

2015-2016
Spring MAP Results
Henderson County Schools



Kim White, Director of Accountability & Assessment

2015 NWEA Measures of Academic Progress Normative Data

2015 RIT Scale Norms allow educators to compare achievement status—and changes in achievement status (growth) between test occasions—to students' performance in the same grade at a comparable stage of the school year. This contextualizing of student performance:

- helps teachers as they plan instruction for individual students or confer with parents
- supports school and district administrators as they focus on allocating resources
- empowers school staff as they work to improve all educational outcomes

For many reasons, it is inadvisable to compare performance of a student on one set of test norms to his or her performance on another. NWEA strongly advises educators to use the 2015 norms because they provide the current and most accurate reference for MAP scores.

Slight differences from the 2011 norms have been observed, some of which reflect true change in the performance of the students. In addition, evidence indicates three other plausible sources for these differences.

- Schools demographics changed between 2011 and 2015 and may have contributed to differences.
- Methodological improvements such as a larger and more representative sample, the use of nine (vs five) terms of data, and a new model for estimating growth have made the 2015 norms more accurate.
- The varied nature of Common Core State Standards adoption, implementation, and testing appear to have resulted in lower test scores. The sources of these observed differences are the subject of further research.

MAP status and growth norms for students and schools

The 2015 NWEA RIT Scale Norms Study provides status and growth norms for individual students as well as for schools on each of the four RIT scales: Reading, Language Usage, Mathematics, and General Science. The study's results are based on K – 11 grade level samples. Each sample is comprised of 72,000 to 153,000 student test records from approximately 1000 schools. These numbers vary by subject. These samples were drawn randomly from test record pools of up to 10.2 million students attending more than 23,500 public schools spread across 6,000 districts in 49 states. Rigorous procedures were used to ensure that the norms were representative of the U.S. school-age population.

Since MAP assessments can be administered on a schedule designed to meet a school's needs, tests can be administered at any time during the school year. The 2015 norms adjust for this scheduling flexibility by accounting for instructional days, allowing more valid comparisons for status and growth. For example, the norms may be used to locate a student's achievement status (as a percentile rank) for any specified instructional week of the school year.

Similar adjustments are made to the norms when comparing student growth. Median growth conditioned on the student's initial score may be determined for any number of instructional weeks separating two test occasions. This allows educators to make appropriate norm-referenced

interpretations of test results that are consistent with their chosen testing schedule. As an additional feature, the norms provide the percentile rank corresponding to a student's observed gain over an instructional interval of a specific length. That is, the norms tell educators what percentage of students made at least as much growth as a particular student for the same period of time, whatever its duration. Situating growth as relative to percentages of students nationwide helps educators move beyond the simple conclusion that a student either did or did not "make target growth."

In order for the norms to take instructional days into account, school district calendars for each school represented in the study sample were retrieved. Using the instructional days data plus the dates of testing, NWEA created "periods or testing seasons" for beginning-of-year norms, middle-of-year norms, and end-of-year norms. Tests occurring at the center of these periods were used to construct the status and growth norms tables that appear below. However, if a school's testing calendar does not conform to the one used to construct these tables, the normative references provided through the NWEA reporting system still allow appropriate comparisons to be made.

Understanding standard deviation (SD): The columns labeled "SD" in the tables below contain the standard deviations of the means. An SD is simply a measure of dispersion of scores around the mean value; the smaller the SD, the more compact the scores are around the mean. SDs are particularly useful when comparing student-level norms and school-level norms and can help educators make a range of inferences. For example, knowing the spread of the data can help identify students who fall well above or below the school average. When making determinations of relative effectiveness, the SDs linked to school norms can also help determine if schools have roughly the same range of scores.

