



The Kindergarten Entry and Exit Profile (KEEP)

During Utah's 2017 General Legislative Session, funding was provided to support the development and implementation of a common metric to evaluate the entry and exit performance levels of Utah's kindergarten students. The Utah State Board of Education, in conjunction with a multitude of stakeholders, including district and charter leaders, kindergarten and preschool teachers, as well as early childhood experts, developed the Kindergarten Entry and Exit Profile (KEEP) to measure the key literacy, numeracy, and social-emotional skills essential for academic success in school. The KEEP was first administered in the fall of 2017 to incoming kindergartners. For the 2017-2018 school year, a total of 44,121 kindergarten students took the KEEP literacy assessment and/or the KEEP numeracy assessment.

Results of the KEEP help educational organizations, educators, families, and students by:

- Providing insights into current levels of academic and social-emotional performance upon entry and exit of kindergarten.
- Identifying students in need of early intervention instruction and promoting differentiated instruction for all students.
- Analyzing the effectiveness of programs, such as extended-day kindergarten and preschool.
- Providing opportunities for data-informed decision-making and cost-benefit analysis of early learning initiatives.
- Identifying effective instructional practices or strategies for improving student achievement outcomes in a targeted manner.
- Understanding the influence and impact of full-day kindergarten on at-risk students in both the short- and long-term.

Kindergarten Ready

The knowledge, skills, and behaviors a kindergarten student enters with as they first enroll in school are highly predictive of their future academic outcomes. In fact, students who enter school with higher levels of knowledge and skills are more likely to attain higher levels of education and gross higher earnings as adults. Unfortunately, some children enter kindergarten without adequate prerequisite skills and knowledge, and are unlikely to catch up.



KEEP Demographics

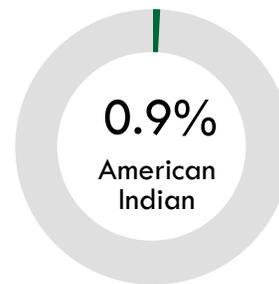
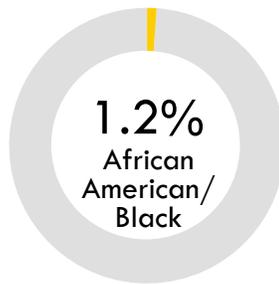
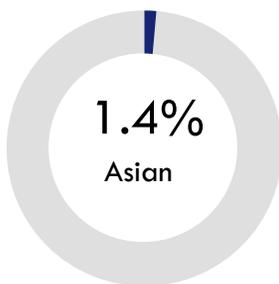
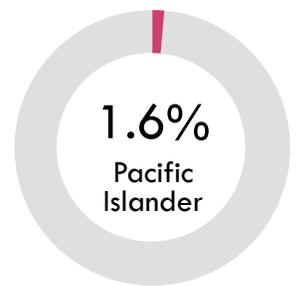
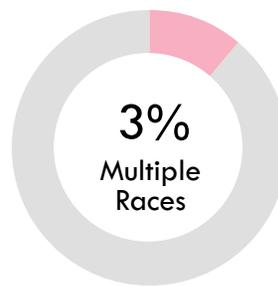
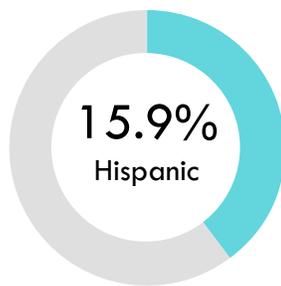
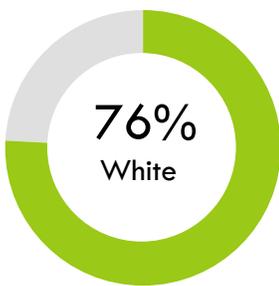
Of the **44,121** kindergartners who took the KEEP literacy assessment and/or the KEEP numeracy assessment and were enrolled at the same school at the beginning and end of the year, **44,121** students participated in both the entry and exit administrations of the literacy assessment and **44,119** students participated in both the entry and exit administrations of the numeracy assessment.

The race and ethnicity of the kindergartners who participated in the KEEP assessment are detailed in the graphs below. While approximately **76%** of the kindergarten participants are white, about **16%** are Hispanic/Latino, and **three** percent identify as two or more races. The racial and ethnic makeup of the assessed kindergartners mirrors that of the overall Utah kindergarten population.

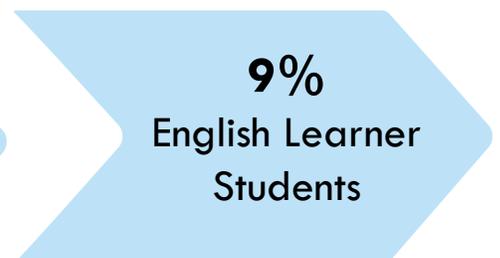
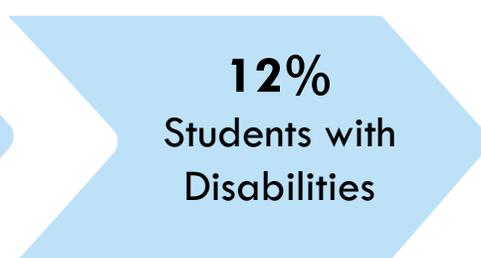
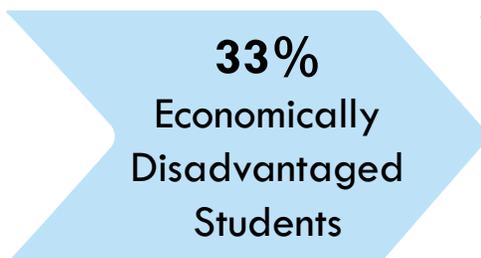
In the 2017-2018 school year

44,121

kindergartners took the KEEP literacy assessment



Approximately 33% of the assessed students are economically disadvantaged, 12% of the students have a disability, and about nine percent are English learners. Students may fall into multiple categories.



