



# Measuring the Predictability of ISIP-ER Reading on Florida Standards Assessments (FSA)

## 2018



### Morgridge International Reading Center

UNIVERSITY OF CENTRAL FLORIDA

# Prepared by the University of Central Florida

## College of Education and Human Performance Morgridge International Reading Center

### Research Study Title

Measuring the Predictability of Istation Indicators of Progress Early Reading (ISIP-ER) Scores on Florida Standards Assessment (FSA) Scores

### Purpose

The following report has been prepared for Istation. The report is a predictability study of the Istation Indicators of Progress Early Reading (ISIP-ER) scores to the Florida Standards Assessment (FSA) scores. Included in this report are charts, tables, and figures demonstrating the predictability of the ISIP-ER scores on FSA scores with a large sample of student data ( $N = 12,243$ ). The data in this report does not identify individual districts, schools, or students. Since the predictability is of the FSA scores, it can be assumed that all participants attend school in the state of Florida.

### University of Central Florida Research Team Members:

#### Principal Investigator:

Laurie O. Campbell, Ed.D., *Assistant Professor*

#### Co-Principal Investigator:

Glenn W. Lambie, Ph.D., *Professor and Department Chair*

#### Postdoctoral Scholar:

Claudia C. Sutter, Ph.D., *Postdoctoral Scholar*

#### Research Assistants:

Ashley R. Bickham, *Research Assistant*

Lindsay Pulse, *Graduate Research Assistant*

#### Contact Information:

Dr. Laurie O. Campbell  
University of Central Florida  
4143 Andromeda Loop, Orlando, FL 32816  
[locampbell@ucf.edu](mailto:locampbell@ucf.edu)

### Citation

Campbell, L. O., Lambie, G. W., Sutter, C. C., Bickham, A. R., & Pulse, L. P. (2018). *Measuring the predictability of Istation Indicators of Progress Early Reading (ISIP-ER) scores on Florida Standards Assessment (FSA) scores*. University of Central Florida. [www.ucf.edu/mirc](http://www.ucf.edu/mirc)

## Abstract

The study provides evidence that Istation's Indicators of Progress (ISIP™) Reading cut scores can predict the Florida Standards Assessment English Language Arts (FSA-ELA) statewide examination scores for all achievement levels among third grade students. The study examined third grade ISIP-ER scores (Overall Reading Ability and Reading Comprehension) and FSA-ELA scale scores. All data came from five public school districts in the state of Florida and was collected during the 2016-2017 school year. A simple linear regression analysis was conducted to determine the correlation of the overall  $R = .74$  (55% of the variance explained) and comprehension  $R = .71$  (50% of the variance explained). ISIP-ER scaled scores had a strong correlate to the FSA-ELA scores. Predictability "bands" were computed following the confidence interval (CI) approach to identify the ISIP-ER cut scores that predict FSA-ELA Reading tests for all achievement levels.

## Table of Contents

Abstract	..... 3
Introduction	..... 5
Literature	..... 5
Methodology	..... 7
Analysis	..... 8
Conclusion	.....12
References	.....13
Appendix A	.....15

## Introduction

The purpose of this study is to determine (a) the predictability of Istation's Indicators of Progress Early Reading (ISIP-ER) overall scaled scores and reading comprehension subtest scores related to the Florida Standards Assessment English Language Arts (FSA-ELA) scores; and (b) the cut scores of the ISIP-ER and the FSA-ELA based on achievement level. Obtaining the predictability of a curriculum-based measure like ISIP-ER scores on a high stakes assessment like the FSA-ELA can provide early awareness of students' yearly progress towards reaching expected state standards (Miller, Bell, & McCallum, 2015). Further, ISIP-ER can provide evidence of how students are meeting formative benchmarks and the resulting data can provide a pathway to personalized instructional decision-making (Campbell, Lambie, & Planinz, 2017).

Students in the state of Florida are required to complete the statewide, standardized assessment program (Florida Statute s.1008.22). Students who score below a level 3 on the FSA-ELA in grade three may be retained to receive additional academic support for reading (Florida Statute s. 1008.25). The predictability of ISIP-ER scores may inform students, families, and educators of the areas of needed remediation for the FSA-ELA. The following report provides evidence of predictability and subsequent cut scores for the ISIP-ER and FSA-ELA. The following two research questions guided this study:

**Research Question 1.** To what level does the ISIP-ER (overall and reading comprehension scores) predict third grade students' FSA-ELA scores?