The norms in the tables below have a very straightforward interpretation. For example, in the status norms for Reading, grade 2 students in the middle of the "begin-year" period had a mean score of 174.7 and a standard deviation of 15.52. To get a sense of how much dispersion there was, the SD 15.52 can be subtracted from the mean and added to the mean to produce a range of about 159–190. Since the norms are based on the bell curve, we know that 68% of all scores are expected to fall between in this range.

2015 READING Student Status Norms							2015 MATHEMATICS Student Status Norms						
	Begin-Year		Mid-Year		End-Year			Begin-Year		Mid-Year		End-Year	
Grade	Mean	SD	Mean	SD	Mean	SD	Grade	Mean	SD	Mean	SD	Mean	SD
K	141.0	13.54	151.3	12.73	158.1	12.85	K	140.0	15.06	151.5	13.95	159.1	13.69
1	160.7	13.08	171.5	13.54	177.5	14.54	1	162.4	12.87	173.8	12.96	180.8	13.63
2	174.7	15.52	184.2	14.98	188.7	15.21	2	176.9	13.22	186.4	13.11	192.1	13.54
3	188.3	15.85	195.6	15.14	198.6	15.10	3	190.4	13.10	198.2	13.29	203.4	13.81
4	198.2	15.53	203.6	14.96	205.9	14.92	4	201.9	13.76	208.7	14.27	213.5	14.97
5	205.7	15.13	209.8	14.65	211.8	14.72	5	211.4	14.68	217.2	15.33	221.4	16.18
6	211.0	14.94	214.2	14.53	215.8	14.66	6	217.6	15.53	222.1	16.00	225.3	16.71
7	214.4	15.31	216.9	14.98	218.2	15.14	7	222.6	16.59	226.1	17.07	228.6	17.72
8	217.2	15.72	219.1	15.37	220.1	15.73	8	226.3	17.85	229.1	18.31	230.9	19.11

Growth norms developed for the 2015 RIT Scale Norms Study reflect the common observation that the rate of academic growth is related to the student's starting status on the measurement scale; typically, students starting out at a lower level tend to grow more. The growth norm tables below show mean growth when the mean grade level status score is used as the starting score. In each case, the starting score is treated as a factor predicting growth. If a particular student's starting score was below the grade level status mean, the growth mean is typically higher. Similarly, students with starting scores above the grade level mean would typically show less growth on average. This procedure, coupled with the inclusion of instructional days in computing the norms, results in a highly flexible and better contextualized reference for understanding MAP RIT scores.

2015 READING Student Growth Norms							2015 MATHEMATICS Student Growth Norms						
	Begin-Year		Mid-Year		End-Year			Begin-Year		Mid-Year		End-Year	
Grade	Mean	SD	Mean	SD	Mean	SD	Grade	Mean	SD	Mean	SD	Mean	SD
K	10.3	6.01	6.81	5.46	17.1	8.11	K	11.4	5.56	7.67	5.03	19.1	7.59
1	10.8	6.00	5.99	5.46	16.8	8.09	1	11.4	5.50	6.97	4.99	18.4	7.45
2	9.5	6.05	4.52	5.49	14.0	8.20	2	9.5	5.35	5.72	4.90	15.2	7.11
3	7.3	5.79	3.02	5.33	10.3	7.59	3	7.8	5.08	5.19	4.73	13.0	6.47
4	5.4	5.56	2.33	5.19	7.8	7.05	4	6.8	5.05	4.78	4.72	11.6	6.41
5	4.2	5.60	1.97	5.21	6.1	7.15	5	5.8	5.22	4.13	4.82	9.9	6.80
6	3.2	5.62	1.54	5.22	4.8	7.19	6	4.4	5.20	3.26	4.80	7.7	6.75
7	2.5	5.58	1.25	5.20	3.7	7.11	7	3.5	5.11	2.47	4.75	6.0	6.55
8	1.9	6.05	0.99	5.49	2.8	8.19	8	2.9	5.59	1.78	5.05	4.6	7.66

Comparative Data to Inform Instructional Decisions

To help provide context to Measures of Academic Progress® (MAP®) normative percentiles, this document includes multiple **College and Career Readiness (CCR)** benchmarks, including those from **ACT®** and **Smarter Balanced Assessment Consortium (Smarter Balanced)®**.

