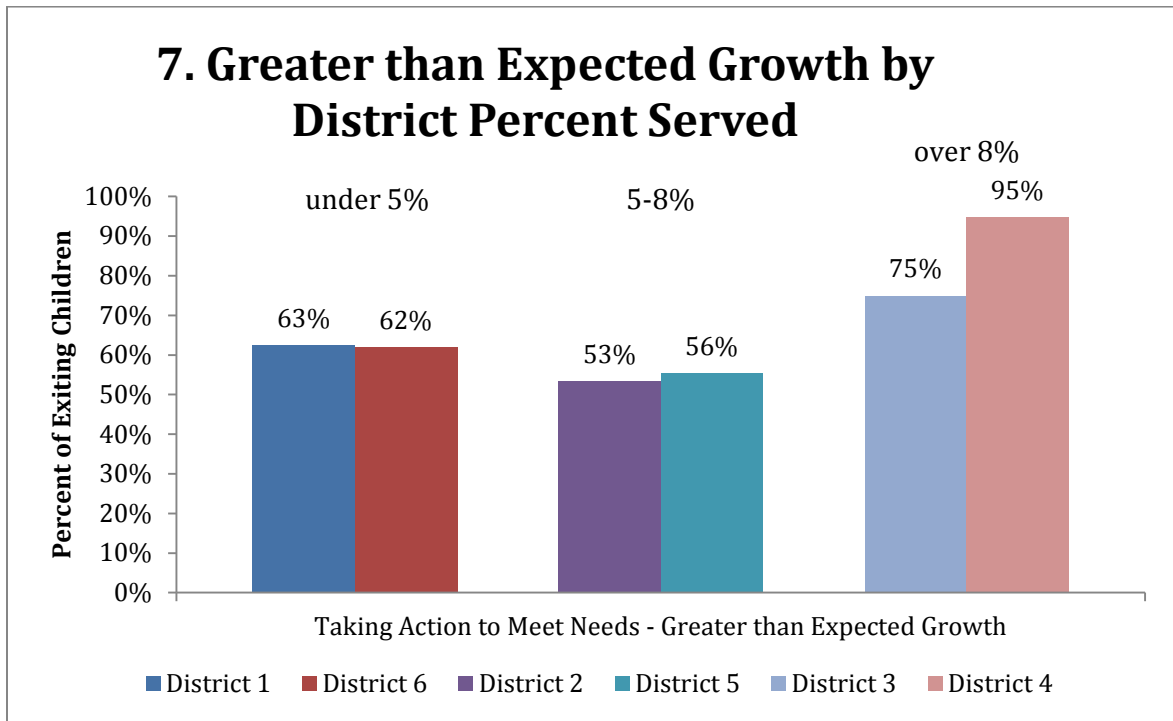
Question	Corresponding Chart/Graph	Notes
1. How do child outcomes differ by <ul style="list-style-type: none"> <li>a. Percent served</li> <li>b. Income level</li> <li>c. Service setting</li> <li>d. Curriculum type</li> </ul>	Chart 1 Graphs 7-14	
2. How you could use this data to inform program improvement activities? <ul style="list-style-type: none"> <li>a. Would the same strategy work for all the districts?</li> <li>b. If not, would there need to be different strategies, and what might those be?</li> </ul>	Chart 1 Graphs 7-14	
3. What additional data or information would you like to see?	All information presented so far	

