



Research

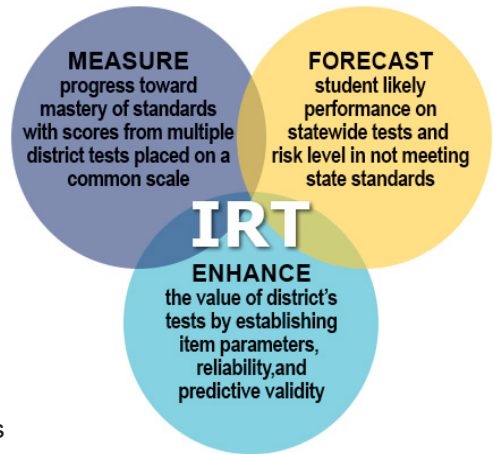
Keeping Galileo K-12 and its Users Ahead of the Curve



ATI uses state-of-the-art measurement techniques to provide reliable and valid assessments and accurate forecasting to facilitate data-driven decision-making for instruction, professional development, and strategic planning. The dedicated ATI Research Team members are experts in gathering and using data to promote effective teaching and learning. ATI's ongoing research helps make it possible for Galileo K-12 to continuously evolve in ways that are relevant to changes in client needs, federal and state legislation, assessment and instruction research findings, and technology.

Psychometric Analysis of Items and Assessments

ATI conducts psychometric analyses of items and multiple types of district-wide assessments (e.g., benchmark, pretest, posttest) using Item Response Theory (IRT) techniques. The ATI Research team uses IRT to establish item characteristics such as difficulty. IRT techniques are also used to provide Developmental Level (DL) scores and to place those scores on a common scale to support the measurement of growth. Note this is not possible with raw scores such as number correct or percent correct



Evaluation of Student Growth

ATI's Categorical Growth Analysis indicates whether expected growth was exceeded, maintained, or not maintained for various groups of students. Growth expectations in math, ELA, writing, and science (grades kindergarten through 12) are based on annual research conducted by ATI using regression techniques. Growth expectations for other content areas are based on the average observed growth for the district.

Forecasting of Statewide Test Performance

ATI uses well-established statistical approaches to set cut scores for multiple types of assessments that forecast student performance on statewide assessments. Forecasting information can be used by teachers, administrators, specialists, and parents throughout the year along with data about student standards mastery, achievement, and growth to improve instructional effectiveness and student learning

Research on Reliability, Validity, and Forecasting Accuracy

ATI's ongoing research routinely demonstrates that Galileo assessments demonstrate high reliability, predictive validity, and accuracy in forecasting student performance on statewide tests. Approximately 95 percent of students classified at the lowest level of risk typically go on to pass the statewide assessment.

Forecast Report
 District: ATI Demo District
 Title: District 5th Math Tests and Statewide Test
 Subtitle: Three 5th Math Tests and Statewide Test

Benchmark Performance			Risk Classification		Statewide Test Performance			Percent Accurately Forecast
Test 1	Test 2	Test 3	Risk Group	Student Count	Met	Not Met	Percent Met	
Met	Met	Met	On Course	269	255	14	95	95
Met	Met	Not Met	Low Risk	25	19	7	68	68
Met	Not Met	Met		62	41	21		
Not Met	Met	Met	Moderate Risk	15	10	5	28	72
Met	Not Met	Not Met		32	7	25		
Not Met	Met	Not Met		14	1	13		
Not Met	Not Met	Met	High Risk	29	13	16	8	92
Not Met	Not Met	Not Met		97	8	89		
Correlations with Statewide Test				Total Student Count: 544	Overall Percent Accuracy:			86
0.78	0.76	0.8						

Test 1 Title: Demo 5th Math #1
 Test 2 Title: Demo 5th Math #2
 Test 3 Title: Demo 5th Math #3

For more information, schedule a Galileo Overview at ati-online.com or contact us.