KEEP Performance Levels

The raw scores of the literacy and numeracy assessment were divided into three performance categories: Level 1, Level 2, and Level 3. The performance levels are defined as:

Level 1

A Utah student entering kindergarten at Level 1 does not demonstrate prerequisite knowledge and skills in literacy or numeracy and may require significant intervention to succeed in kindergarten.

Level 2

A Utah student entering kindergarten at Level 2 has minimal prerequisite knowledge and skills in literacy or numeracy and may require some intervention to succeed in kindergarten.

Level 3

A Utah student entering kindergarten at Level 3 has sufficient prerequisite knowledge and skills in literacy or numeracy but may require minimal intervention to succeed in kindergarten.

Overall Performance

The results of the 2018 administration indicate that about 63% of Utah's kindergartners entered kindergarten with adequate skills (Level 3) in literacy and about 73% entered with adequate skills in numeracy. Unfortunately, these data also demonstrate that there is a substantial percentage of the incoming kindergarten population who is not adequately prepared for the expectations of kindergarten with 37% at level 1 or level 2 on the literacy entry assessment and 27% at level 1 or level 2 on the numeracy entry assessment. However, by the end of the 2017-2018 school year, the overall number of students not demonstrating prerequisite knowledge and skills (Level 1) decreased in both literacy and numeracy. In literacy, the percentage of students in Level 1 decreased by 12 percentage points from entry to exit. In numeracy, about 6% of students exited at Level 1, compared to 8% at Level 1 on the numeracy entry assessment.

63%
Entered
as Level 3
Literacy

73%
Entered
as Level 3
Numeracy

23%
Entered
as Level 1
Literacy

8%
Entered
as Level 1
Numeracy

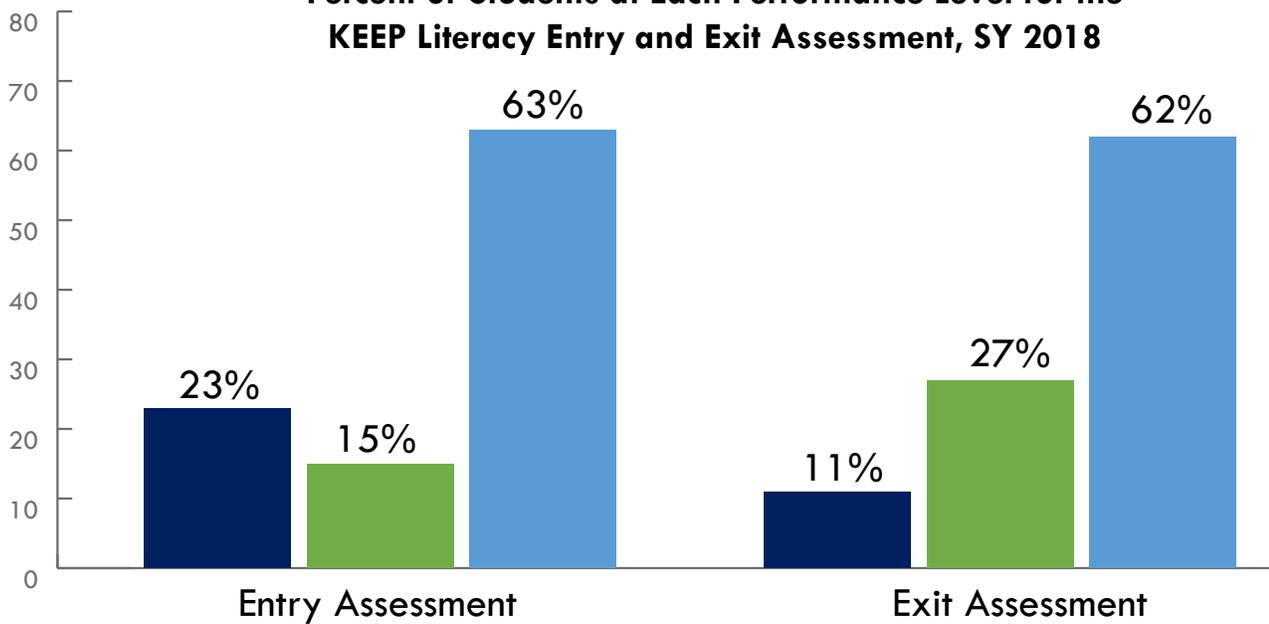
12
percentage
points
Decrease for
Level 1
Literacy