**Chart 2. Overview of Cooperative District Data**

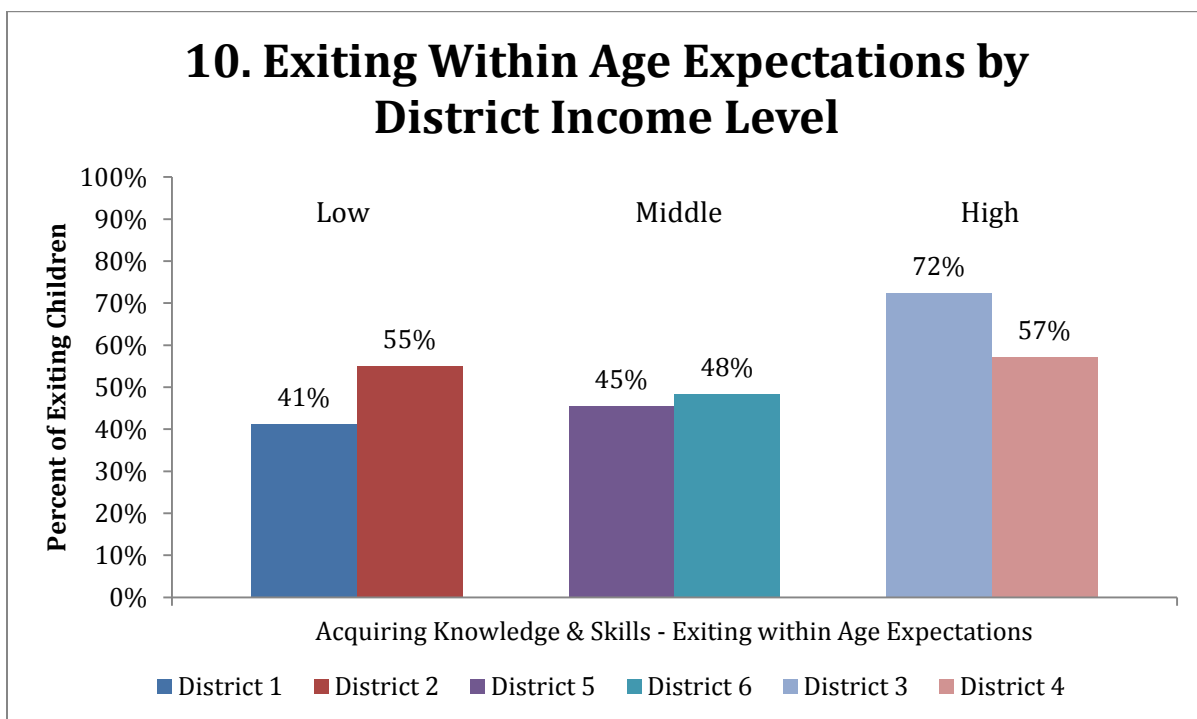
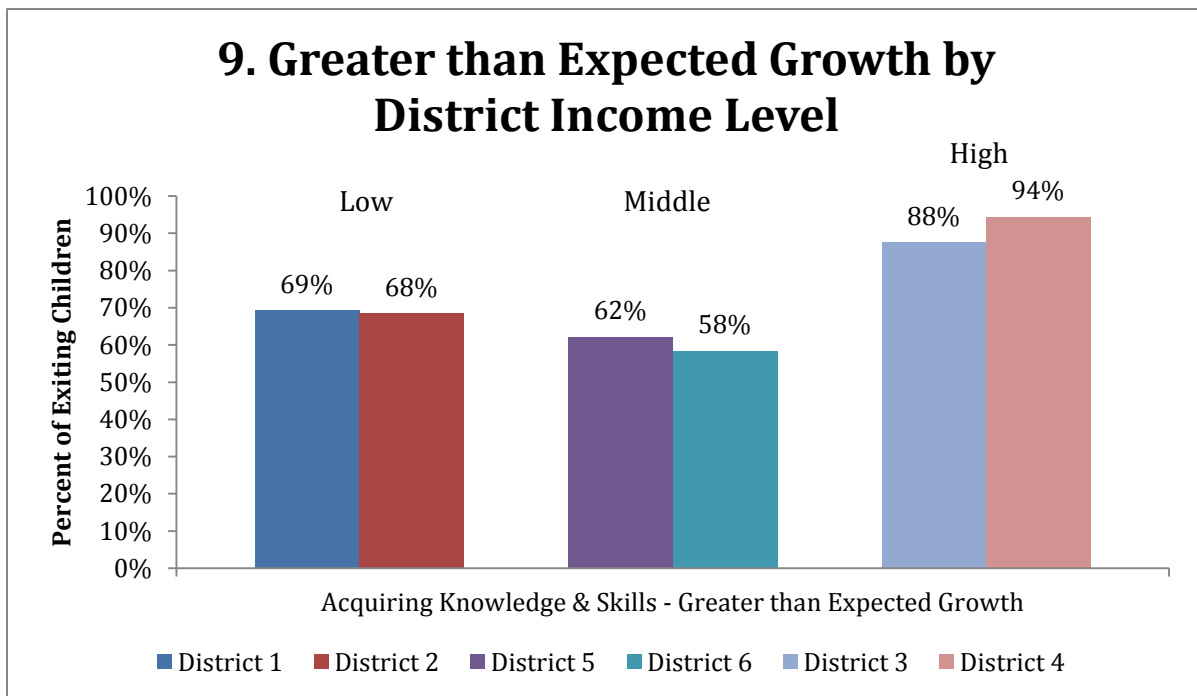
District	Number of Exiters	% Served	% Low Income	% Minority	% DLL	% Speech/Lang Only	OC1 SS1	OC1 SS2	OC2 SS1	OC2 SS2	OC3 SS1	OC3 SS2	Service Location	Curriculum
District 1	17	3%	71%	76%	47%	12%	50%	29%	69%	41%	63%	29%	Special Ed Classrooms	Tools of the Mind
District 2	20	7%	75%	70%	35%	20%	63%	55%	68%	55%	53%	55%	State PreK (not universal)	Creative Curriculum
District 3	29	12%	7%	14%	3%	52%	75%	72%	88%	72%	75%	72%	State PreK (not universal)	Positive Behavioral Supports
District 4	21	10%	5%	5%	5%	48%	84%	48%	94%	57%	95%	57%	Itinerant Services	N/A
District 5	33	8%	24%	48%	18%	36%	54%	45%	62%	45%	56%	42%	Itinerant Services	N/A
District 6	31	4%	26%	42%	16%	26%	52%	39%	58%	48%	62%	48%	Special Ed Classrooms	Ready to Read