**Research Question 2.** What are the cut scores of the ISIP-ER relationship to third grade students' FSA levels of achievement?

## Review of Related Literature

### Istation's Indicators of Progress Early Reading (ISIP-ER)

ISIP-ER is a computer-adaptive, Internet-delivered, curriculum-based measure, for students in kindergarten through third grade. Educators utilize ISIP-ER for continuous progress monitoring of students' reading abilities. The composition of the overall reading scaled score for grade three is derived from the following subtest: (a) reading comprehension, (b) spelling, and (c) vocabulary (Matthes, Torgeson, & Herron, 2011; 2016). ISIP-ER takes approximately 20 to 40 minutes to complete. Although the ISIP-ER assessment is scheduled to be taken monthly, school districts typically have their students take the assessment four to six times per year based on previous observed usage and schedules (Campbell, Lambie, Hahs-Vaughn, & Bai, 2015; Campbell, Lambie, Planinz, & Pulse, 2016).

Previous predictive studies have concluded that the ISIP-ER is predictive of national (Hoelzle, 2012) and state-wide high-stakes assessment scores (Gaughin, 2011, Luo, Guang-Lea, & Molina, 2017; Patarapichayatham, 2016; 2017). The ISIP-ER test questions are computer-adaptive and the test was built on two-parameter Item Response Theory (IRT). The ISIP-ER assessment considers the difficulty of the question and the performance and ability of the test-taker.

### Florida Standards Assessment English Language Arts (FSA-ELA)

The Florida Standards Assessment (FSA) is a comprehensive summative assessment program that spans from kindergarten through high school. Students enrolled in grade three are required to complete the FSA-ELA assessment (s. 10000). The FSA-ELA assessments are held on school campus and delivered in a paper-based format per different grade levels (through 2017). The FSA-ELA Reading assessments are administered over two days in two 80-minute sessions. The testing window for the FSA-ELA Reading assessments is typically at the end of March through the beginning of April. Each school district or school indicates the testing dates for their students.

The FSA measures how well students have learned the knowledge and skills outlined in the state-adopted content standards in English Language Arts (ELA). The third grade FSA-ELA consists of 56-60 questions focused on reading, language and listening of which 6-10 items are test items and are not included in the scoring FLDOE, 2017 (See Appendix A, Table 13). Students are assessed on the FSA-ELA standards (CPalms.org, 2017). Student performance on Florida’s statewide assessments is categorized into five achievement levels: (a) Inadequate, (b) Below Satisfactory, (c) Satisfactory, (d) Proficient, and (e) Mastery (See Table 1).

**Table 1.**  
*FSA-ELA Achievement Levels\* and Scale Scores Grade 3*

Achievement Levels	Level 1 Inadequate	Level 2 Below Satisfactory	Level 3 Satisfactory	Level 4 Proficient	Level 5 Mastery
<b>Descriptor</b>	Highly likely to need substantial support for the next grade	Likely to need substantial support for the next grade	May need additional support for the next grade	Likely to excel in the next grade	Highly likely to excel in the next grade
<b>Scaled Score Range</b>	240-284	285-299	300-314	315-329	330-360

Notes: Levels 3-5 indicates student at or above target. \*Source for achievement levels, descriptors, and scores: <http://www.fldoe.org/core/fileparse.php/5663/urlt/ELA-MathFSAFS1617.pdf>

## Methods

Results from third grade student ISIP-ER and FSA-ELA Reading tests for third grade from the 2016-2017 school year were used to conduct this study. Assessment results from the March/April FSA-ELA and April ISIP-ER (overall and comprehension subtest) were compared.

### Participants

The sample ( $N = 12,243$ ) were third grade students from five public school districts in the state of Florida. Students in the sample were mostly representative of the population in the state of Florida for the 2016-2017 school year (see Table 2). While data were available for students enrolled in the state by race and ethnicity, data were not available for the students who took the FSA-ELA. There was a discrepancy in the total amount of third grade students enrolled in public schools ( $N = 232,339$ ) versus the total amount of third grade students that completed the FSA-ELA test ( $N = 228,166$ ; FSA Accountability). Meaning the race and ethnicity might be slightly skewed from the population total to those students who completed the FSA-ELA ( $n = 4,173$ ). Gender representation in the sample for this study (male, 51.6%; female, 48.4%) mirrored the gender representation of students enrolled in the third grade in the state of Florida (male, 51.3%; female, 48.7%).