2
percentage
points
Decrease for
Level 1
Numeracy

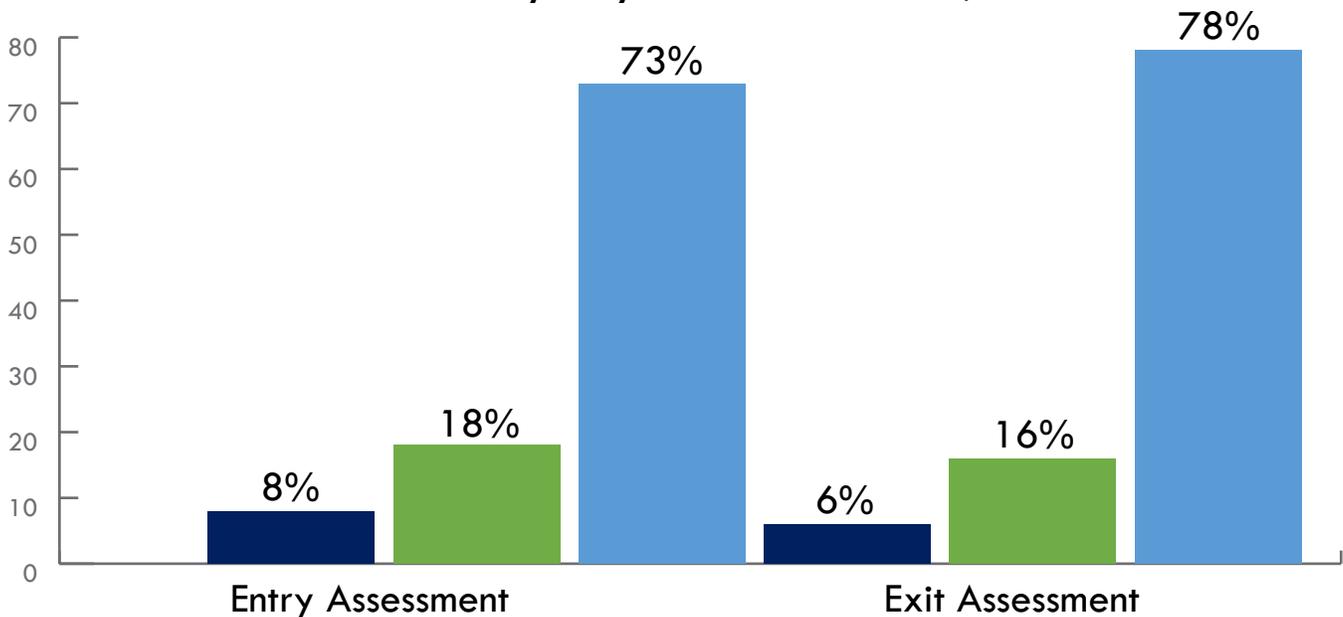
Overall Performance Levels

- Level 1:** A Utah kindergartener at Level 1 does not demonstrate prerequisite knowledge and skills in literacy/numeracy and may require significant intervention to succeed in kindergarten.
- Level 2:** A Utah kindergartener at Level 2 has minimal prerequisite knowledge and skills in literacy or numeracy and may require some intervention to succeed in kindergarten.
- Level 3:** A Utah kindergarten at Level 3 has sufficient prerequisite knowledge and skills in literacy/numeracy; may require minimal intervention to succeed in kindergarten.

Percent of Students at Each Performance Level for the KEEP Literacy Entry and Exit Assessment, SY 2018



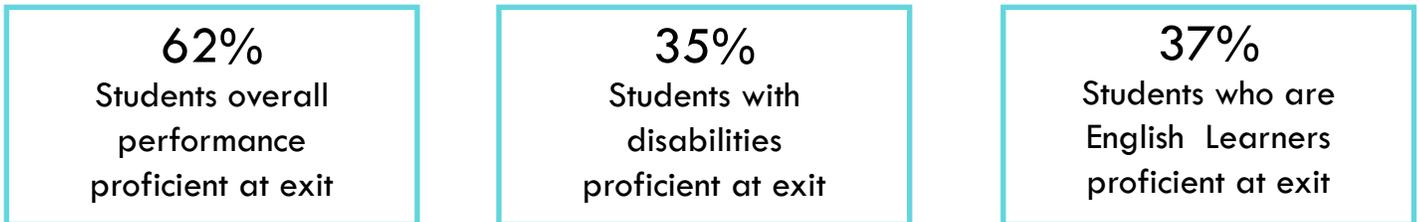
Percent of Students at Each Performance Level for the KEEP Numeracy Entry and Exit Assessment, SY 2018



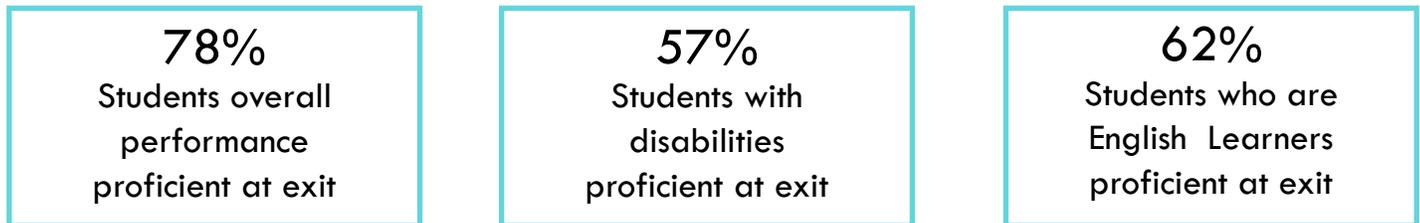
Distinctive Group Performance

Literacy and numeracy exit performance was disaggregated by distinct student groups. Most groups performed at lower levels of proficiency at kindergarten exit. While differences between male and female students and the overall student performance is not drastically different, the performance of the remaining student groups is lower than overall performance. Most notable, while 62% of students overall are proficient in literacy at exit only about 35% of students with disabilities and 37% of students who are English learners are proficient. About 78% of all students are proficient in numeracy at exit, while 57% of students with disabilities and 62% of students who are English learners are proficient.