OC1 = Outcome 1, positive social relationships  
 OC2 = Outcome 2, Acquiring Knowledge & Skills  
 OC3 = Outcome 3, Taking Action to Meet Needs  
 SS1 = Summary statement 1, Greater than Expected Growth  
 SS2= Summary Statement 2, Exiting within Age Expectations

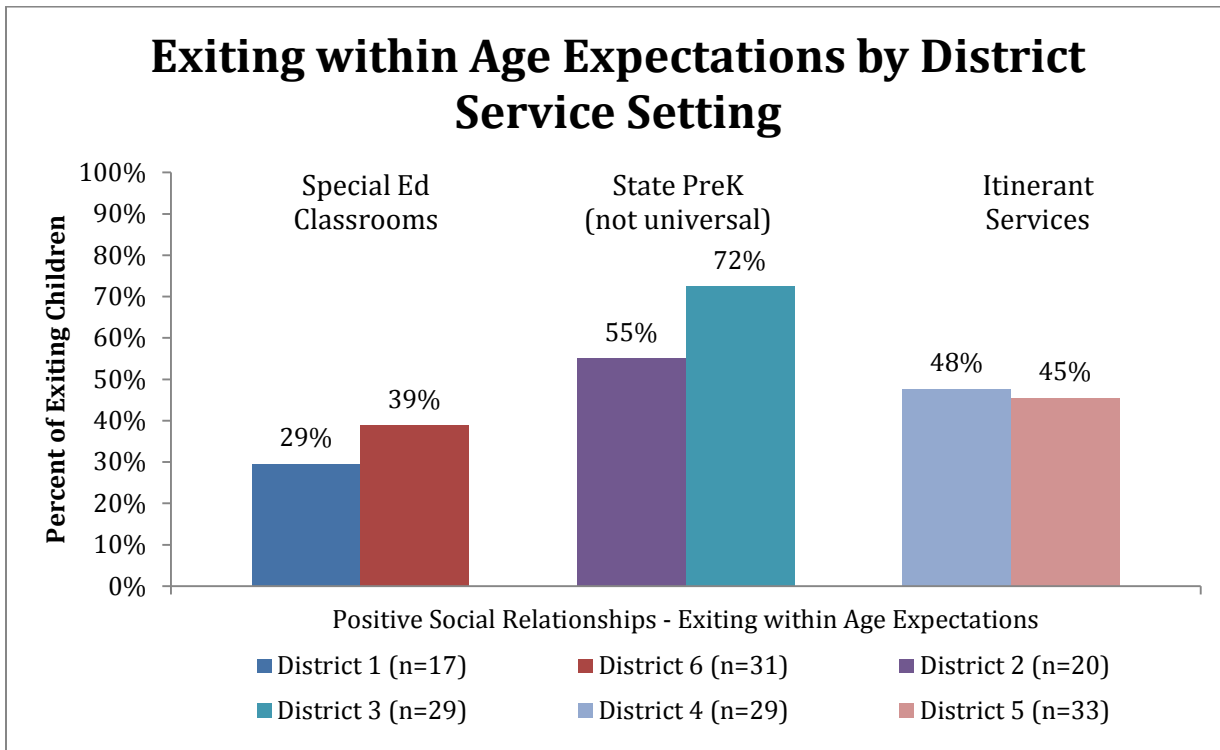
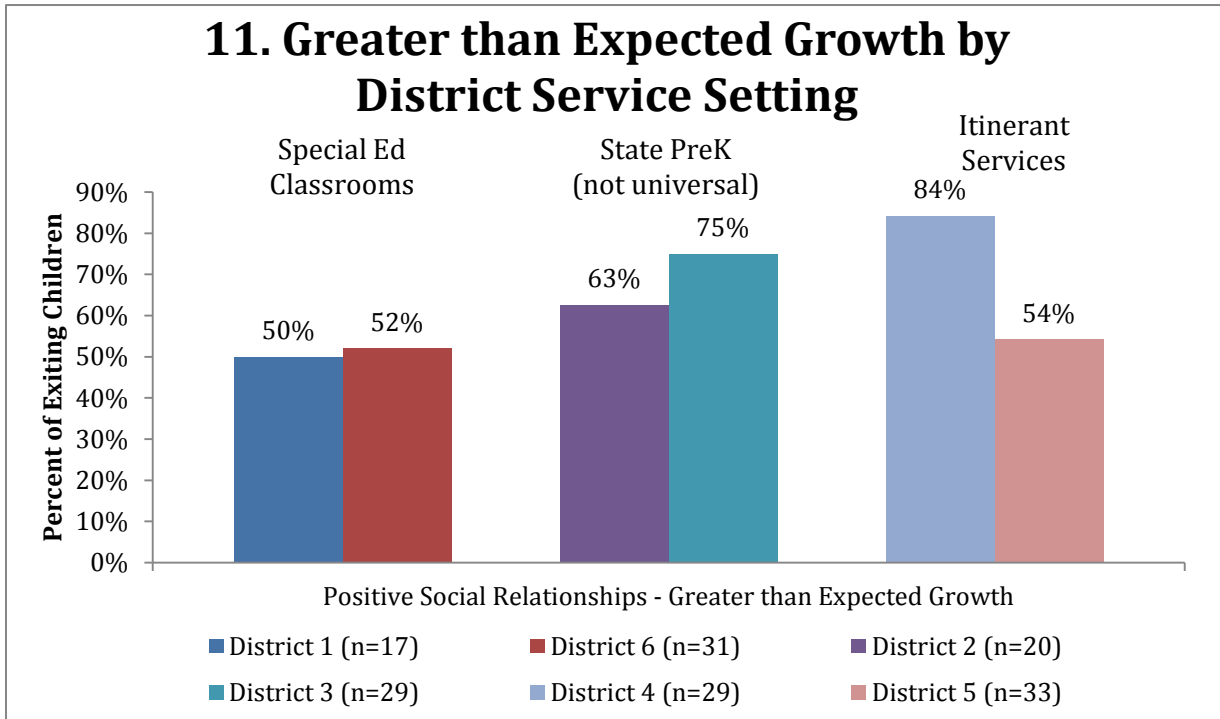
*By Percent Served*