**Table 2.**

*Race and Ethnicity Comparison to State*

Race Ethnicity	# of Students in the sample	Sample Totals with ISIP-ER and FSA-ELA by Percentage	Third grade Students Enrolled in State of Florida by percentage
White	6,854	56%	37%
Hispanic	2,191	18%	34%
Black	2,052	17%	23%
Two or More Races	657	5%	4%
Asian	424	3%	3%
American Indian	19	< 0.001	< 0.001
Pacific Islander	36	< 0.001	< 0.001
Other Non-Hispanic	10	< 0.001	NR

\* Note. All percentages were rounded up.

## Analysis

The purpose of this study was to determine predictability ISIP-ER scores on FSA-ELA scores and to determine the cut scores relative to the FSA-ELA achievement levels for grade three.

**Table 3.**

*Descriptive Statistics of the Assessment Scores*

Grade	N	ISIP Overall Reading Ability		ISIP Reading Comprehension		FSA-ELA	
		M	SD	M	SD	M	SD
3rd	12,243	251.53	21.01	262.36	27.12	304.43	19.60

To determine the correlation of the ISIP-ER overall score to the FSA-ELA scores, a Pearson's  $r$  was conducted. The ISIP-ER (overall scores) and FSA-ELA scores correlated ( $r = .74, p < .001$ ). The effect size for the identified correlation was large, explaining 55% of the variance (Cohen, 1988; 1992). Similarly, the ISIP-ER reading comprehension subscale scores correlated with the FSA-ELA scores ( $r = .71, p < .001$ ), explaining 50% of the variance. Therefore, both the ISIP-ER overall scores and reading comprehension subscale scores had a strong correlation with the FSA-ELA Reading test scores.

**Table 4.**

*Pearson Product-Moment Correlation Coefficients and Effect Size Interpretation*

	ISIP-ER Overall	$r^2$	ISIP-ER Reading Comprehension	$r^2$
FSA-ELA	.74	.55	.71	.50
Effect Size		Large		Large

A simple linear regression analysis was conducted using SPSS software version 24 to determine the predictability of ISIP-ER scores to the students' FSA-ELA scores. The ISIP-ER Overall Reading Ability score was the predictor variable, and the FSA-ELA Reading score was the outcome variable. The ISIP-ER Reading Comprehension score was also the predictor variable, and the FSA-ELA Reading score was the outcome variable. The  $\hat{y}$  for third grade data was computed.

### Research Question 1: Simple Linear Regression Analysis

To what level does the ISIP-ER (overall and reading comprehension scores) predict third grade students FSA-ELA scores?



For third grade ISIP-ER Overall Reading Ability, 54.3% of the variance in FSA-ELA Reading scores was predicted by the ISIP-ER Overall Reading Ability scores. The equation for predicting the FSA-ELA Reading score is:  $FSA-ELA = 131.516 + .687 (\text{ISIP Overall score}) + e$ . The intercept was 131.516. The FSA-ELA Reading score was 131.516 as ISIP-ER Overall score was zero. The slope for ISIP-ER Overall Reading Ability was .687, indicating that the FSA-ELA Reading score was 132.2 ( $131.516 + .687$ ) as the ISIP-ER Overall Reading Ability score increases 1 unit (See Figure 1). For third grade ISIP-ER Reading Comprehension, 51.6% of the variance in FSA-ELA Reading was predicted from ISIP-ER Reading Comprehension scores. The equation for predicting the FSA-ELA Reading score is:  $FSA-ELA = 168.283 + .519 (\text{ISIP Overall score}) + e$ . The intercept was 168.283. The FSA-ELA Reading score was 168.283 as ISIP-ER Overall score was zero. The slope for ISIP-ER Reading Comprehension was .519, indicating that the FSA-ELA Reading score was 168.5 ( $168 + .519$ ) as the ISIP-ER Reading Comprehension score increases 1 unit. ISIP-ER overall scores and reading comprehension subscale scores were significant predictors of the FSA-ELA scores for student in grade three.