Proficiency in Literacy at Exit



Proficiency in Numeracy at Exit



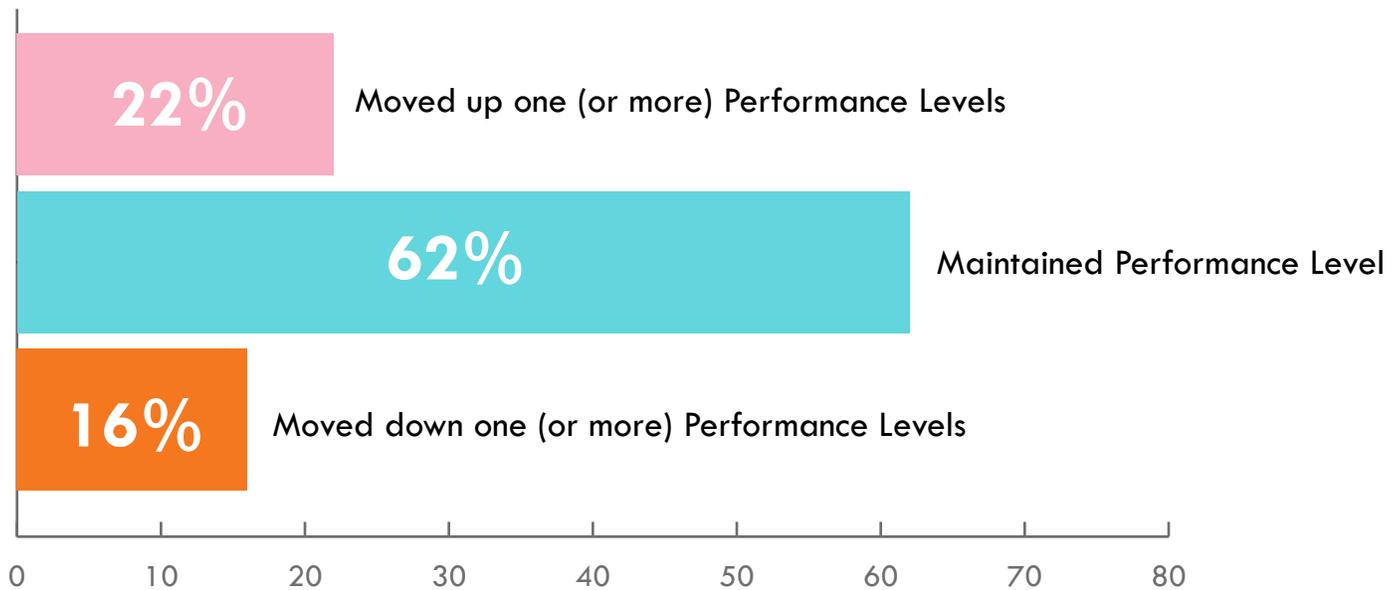
KEEP Literacy and Numeracy Proficiency at Exit by Demographic Grouping

Demographic Group	Sample	Literacy	Numeray
All Students	44,121	62.3%	77.9%
Economically Disadvantaged	14,373	49.0%	69.9%
Racial Minority	10,593	47.4%	66.3%
English Learners	4,074	36.5%	61.8%
Students with Disabilities	5,169	35.4%	56.6%
Female	21,493	64.4%	78.4%
Male	22,628	60.4%	77.4%

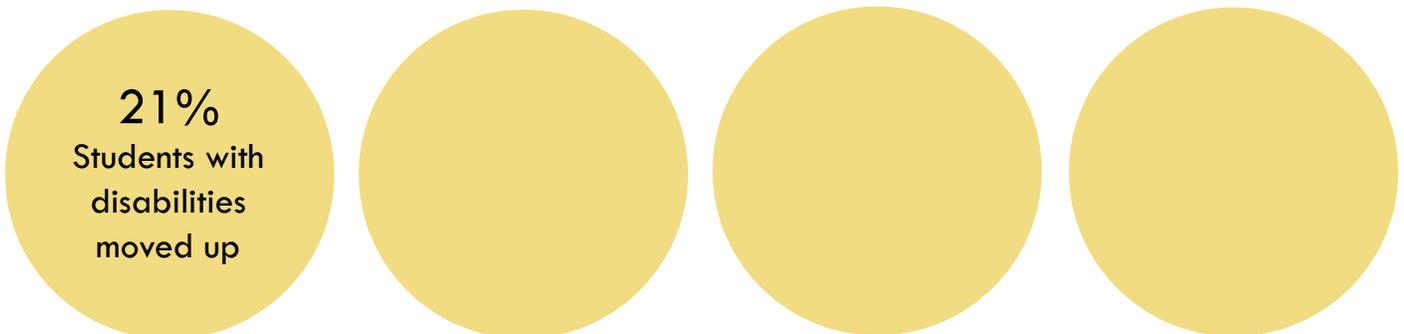
Student Performance from Entry to Exit

Despite achievement gaps for student groups, from the entry assessment to the exit assessment students within most of the student groups showed higher levels of improvement compared to students overall. For the KEEP literacy assessment, overall the majority of students maintained their performance level from entry to exit while 22% moved up one or more performance levels and 16% moved down one or more performance levels.

