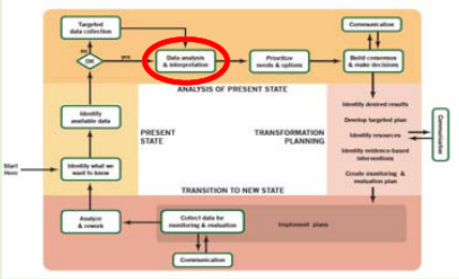
PPT 4: PREPARING FOR DATA ANALYSIS-MEASURING STUDENT GROWTH

Connecting Theory to Practice



For the following lessons and during your own data analysis, refer to Handout 4.1 for clarification and more explanation of common data terminology.

How Do We Measure Growth?

Who Had More Growth?

	G5 2008 Math*	G6 2009 Math*	Increase
Noah	702	775	73
Ben	425	527	102

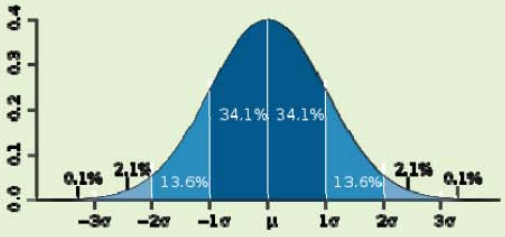
*scale scores

Growth Percentiles

Your son has grown three inches.

Your son's growth is at the 60th percentile for his age.

The Normal Distribution



Percentiles: 2 16 50 84 98

Student Growth Percentiles

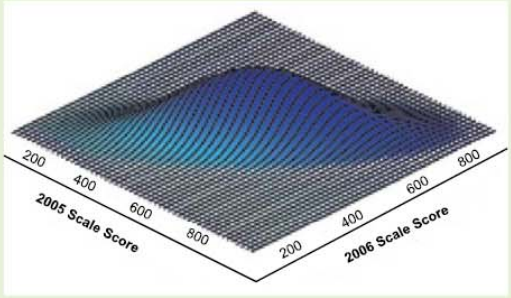


*Image adapted from Betebenner, D. (2008). A Primer on Student Growth Percentiles. *National Center for the Improvement of Educational Assessment (NCIEA)*

Student Growth Percentiles

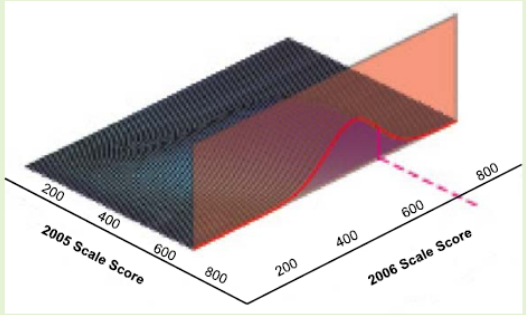


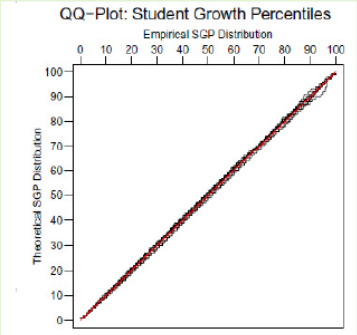
*Image adapted from Betebenner, D. (2008). A Primer on Student Growth Percentiles. *National Center for the Improvement of Educational Assessment (NCIEA)*

Quantile Regression

Student Growth Percentile Range

Prior Scale Score Decile/Range	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99
1st/[0,272]	10.35	10.32	10.06	10.06	10.32	9.89	9.83	9.89	9.57	9.89
2nd/(272,349]	9.61	9.50	10.12	9.53	9.73	10.45	10.09	10.34	10.12	10.51
3rd/(349,418]	8.62	10.92	9.52	9.93	9.96	9.40	10.42	10.58	10.21	10.45
4th/(418,484]	9.55	8.85	10.05	9.82	10.43	10.40	9.64	9.90	10.20	11.16
5th/(484,536]	9.52	10.12	10.14	10.03	10.17	9.21	9.81	9.78	10.68	10.54
6th/(536,581]	9.77	9.88	9.85	9.83	9.71	10.17	9.91	9.68	9.86	11.54
7th/(581,628]	9.05	9.75	10.27	9.88	10.73	10.01	9.46	9.86	10.59	10.41
8th/(628,678]	9.48	9.87	9.45	9.98	9.82	9.92	11.37	11.59	9.10	9.83
9th/(678,748]	9.61	11.01	10.22	9.61	9.94	9.70	9.61	9.21	8.63	12.48
10th/(748,983]	9.81	9.47	9.90	10.23	10.05	9.51	10.29	8.90	13.97	7.87

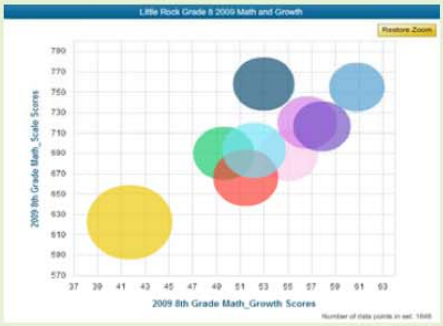
Quantile Regression



Who Had More Growth?

	G5 2008 Math	G6 2009 Math	2009 Math SGP
Noah	702	775	54
Ben	425	527	44

Aggregated Growth Percentiles



Student Growth Percentile

IS NOT the Arkansas Growth Model

IS NOT part of any accountability

IS an objective measure of growth, regardless of the previous year's performance or the nature of the assessments

IS used by ten states for their growth model

IS only one small part of a much richer narrative

Check for Understanding...

You will now complete a short activity to check your understanding of student growth percentiles. When you have finished, you will be ready to move on to Lesson 5.

Congratulations!

You have now completed Lesson 4.

You are now ready to begin Lesson 5: Preparing for Data Analysis—Using the QuickLooks System.