*By Income Level*

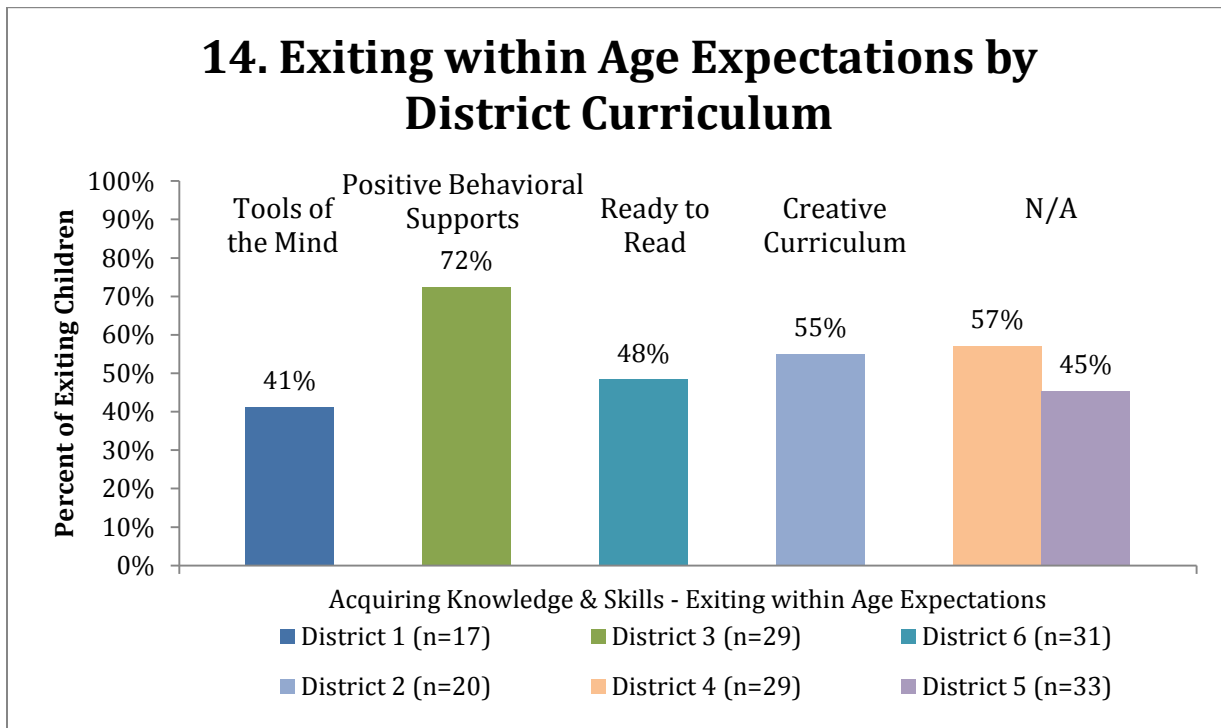
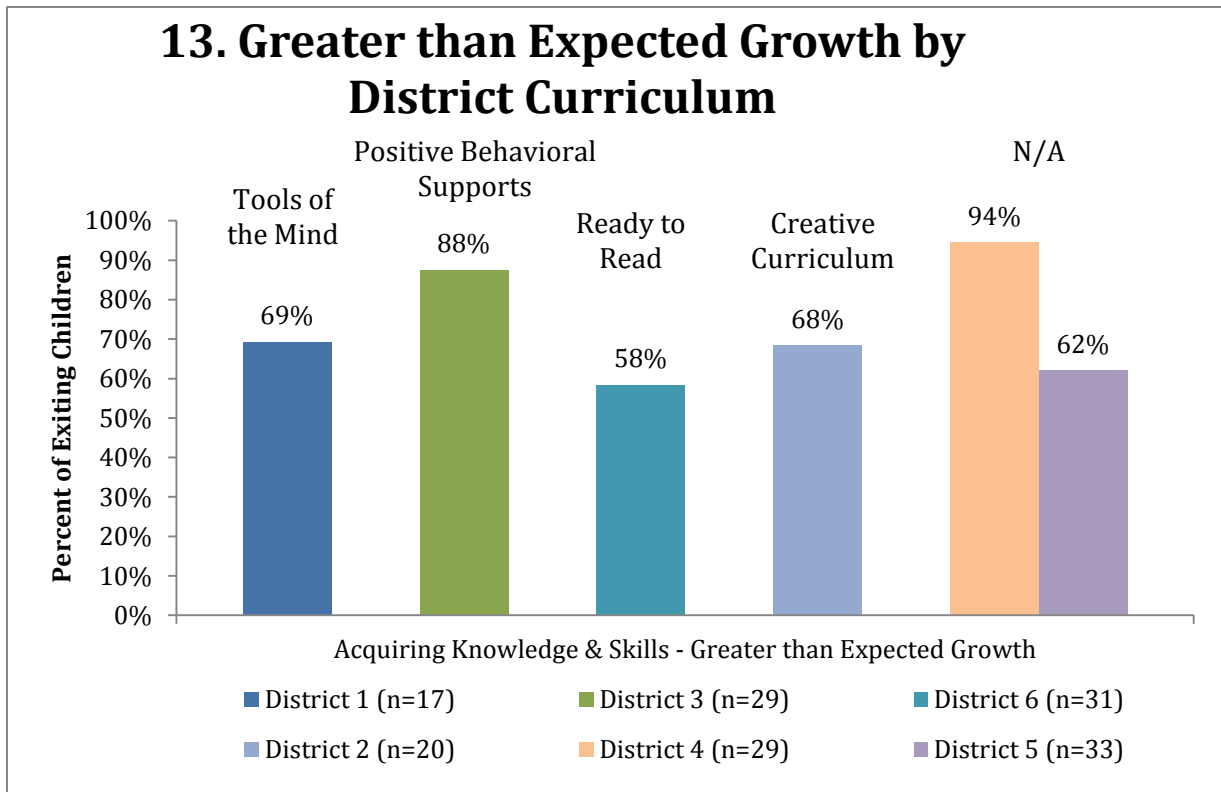


*By Service Setting*



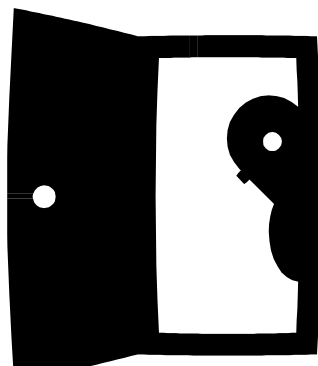


*By Curriculum Type*





Activity 4  
NO PEEKING!