**Change in Performance Level from Literacy Entry to Exit Assessment,
All Students, SY 2018**



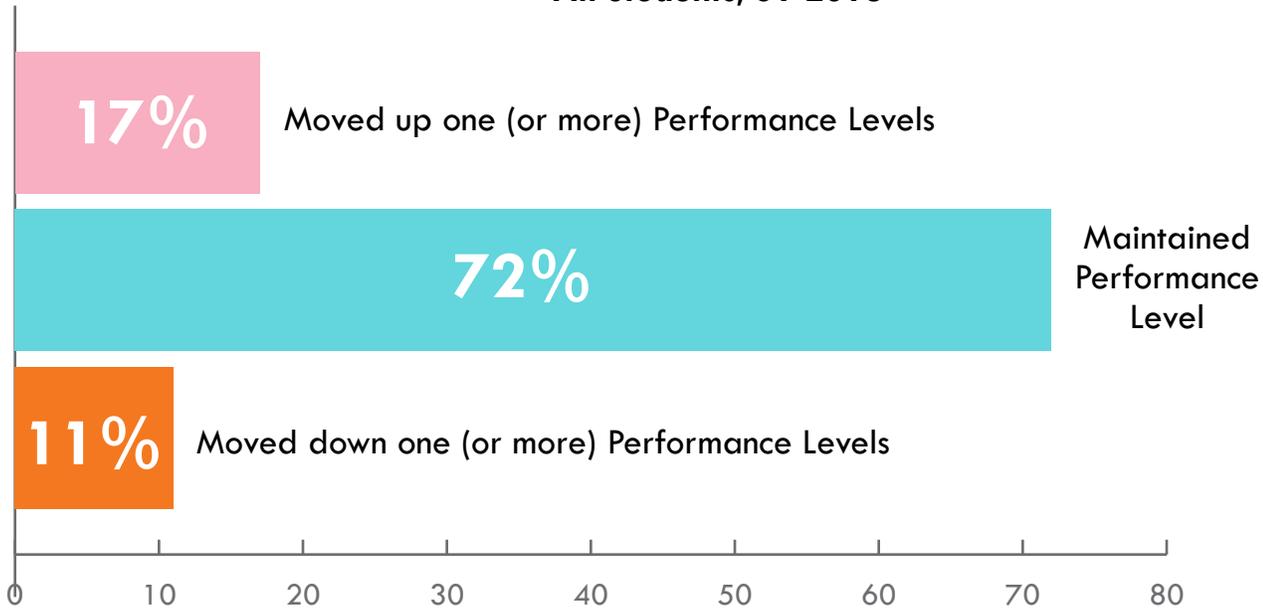
Similarly, 21% of students with disabilities moved up one or more performance levels from the entry to the exit assessment. However, 35% of students who are economically disadvantaged and 35% of students who identify as a racial or ethnic minority moved up one or more performance levels on the KEEP literacy assessment. The largest difference is with students who are English learners with 44% moving up one or more performance levels from entry to exit.



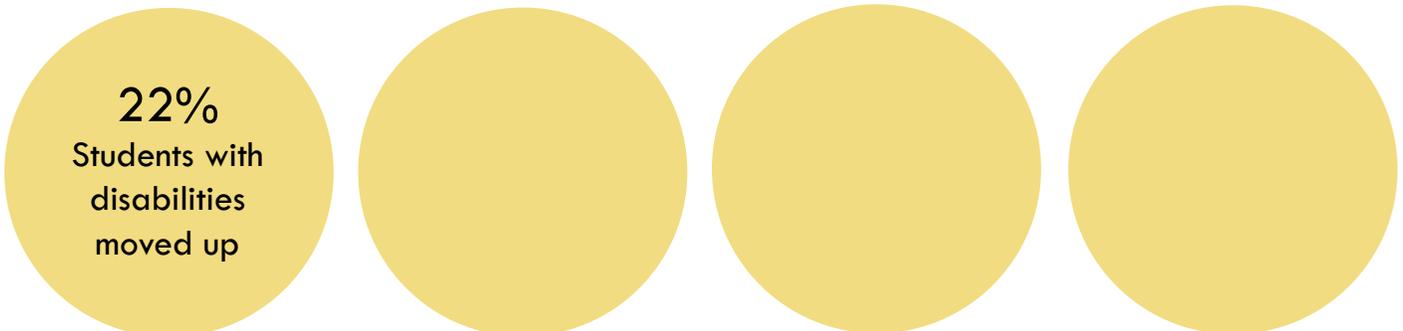
Student Performance from Entry to Exit, *cont.'d*

For the KEEP numeracy assessment, overall the majority of students, 72%, maintained their performance level from entry to exit while 17% moved up one or more performance levels and 11% moved down one or more performance levels.

**Change in Performance Level from Numeracy Entry to Exit Assessment,
All Students, SY 2018**



By comparison, 22% of students with disabilities moved up one or more performance levels from entry to exit assessment. While 28% of students who are economically disadvantaged and 28% of students who identify as a racial or ethnic minority moved up one or more performance levels on the KEEP numeracy assessment. Again the largest difference is with students who are English learners with 41% moving up one or more performance levels from entry to exit.



Optional Extended-Day Kindergarten

As part of the Basic School Program under the Minimum School Program, the state provides unrestricted revenues to support half-day kindergarten programs. In an effort to provide extended-day kindergarten opportunities, during the 2007 General Session, the Legislature passed Senate Bill 49.