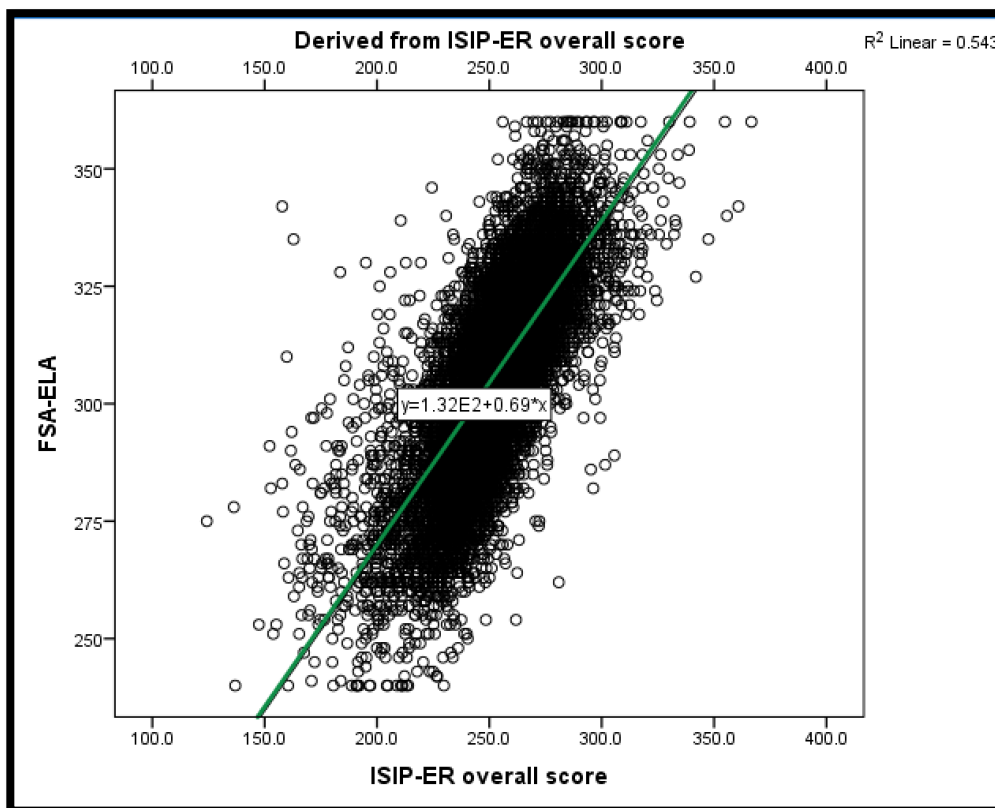


Figure 1. Scatterplot of FSA-ELA

## Research Question 2: Confidence Intervals

What are the cut scores of the ISIP-ER in relationship to third grade students' FSA levels of achievement?

To answer research question two, confidence interval (CI) were computed. Prediction bands occur in a regression analysis. The goal of a prediction band is to cover with a prescribed probability the values of one or more future observations for the same population from which a given dataset was sampled. There are two types of prediction bands: (a) confidence interval (CI) and (b) prediction interval (PI). A CI is used in statistical analysis to represent the uncertainty in an estimate of a curve or function of the data. The 95% confidence intervals enclose the area can be 95% certain contains the true curve. With many data points, the CIs will be near the line or curve, and most of the data will lie outside the CIs. The 95% PIs enclose the area expected to enclose 95% of future data points. They are wider than confidence bands, and they are much wider with large datasets.

The CI for the average expected value of  $y$  for a given  $x^*$  is as follows:

$$E(y | x^*) = \hat{y} \pm t_{n-2}^* \sqrt{\frac{1}{n} + \frac{(x^* - \bar{x})^2}{(n-1)s_x^2}}$$

where  $s_y$  is the standard deviation of the residuals, calculated as

$$s_y = \sqrt{\frac{\sum (y_i - \hat{y}_i)^2}{n-2}}.$$

ISIP-ER reading overall scores and ISIP-ER reading comprehension subscale scores upper and lower bound CI were selected to develop the cut point.

The CI was applied to obtain the prediction band from simple linear regression results. The confidence level was set at 0.95. ISIP-ER prediction bands for overall reading ability scores were calculated to predict FSA-ELA scores by Achievement Level (See Table 5). Achievement levels were provided by the Florida Department of Education (See Table 1). FSA-ELA scores in achievement level 2 or lower, identify the need of immediate remediation for students. The cut score for FSA-ELA Achievement Level 3 is 300 for third grade, which differs from the known cut scores for FSA-ELA. At Achievement Level 3 (passing), the cut score is 314 (See Table 5).