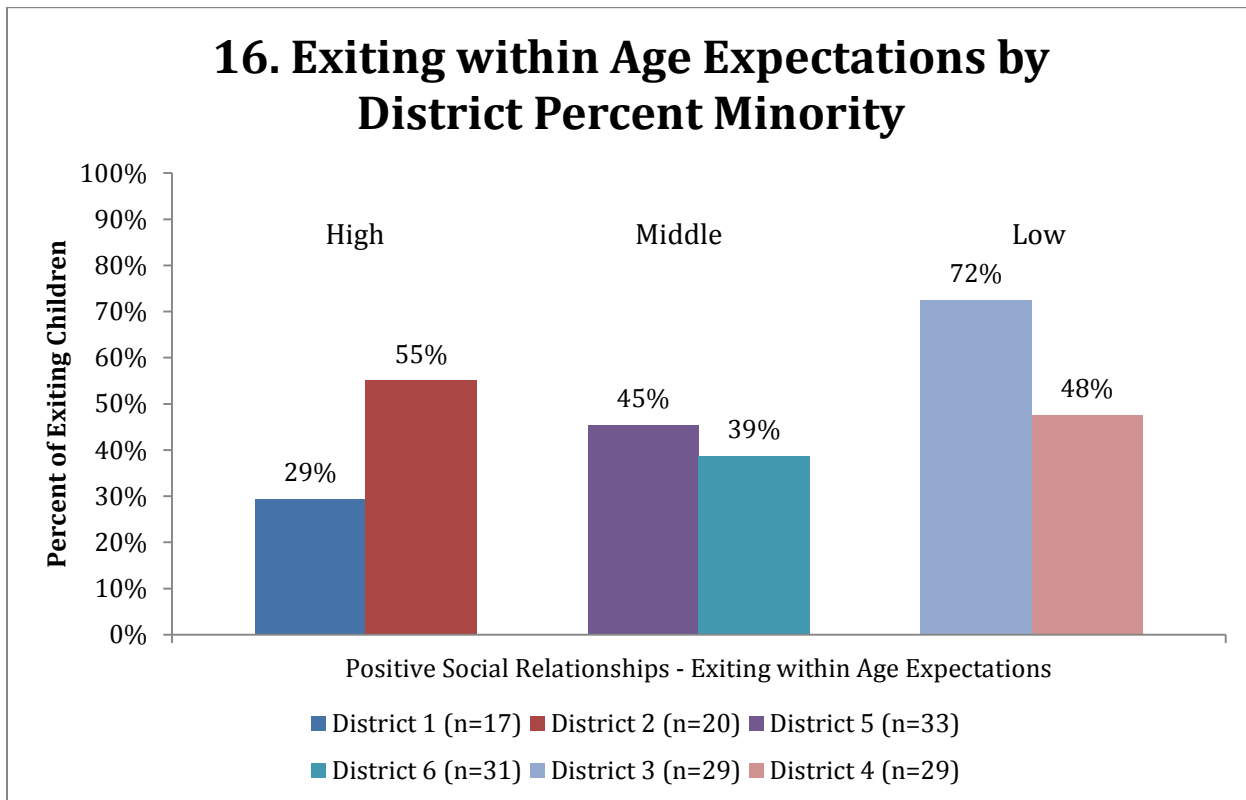
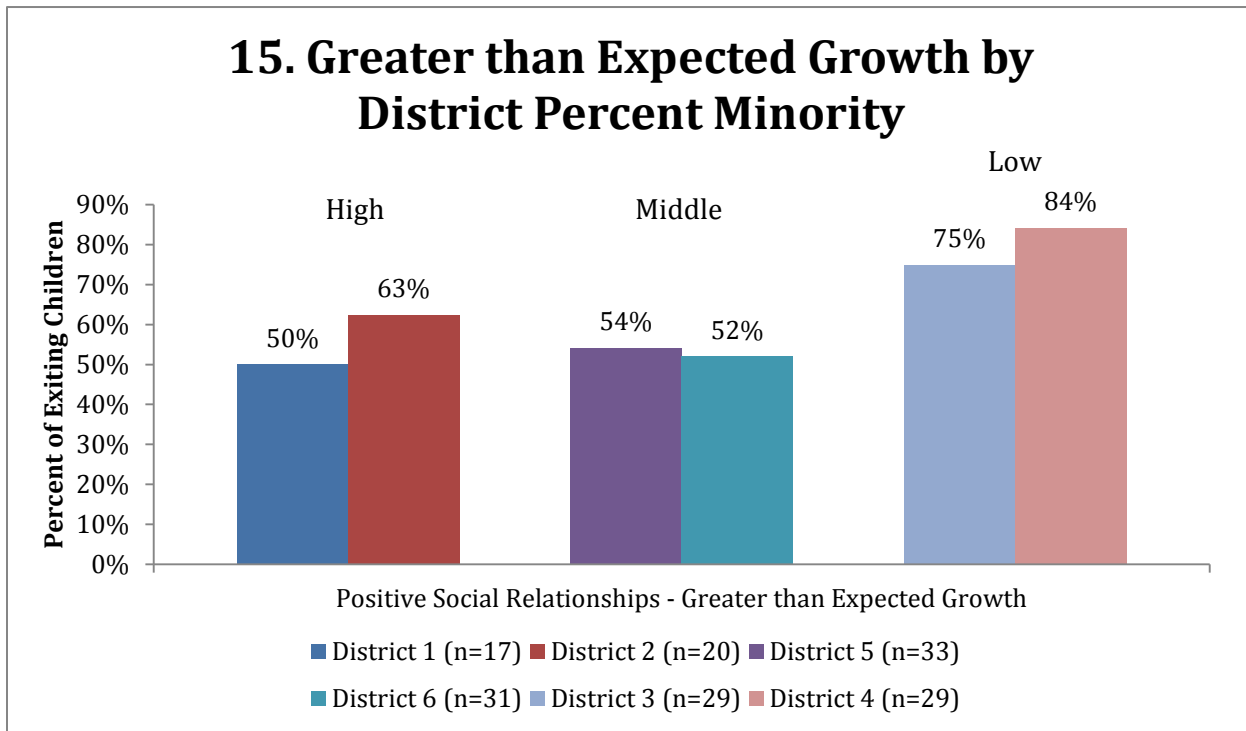
**Activity 4: Comparing Child Outcomes By Child Characteristics**