When you're armed with MAP interim assessment data, you're better prepared to meet your students when and where they need you most.

Use the comparative data in the tables below as one of your data points for instructional decision making. While not intended for use as a single placement guide, these data can help inform a variety of programmatic and instructional decisions, including:

- identifying and qualifying students for various instructional strategies
- guiding teachers who do not regularly make decisions on instructional program choices for students
- scheduling and grouping to meet students' learning needs
- screening for special or alternative instruction
- staffing and resourcing

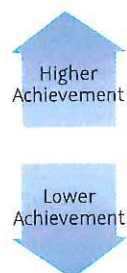
About each chart

- The grade designations represent beginning-of-year grade levels.
- The RIT scores defining each level are separated by 1/2 standard deviation except for the highest level, which is set at the 95th percentile.
- At all levels, consider differentiated instruction, flexible grouping, or tiered instruction.
- As scores ascend, give more consideration to curriculum-compacting, accelerated instructional pacing, and special programs.
- As scores descend, give more consideration to additional instructional time, one-on-one tutoring, use of short cycle assessments, and special programs.

The instructional suggestions in this document are intended to provide initial ideas, not to be an exhaustive list of options.

MATHEMATICS

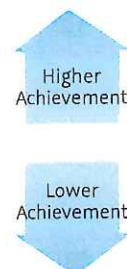
		K	1	2	3	4	5	6	7	8	9	10	11	2015 Norms Percentile
CCR (Smarter Balanced Level 3)	Spring				204	217	229	230	235	242				52-72
CCR (ACT ≥ 22)	Spring						226	232	238	243	246			61-74
CCR (ACT ≥ 24)	Spring						230	237	243	248	252			70-83
NWEA	Fall	165	184	199	212	225	236	243	250	256	260	262	266	95
NWEA	Fall	155	175	190	203	216	226	233	239	244	248	250	253	84
NWEA	Fall	148	169	183	197	209	219	225	231	235	239	240	243	69
NWEA Median	Fall	140	162	177	190	202	211	218	223	226	230	230	233	50
NWEA	Fall	133	156	170	184	195	204	210	214	217	221	220	223	31
NWEA	Fall	125	150	164	177	188	197	202	206	209	212	211	213	16
NWEA	Fall	118	143	157	171	182	190	195	198	200	204	201	204	7



A student score at or above the following scores on a 6+ Mathematics Survey with Goals test suggests student readiness for:
230 Introduction to Algebra; 235 Algebra; 245 Geometry

READING

		K	1	2	3	4	5	6	7	8	9	10	11	2015 Norms Percentile
CCR (Smarter Balanced Level 3)	Spring				202	209	214	218	222	225				56-62
CCR (ACT ≥ 22)	Spring						215	220	224	227	230			59-69
CCR (ACT ≥ 24)	Spring						218	223	227	230	233			66-75
NWEA	Fall	163	182	200	214	224	231	236	240	243	246	248	250	95
NWEA	Fall	155	174	190	204	214	221	226	230	233	236	237	239	84
NWEA	Fall	148	167	182	196	206	213	218	222	225	228	229	231	69
NWEA Median	Fall	141	161	175	188	198	206	211	214	217	220	220	223	50
NWEA	Fall	134	154	167	180	190	198	204	207	209	212	212	214	31
NWEA	Fall	128	148	159	173	183	191	196	199	202	205	204	206	16
NWEA	Fall	121	141	152	165	175	183	189	192	194	197	196	198	7