**Table 5.***Grade 3 ISIP-ER overall score prediction bands and cut scores for the FSA-ELA.*

ISIP Reading Overall Score					
Achievement Levels	Level 1 Inadequate	Level 2 Below Satisfactory	Level 3 Satisfactory	Level 4 Proficient	Level 5 Mastery
ISIP-ER overall scores	196-236	238-247	248-259	260-271	273-293
ISIP-ER Overall Lower Bound Cut Scores	236*	238	248	260	273
FSA-ELA** Cut scores Bands	240 - 284	285 - 299	300 – 314	315 - 329	330 - 360

Note. Scores shaded in yellow indicate a Satisfactory rating. \*Level 1 indicates Upper Bound. \*\*FSA-ELA cut scores are derived from the Florida Department of Education.

For third grade, the prediction band for Achievement Level 1 (Inadequate) was 196 to 236. The ISIP-ER Overall Reading Ability score at 236 is the cut score. It is 95% certain that students who have an ISIP-ER Overall Reading Ability score of 236 will score at Achievement Level 1 and that their FSA-ELA Achievement Level 1 cut score will be in the 240-284 range. In other words, third grade students who score equal to or is lower than 236 on the ISIP-ER Overall Reading Ability will almost certainly achieve FSA-ELA Achievement Level 1. For each achievement level, the prediction bands are indicated with 95% certainty. Likewise, the same pattern can be followed for all of the other FSA-ELA Achievement Levels.

To obtain FSA-ELA Achievement Level 5, the prediction band ranges for the ISIP-ER overall reading ability scores range from 273 to 293. The ISIP-ER overall reading ability lower bound score of 273 is the cut score for Mastery. It is 95% certain that a group of third grade students who have an ISIP-ER Overall Reading Ability score of 273 or above will score at Achievement Level 5 on the FSA-ELA with the bound cut score of 330-360. In other words, third grade students who score 293 or higher on ISIP-ER Overall Reading Ability will almost certainly achieve FSA-ELA Achievement Level 5.

### Reading Comprehension

The ISIP-ER reading comprehension subtest was considered when determining cut scores for students in grade three. The prediction band ranges from 238 to 247 would indicate that a student would be in Level 2 achievement (below satisfactory). The ISIP-ER Reading Comprehension upper bound cut score is

247 for this level. It is with 95% certainty that students who have an ISIP-ER Reading Comprehension score of 247 will score at FSA-ELA Achievement Level 2 with a FSA-ELA range score of 285-299. In other words, third grade students who score 238-247 on the ISIP-ER Reading Comprehension subtest will almost certainly achieve FSA-ELA Achievement Level 2 (See Table 6).

**Table 6.**

*Grade 3 ISIP-ER Reading Comprehension Prediction Bands and Cut Scores for the FSA-ELA.*

ISIP-ER Reading Comprehension Subtest					
Achievement Levels	Level 1 Inadequate	Level 2 Below Satisfactory	Level 3 Satisfactory	Level 4 Proficient	Level 5 Mastery
ISIP-ER Comprehension scores	200 - 237	238 - 247	248 – 263	267 - 285	286 - 315
ISIP-ER Comprehension Lower Bound Cut Scores	237*	238	248	267	286
FSA-ELA** Cut scores	240 - 284	285 - 299	300 – 314	315 - 329	330 - 360

Note. Scores shaded in yellow indicate a Satisfactory rating. \*Level 1 indicates Upper Bound. \*\*FSA-ELA cut scores are derived from the Florida Department of Education.

A final example for the ISIP-ER Reading Comprehension subtest cut scores, the prediction band ranges from 267 to 285. The ISIP-ER Reading Comprehension score at 285 is the upper bound cut score. Whereas, 267 is the lower bound cut score for FSA-ELA Achievement Level 4. It is 95% certain that a group of third grade students who have an ISIP Reading Comprehension score of 285 will score at FSA-ELA Achievement Level 4.

## Conclusions

Overall, the study indicates the ISIP-ER assessment scores are predictive of the third grade students' FSA-ELA scores for both the overall score and the reading comprehension subscale score. Based on this sample of third grade students ( $N = 12,243$ ), educators can rely on the ISIP-ER Overall and Reading Comprehension subscale scores to be predictive of FSA-ELA scores. The ISIP-ER cut scores are useful for educators to predict students' performance on FSA-ELA tests and to guide instruction prior to high-stakes

achievement testing of the Florida ELA standards.