To gain more information about which children are experiencing better outcomes, we will now compare the child outcomes data for each district by several subgroups based upon child/family characteristics. The evidence we will use is child outcomes data for the districts examined by several child and family characteristics. Inference will be related to comparisons between these different child/family characteristics and how they relate to differences in child outcomes within and across districts. Action will be the identification of factors that may be contributing differences in districts’ child outcomes and potential improvement strategies.

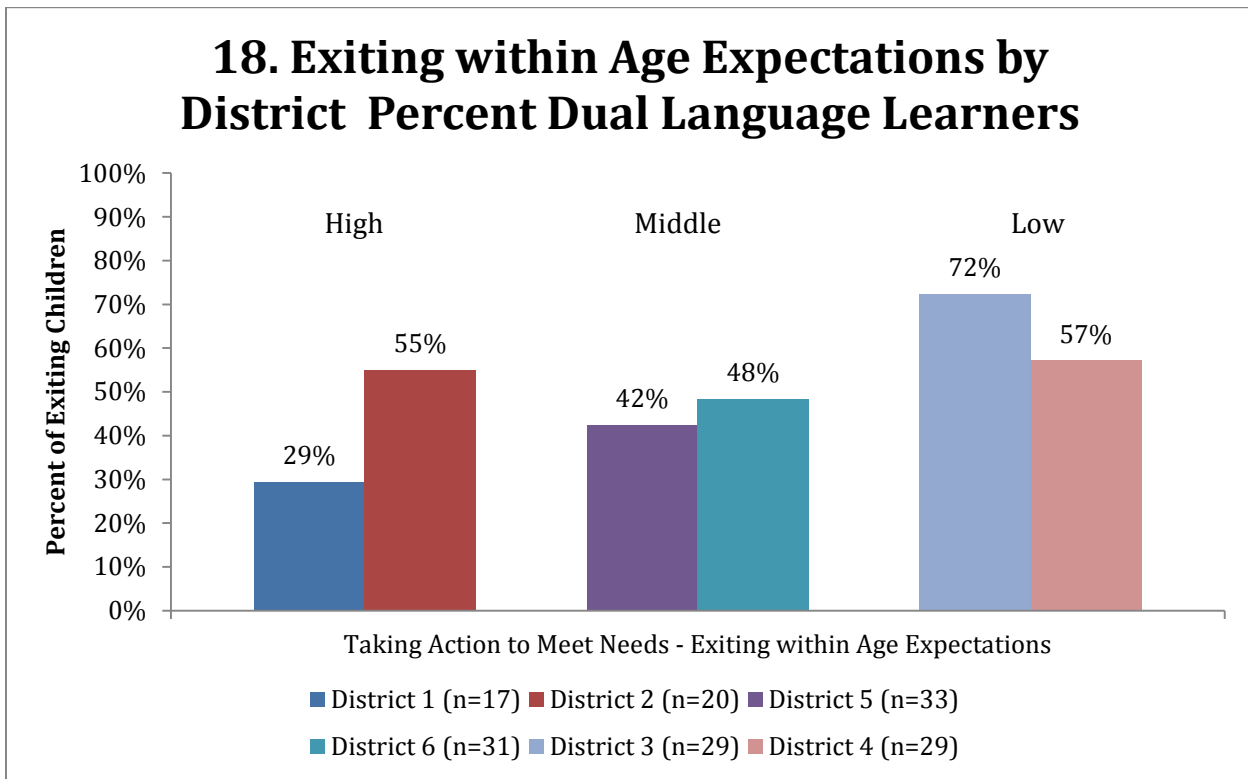
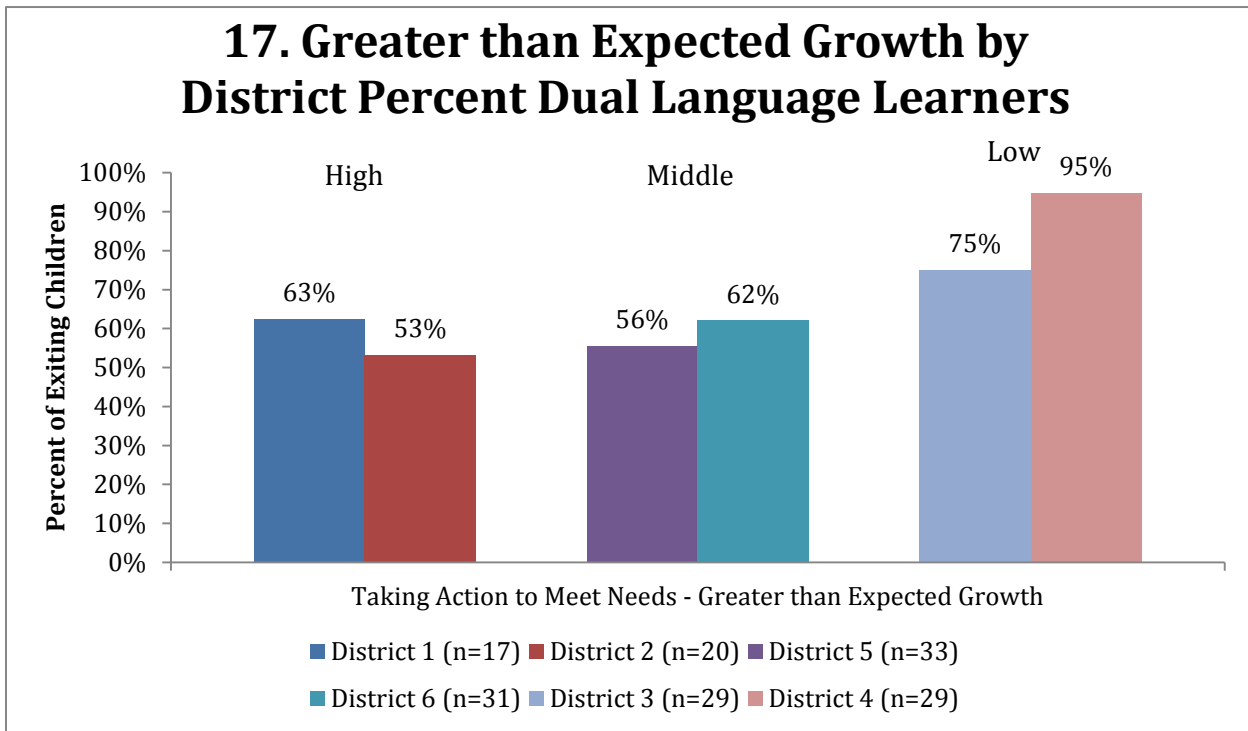
**As you review the data in this activity consider the following questions and record your thoughts.**

Question	Corresponding Chart/Graph	Notes
1. How do child outcomes differ by <ul style="list-style-type: none"> <li>a. Race/ethnicity</li> <li>b. Language</li> <li>c. Disability type</li> </ul>	Graphs 15-16 Graphs 17-18 Graphs 19-20	
2. How you could use this data to inform program improvement activities? <ul style="list-style-type: none"> <li>a. Would the same strategy work for all the districts?</li> <li>b. If not, would there need to be different strategies, and what might those be?</li> </ul>	Graphs 15-20	
3. What other characteristics or information would you like to know about children or families? About practices?	All information presented	

*By Race/Ethnicity (percent minority)*



*By Language (percent Dual Language Learners)*



*By Disability Type (percent Speech/Language Only)*