Student Growth Summary Report

Aggregate by District

Term: Spring 2015-2016
District: Henderson County School District

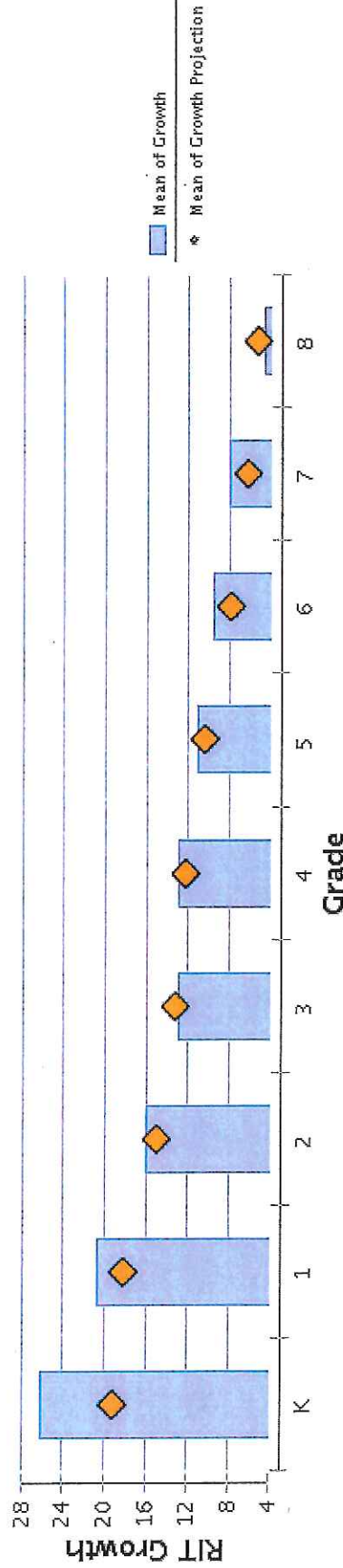
Norms Reference Data:
Growth Comparison Period:
Weeks of Instruction:

2015 School
Fall 2015 - Spring 2016
Start - 4 (Fall 2015)
End - 32 (Spring 2016)
None
No
Grouping:
Small Group Display:

Mathematics

Grade (Spring 2016)	Growth Count#	Achievement Status:				Spring 2016				Growth					Comparative	
		Fall 2015								Grade Level				School Conditional Growth Index	School Conditional Growth Percentile	
		Mean RIT	SD	Percentile		Mean RIT	SD	Percentile	Observed Growth	Observed Growth SE	Projected Growth	Count Met Projected Growth	Percent Met Projected Growth			
K	529	139.7	10.9	48		165.7	12.6	85	26.0	0.7	19.2	414	78	2.40	99	
1	580	168.1	12.1	84		188.8	14.4	90	20.7	0.8	18.2	337	58	0.80	80	
2	547	181.5	11.7	79		197.5	10.8	80	16.0	0.7	15.1	280	51	0.30	63	
3	587	196.1	10.5	83		209.0	10.7	81	12.9	0.6	13.2	265	45	-0.10	45	
4	500	207.6	11.2	82		220.5	12.2	84	12.9	0.7	12.1	253	51	0.40	65	
5	532	215.0	12.5	69		226.0	14.8	72	11.0	0.8	10.3	269	51	0.30	61	
6	532	219.5	14.3	60		229.0	15.6	68	9.5	0.9	7.8	321	60	0.70	77	
7	471	227.2	16.3	72		235.2	16.5	78	8.0	1.1	6.2	275	58	0.90	80	
8	515	232.8	17.6	77		237.3	19.1	75	4.5	1.1	5.1	228	44	-0.30	40	

Mathematics



Explanatory Notes

* Summaries for groups of fewer than 10 students are not shown, as the sample size may be too small for acceptable statistical reliability.
#Growth Count provided reflects students with MAP results in both the Start and End terms. Observed Growth calculation is based on that student data.