The ISIP-ER is designed to be administered monthly during the time students spends using the Istation reading curriculum. Teachers, reading coaches, school counselors, and administrators can view the students' data monthly to determine students' progress towards a satisfactory achievement level in reading on the FSA-ELA. For example, the ISIP-ER Overall Reading Ability cut score for third grade to pass FSA-ELA Achievement Level 3 is 248-259. If a third grade student scores 238 at the beginning of the year (September assessment month), the student will need to gain 10 more points to meet the minimum ISIP-ER Overall Reading Ability lower bound cut score of 248 before FSA-ELA testing in late March or the beginning of April.

Even though this study provided ISIP-ER Overall Reading Ability cut scores and ISIP-ER Reading Comprehension cut scores to prepare students for FSA-ELA Reading tests, these scores are presented with 95% certainty. Environmental, physical, and psychological factors may impact students FSA-ELA scores.

## References

- Binici, S. (2018). Florida Standards Assessment. 2016–2017 Volume 4 Evidence of Reliability and Validity the Florida Department of Education.  
[https://fsassessments.org/assets/documents/V4\\_FSA\\_Technical\\_Report\\_Year\\_2016-2017\\_FINAL\\_508.pdf](https://fsassessments.org/assets/documents/V4_FSA_Technical_Report_Year_2016-2017_FINAL_508.pdf).
- Campbell, L. O., Lambie, G. W., Hahs-Vaughn, D., Bai, H. (2015). *An investigation of the effects of the Istation Reading program on the reading performance of elementary school students in the state of Florida*. University of Central Florida, Orlando, FL. [www.ucf.edu/mirc/istation](http://www.ucf.edu/mirc/istation).
- Campbell, L.O., Lambie, G. W., Planinz, T., & Pulse, L. (2016). *An investigation of the effects of the Istation Reading program on the reading performance of elementary school students in the state of Florida (Year 2)*. Orlando, FL. University of Central Florida. [www.ucf.edu/mirc/istation](http://www.ucf.edu/mirc/istation).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159. doi:10.1037/0033-2909.112.1.155
- CPalms.org (2018). *State of Florida's official source for standards information and course descriptions*.  
<http://www.cpalms.org/Public/search/Standard>.
- Florida Department of Education (FLDOE). (2017). *Test Design Summary and Blueprint: English Language Arts Grade 3 English Language Arts Standards Coverage Reading, Language, and Listening Component*. <http://www.fldoe.org/core/fileparse.php/5663/urlt/ELATDS.pdf>.
- Florida Statutes (2017). *Title XLVIII, Chapter 1008, K-20 Education Code*. 1008.22 Student assessment programs for public schools.
- Florida Statutes. (2017) *Title XLVIII, Chapter 1008, K-20 Education Code*. 1008.25 Public school student progression; student support; reporting requirements.
- Gaughin, L. (2011). *Report of Istation 2009 Second Grade 2010 Third Grade Users*. [White Paper] Hillsborough County Public Schools: Tampa, FL
- Hoelzle, B. (2012). *Predicting student performance on the developmental reading assessment: An independent comparison of two different tests*. (2nd ed.). [White Paper] Frisco Independent School District: Frisco, TX
- Luo, T., Guang-Lea, L., & Molina, C. (2017) Incorporating Istation into early childhood classrooms to improve reading comprehension. *Journal of Information Technology Education: Research* 16, 247-266. doi: 10.28945/3788