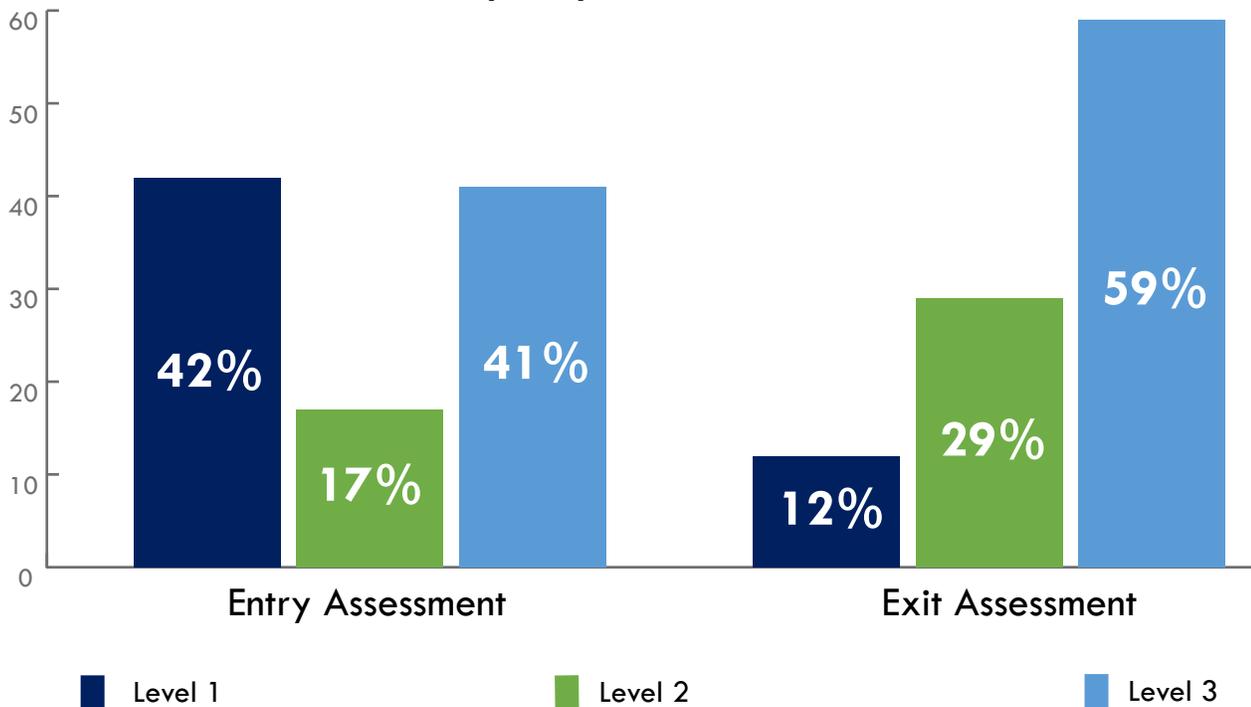
In the 2012 General Session, the Legislature transitioned from the four-year pilot program to providing extended-day kindergarten through the Early Intervention program established through **House Bill 513**.

The KEEP assessment allows us to analyze the impact of our extended-day kindergarten program. Compared to the performance of all students, a much higher percentage of OEK students enter kindergarten at Performance Level 1. Whereas 23% overall are at Level 1 in literacy, 42% of OEK students enter at Level 1. For numeracy, 8% of students overall enter at Performance Level 1 compared to 18% of OEK students which is to be expected since the program is targeted to at-risk students.

What is OEK?

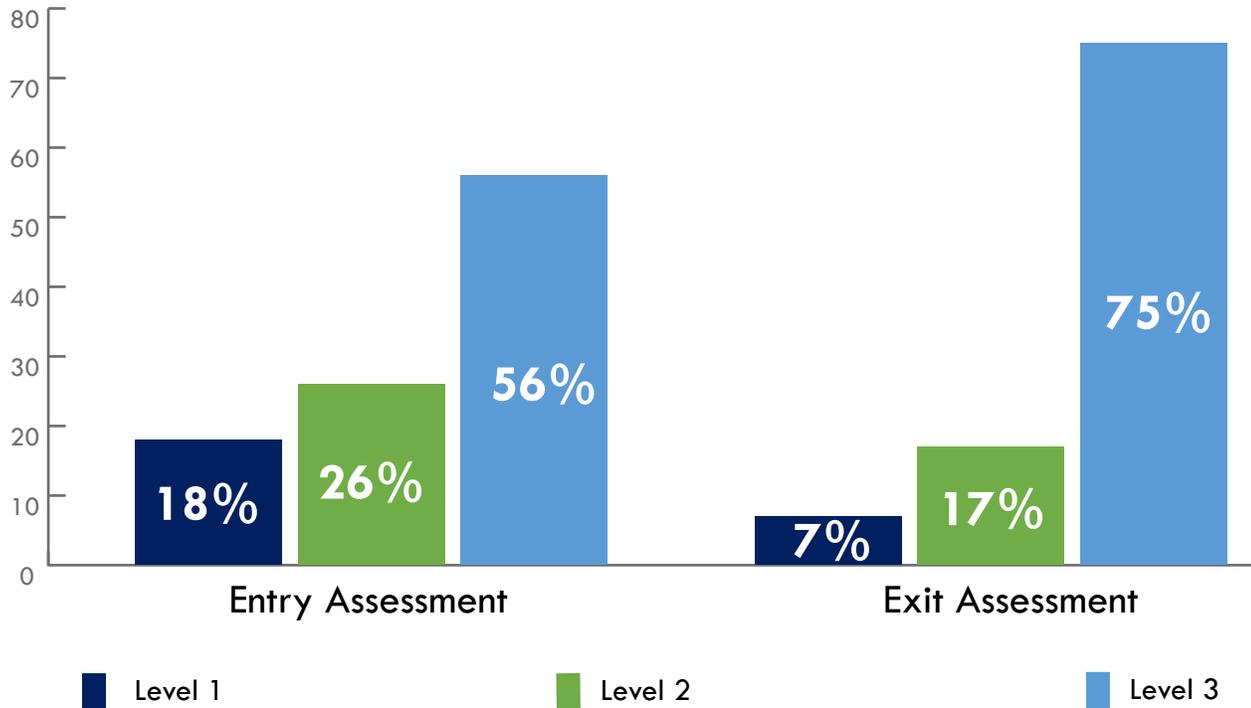
Optional extended-day kindergarten (OEK) is targeted to at-risk students and it provides funding to local education agencies to provide an enhanced kindergarten program focused on building age-appropriate literacy and numeracy skills and delivered through additional hours or other means. During the 2007 General Session, the Legislature passed Senate Bill 49 which established the Optional Extended-Day Pilot Program.