Generated 6/6/16, 11:35:14 AM

© 2000-2015 Northwest Evaluation Association. All rights reserved. Common Core State Standards are provided under a public license.
© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Student Growth Summary Report

Aggregate by District

Term: Spring 2015-2016
District: Henderson County School District

Norms Reference Data:
Growth Comparison Period:
Weeks of Instruction:

2015 School
Fall 2015 - Spring 2016
Start - 4 (Fall 2015)
End - 32 (Spring 2016)

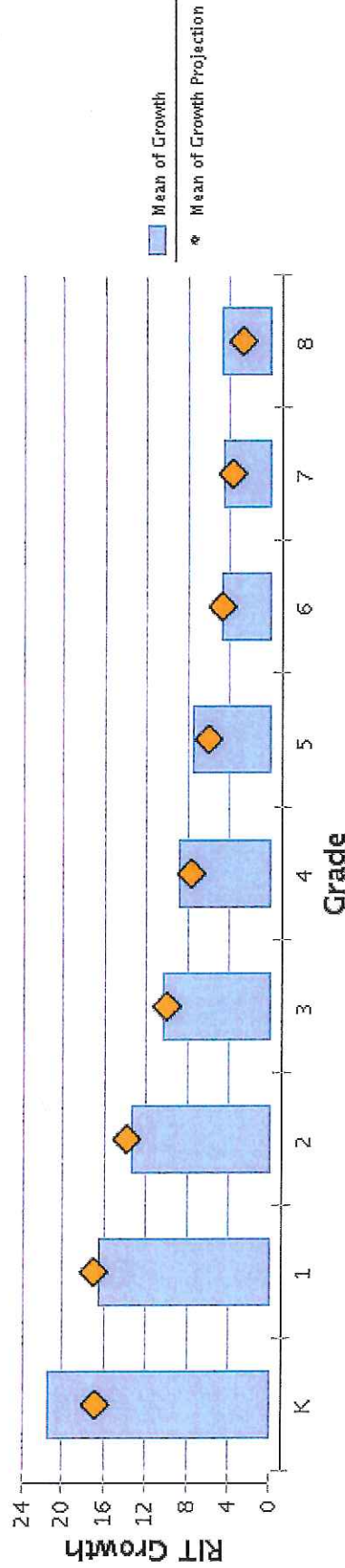
Grouping:
Small Group Display:

None
No

Reading

Grade (Spring 2016)	Growth Count#	Achievement Status				Growth				Comparative	
		Fall 2015		Spring 2016		Grade Level		Count Met		School Conditional Growth Percentile	
		Mean RIT	SD	Percentile		Observed Growth	Observed Growth SE	Projected Growth	Percent Met Projected Growth	School Conditional Growth Index	School Conditional Growth Percentile
K	529	142.1	8.9	57	163.5	21.4	0.6	16.9	368	70	94
1	581	167.5	12.3	88	184.0	16.5	0.7	17.1	273	47	41
2	549	180.4	15.7	81	193.8	13.4	0.9	13.9	252	46	43
3	587	193.4	13.8	78	203.7	10.3	0.8	10.0	289	49	55
4	500	203.2	14.1	78	212.1	8.9	0.9	7.6	279	56	78
5	532	209.2	14.0	71	216.7	7.5	0.8	6.0	325	61	80
6	536	213.3	14.3	64	218.0	4.7	0.9	4.7	268	50	50
7	472	216.8	13.5	64	221.3	4.5	0.9	3.7	263	56	68
8	517	220.8	13.5	68	225.5	4.7	0.8	2.7	309	60	82

Reading



Explanatory Notes

* Summaries for groups of fewer than 10 students are not shown, as the sample size may be too small for acceptable statistical reliability.
#Growth Count provided reflects students with MAP results in both the Start and End terms. Observed Growth calculation is based on that student data.