- Mathes, P., Torgesen, J., & Herron, J. (2011). *Technical manual: Istation's Indicators of Progress, Early Reading: Computer Adaptive Testing System for Continuous Progress Monitoring of Reading Growth for Students Pre-K to Grade 3*. Retrieved from: [www.istation.com/studies](http://www.istation.com/studies).
- Mathes, P., Torgesen, J., & Herron, J. (2016). *Computer Adaptive Testing System for Continuous Progress Monitoring of Reading Growth for Students Pre-K through Grade 3*. Istation.com, Dallas, Texas. Retrieved from: [www.istation.com/studies](http://www.istation.com/studies).
- Miller, K. C., Bell, S. M., & McCallum, R. S. (2015). Using reading rate and comprehension CBM to predict high-stakes achievement. *Journal of Psychoeducational Assessment, 33*(8), 707-718.
- Patarapichayatham, C., Fahle, W., & Roden, T. R. (2014). *ISIP Reading versus STAAR Reading: The Predictability Study*. Dallas, TX: Istation. Retrieved from: [www.istation.com/studies](http://www.istation.com/studies).
- Patarapichayatham, C. (2016). *Predictability Study of ISIP Reading and Georgia Milestones Assessment System: 3<sup>rd</sup> – 6<sup>th</sup> Grade Students*. Dallas, TX: Istation. Retrieved from: [www.istation.com/studies](http://www.istation.com/studies).
- Patarapichayatham, C. (2017). *Predictability Study of ISIP Reading and Kansas Assessment Program: 3<sup>rd</sup>– 6<sup>th</sup> Grade Students*. Dallas, TX: Istation. Retrieved from: [www.istation.com/studies](http://www.istation.com/studies).

## Appendix A

**Table 7.**

Simple Linear Regression Analysis for 3rd Grade: ISIP Overall Reading Ability

### Model Summary<sup>a</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.737 <sup>a</sup>	.543	.543	13.47	.43	14553.245	1	12241	.000

a. Predictors: (Constant), ISIP overall score

**Table 8.**

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2553821.619	1	2553821.619	14553.245	.000 <sup>b</sup>
	Residual	2148065.909	12241	175.481		
	Total	4701887.528	12242			

a. Dependent Variable: ELA/FSA scale score

b. Predictors: (Constant), ISIP overall score

**Table 9.**

### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	131.516	1,438		91.437	.000
	ISIP overall score	.687	,006	,737	120.637	.000

a. Dependent Variable: ELA/FSA scale score



**Table 10.**

Simple Linear Regression Analysis for 3rd Grade: ISIP Reading Comprehension

**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.718 <sup>a</sup>	.516	.516	13.636	.516	13040.56	1	122	.000

a. Predictors: (Constant), ISIP comprehension score

**Table 11.****ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2424660.927	1	2424660.927	13040.566	.000
	Residual	2275252.073	12237	185.932		
	Total	4699913.000	12238			

a. Dependent Variable: ELA/FSA scale score

b. Predictors: (Constant), ISIP comprehension score

**Table 12.****Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	168.283	1.199		140.397	.000
	ISIP comprehension score	.519	.005	.718	114.195	.000

a. Dependent Variable: ELA/FSA scale score

**Table 13.**

Grade 3 English Language Arts Standards Coverage and FSA Weighting

Copied from: <http://www.fldoe.org/core/fileparse.php/5663/urlt/ELATDS.pdf>

Reporting Category	Genre	Standards Assessed	Percentage of Assessment
Key Ideas and Details	Literature	LAFS.3.RL.1.1	15 - 25%
		LAFS.3.RL.1.2	
		LAFS.3.RL.1.3	
	Informational	LAFS.3.RI.1.1	
		LAFS.3.RI.1.2	
		LAFS.3.RI.1.3	
Craft and Structure	Literature	LAFS.3.RL.2.4 Also assesses LAFS.3.RF.3.3 and LAFS.3.RF.4.4	25 - 35%
		LAFS.3.L.2.3.a	
		LAFS.3.L.3.4	
		LAFS.3.L.3.5	
		LAFS.3.RL.2.5	
		LAFS.3.RL.2.6	
	Informational	LAFS.2.RI.2.4 Also assesses LAFS.3.RF.3.3 and LAFS.3.RF.4.4	
		LAFS.3.L.2.3.a	
		LAFS.3.L.3.4	
		LAFS.3.L.3.5	
		LAFS.3.RI.2.5	
		LAFS.3.RI.2.6	
Integration of Knowledge and Ideas	Literature	LAFS.3.RL.3.7	20 - 30%
		LAFS.3.SL.1.2**	
		LAFS.3.SL.1.3**	
		LAFS.3.RL.3.9	
	Informational	LAFS.3.RI.3.7	
		LAFS.3.SL.1.2**	
		LAFS.3.SL.1.3**	
		LAFS.3.RI.3.8	
		LAFS.3.RI.3.9	
Language and Editing*	Literature or Informational	LAFS.3.L.1.1	15 - 25%
		LAFS.3.L.1.2	