Percent of OEK Students at Each Performance Level for the KEEP Literacy Entry and Exit Assessment, SY 2018

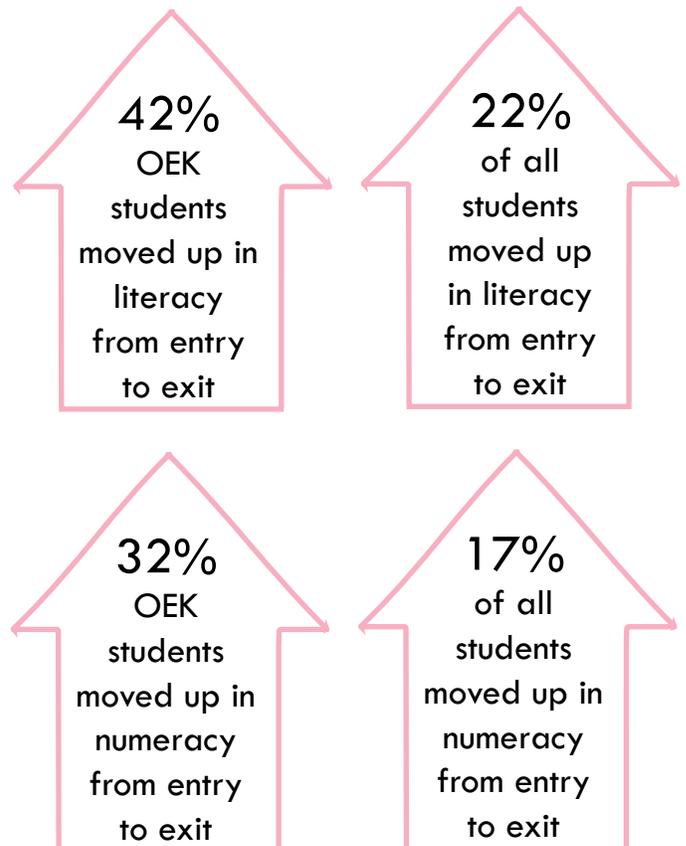


Optional Extended-Day Kindergarten, *cont.'d*

Percent of OEK Students at Each Performance Level for the KEEP Numeracy Entry and Exit Assessment, SY 2018



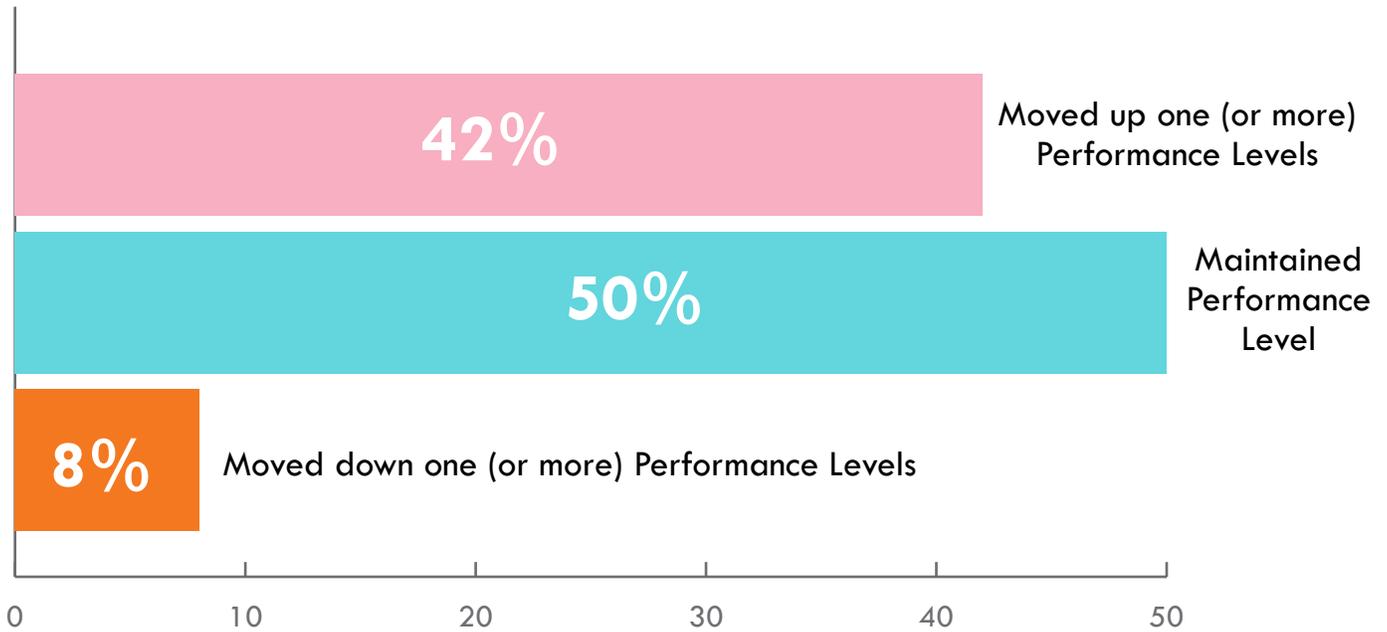
Like our other distinct student groups above, despite starting kindergarten at lower levels of proficiency, a higher percentage of OEK students move up one or more performance levels compared to overall student performance. From Literacy entry to exit, 42% of OEK students moved up one or more performance levels compared to 22% of all students. From Numeracy entry to exit, 32% of OEK students moved up one or more performance levels compared to 17% of all students.