Student Growth Summary Report

Aggregate by District

Term: Spring 2015-2016
District: Henderson County School District

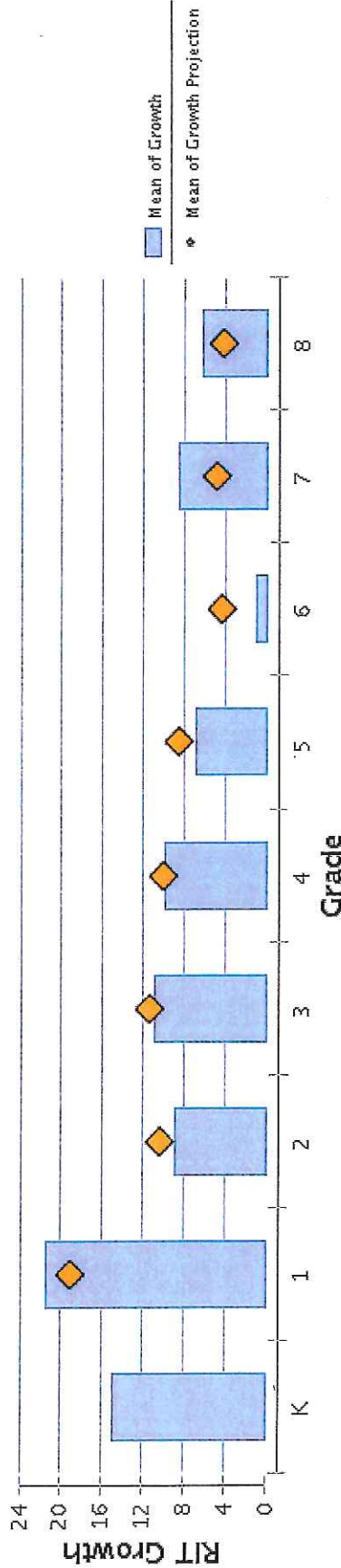
Norms Reference Data:
Growth Comparison Period:
Weeks of Instruction:

2015 School
Spring 2015 - Spring 2016
Start - 32 (Spring 2015)
End - 32 (Spring 2016)
None
No
Grouping:
Small Group Display:

Mathematics

Grade (Spring 2016)	Growth Count†	Achievement Status				Growth					Comparative			
		Spring 2015		Spring 2016		Observed Growth	Observed Growth SE	Projected Growth	Count Met Projected Growth	Percent Met Projected Growth	School Conditional Growth Index	School Conditional Growth Percentile		
		Mean RIT	SD	Percentile	Mean RIT								SD	Percentile
K	57	151.8	11.5		166.7	10.2	88	14.9	2.0					
1	551	167.5	11.2	91	188.9	14.2	90	21.4	0.8	19.1	320	58	0.80	79
2	527	189.0	13.4	90	197.8	10.6	82	8.8	0.7	10.4	245	46	-0.60	28
3	563	198.3	10.3	84	209.1	10.7	81	10.8	0.6	11.4	256	45	-0.20	42
4	484	210.7	11.8	87	220.5	12.1	84	9.8	0.8	10.1	225	46	-0.10	45
5	511	219.4	13.7	80	226.3	14.7	73	6.9	0.9	8.5	211	41	-0.60	29
6	523	228.1	14.5	80	229.1	15.6	68	1.0	0.9	4.4	187	36	-1.40	8
7	463	226.8	15.4	57	235.3	16.5	79	8.5	1.0	4.8	335	72	1.70	96
8	508	231.1	16.9	62	237.3	19.1	75	6.2	1.1	4.1	317	62	0.90	80

Mathematics



Explanatory Notes

* Summaries for groups of fewer than 10 students are not shown, as the sample size may be too small for acceptable statistical reliability.

† Growth Count provided reflects students with MAP results in both the Start and End terms. Observed Growth calculation is based on that student data.

Generated 6/6/16, 11:35:25 AM

© 2000-2016 Northwest Evaluation Association. All rights reserved. Common Core State Standards are provided under a public license.
© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Student Growth Summary Report

Aggregate by District

Term: Spring 2015-2016
District: Henderson County School District

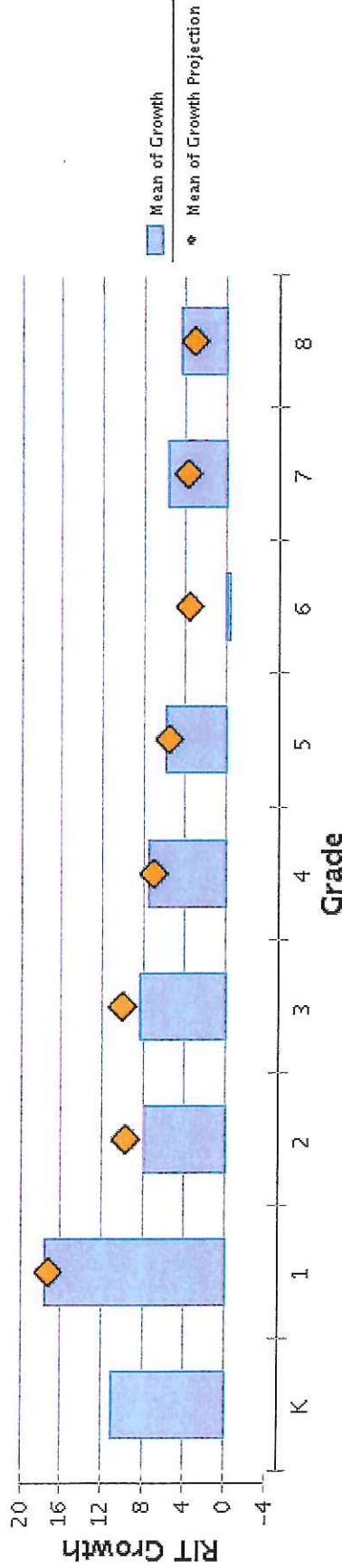
Norms Reference Data:
Growth Comparison Period:
Start - 32 (Spring 2015)
End - 32 (Spring 2016)
None
No

Grouping:
Small Group Display:

Reading

Grade (Spring 2016)	Growth Count†	Achievement Status				Growth								
		Spring 2015		Spring 2016		Grade Level			Comparative					
		Mean RIT	SD	Percentile	Mean RIT	SD	Percentile	Observed Growth	Observed Growth SE	Projected Growth	Count Met Projected Growth	Percent Met Projected Growth	School Conditional Growth Index	School Conditional Growth Percentile
K	57	152.5	8.4		163.5	8.8	82	11.0	1.6					
1	551	166.4	10.9	92	184.0	12.7	83	17.6	0.7	17.3	283	51	0.10	55
2	528	186.5	11.7	91	194.3	13.1	80	7.8	0.8	9.7	221	42	-0.80	21
3	564	195.4	12.6	84	203.7	11.9	78	8.3	0.7	10.0	244	43	-0.90	19
4	484	204.7	12.0	82	212.3	12.6	84	7.6	0.8	7.0	276	57	0.30	63
5	511	211.1	12.3	79	216.9	12.4	79	5.8	0.8	5.5	275	54	0.20	57
6	526	218.5	11.7	86	218.1	13.4	64	-0.4	0.8	3.5	155	29	-1.90	3
7	462	215.7	14.3	50	221.4	12.6	69	5.7	0.9	3.7	274	59	1.00	85
8	508	221.1	13.2	67	225.5	13.8	77	4.4	0.8	3.0	310	61	0.60	74

Reading



Explanatory Notes

* Summaries for groups of fewer than 10 students are not shown, as the sample size may be too small for acceptable statistical reliability.
† Growth Count provided reflects students with MAP results in both the Start and End terms. Observed Growth calculation is based on that student data.

Generated 6/6/16, 11:35:25 AM

© 2000-2016 Northwest Evaluation Association. All rights reserved. Common Core State Standards are provided under a public license.
© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.