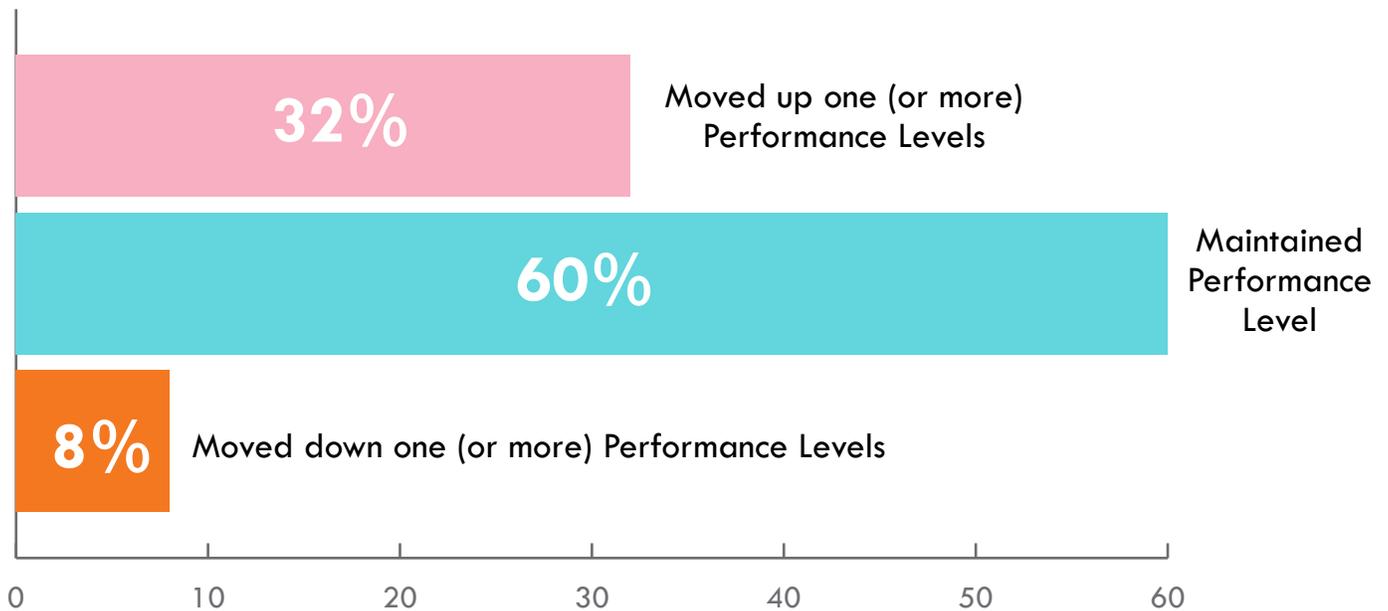
HIGHER percentages of OEK students moved up one or more performance levels

Optional Extended-Day Kindergarten, *cont.'d*

**Change in Performance Level from Literacy Entry to Exit Assessment,
OEK Students, SY 2018**



**Change in Performance Level from Numeracy Entry to Exit Assessment,
OEK Students, SY 2018**



Takeaway Points

The KEEP assessment demonstrates that overall kindergartners made gains in literacy and numeracy from entry to exit with 22% moving up at least one performance level in literacy and 17% moving up at least one performance level in numeracy.



Higher percentages of our distinct student groups including students who are economically disadvantaged, students who identify as a racial or ethnic minority, students with disabilities, students who are English learners, and students who participate in optional extended-day enter kindergarten at lower levels of proficiency. However, a higher percentage of students in most of these distinct groups move up one or more performance levels compared to all students assessed. Thus, in most instances we are seeing higher gains for these groups of students relative to overall student performance.

Higher % of students in distinct groups move up one or more levels from entry to exit

Despite these successes, there is room for improvement. Overall, 38% of students in literacy and 22% of students in numeracy are exiting kindergarten at Level 1 or Level 2. Even with substantial gains from entry to exit, a higher percentage of students in our student groups are exiting kindergarten at Level 1 or Level 2 on the KEEP. The largest difference is for our students with disabilities with about 65% in literacy and 43% in numeracy exiting at Level 1 or Level 2. Similarly, for our students who are English learners, 64% in literacy and 38% in numeracy are exiting kindergarten at Level 1 or Level 2.

