Study Profile: STAAR Algebra II – ACCUPLACER Algebra (★★ ☆ ☆ ☆ ☆)

The STAAR Algebra II – ACCUPLACER Algebra external validity study is designed to establish empirical links between performance on the STAAR Algebra II assessment and performance on the ACCUPLACER algebra test.

### Motivation ( $\star \star \star \Rightarrow \Rightarrow \Rightarrow \Rightarrow$ )

This analysis was based on a single group of students who took both the STAAR Algebra II and the ACCUPLACER algebra assessments in 2010 or 2011. Data from STAAR derive from a stand-alone field test administered in 2010 and a low-stakes operational administration in 2011 and are linked to motivated ACCUPLACER algebra scores in corresponding years.

#### Representativeness ( $\star \star \star \Rightarrow \Rightarrow \Rightarrow$ ) and Sample Size ( $\star \star \star \star \Rightarrow \Rightarrow$ )

# **Grade Levels**All Algebra II Examinees Versus Those Linked to ACCUPLACER Scores

Group	roup Grade 8		Grade 9		Grade 10		Grade 11		Grade 12		Missing		Total
All Algebra II	32	0%	2,781	3%	32,956	31%	53,140	50%	16,414	16%	8	0%	105,331
Linked	0	0%	11	0%	554	22%	1,249	49%	750	29%	0	0%	2,564

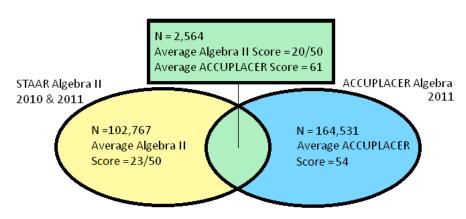
## Demographic Characteristics

All Algebra II Examinees Versus Those Linked to ACCUPLACER Scores

Group	Group Female		Economically Disadvantaged		African American		Hispanic		White		Other	
All Algebra II	53,187	50%	45,360	43%	13,128	12%	45,127	43%	41,239	39%	5,837	6%
Linked	1,371	53%	1,209	47%	307	12%	1,224	48%	979	38%	54	2%

#### **Summary of STAAR Algebra II and ACCUPLACER Achievement**

Linked and Unlinked Groups



#### **Average ACCUPLACER Scores Based on Students' STAAR Performance**

Satisfactory Academic Performance	Advanced Academic Performance				
83	102				

#### Correlation (★★☆☆☆)

Correlation between STAAR Algebra II and ACCUPLACER Algebra = 0.56

#### Content Overlap (★★☆☆)

There is minimal (approximately 5%) content/skills overlap between the STAAR Algebra II assessment and the ACCUPLACER algebra test.

## **Assessment Characteristics**

Assessment Characteristic	STAAR Algebra II	ACCUPLACER Algebra
Purpose	Created to determine mastery of the Algebra II Texas Essential Knowledge and Skills (TEKS), the state-mandated curriculum	Under the Texas Success Initiative, the ACCUPLACER test is used to measure academic skills of students enrolling in Texas institutions of higher education to determine class placement.
Assessment Type	A criterion-referenced assessment	A criterion-referenced assessment
Content	Measures properties and attributes of functions, representational tools to solve problems, properties of quadratic functions, representations of quadratic relations, properties of square root functions, properties of rational functions, and properties of exponential and logarithmic functions	Measures operations with integers and rational numbers; operations with algebraic expressions; and the solutions of equations, inequalities, and word problems  There is minimal (approximately 5%) content/skills overlap between the STAAR Algebra II assessment and the ACCUPLACER algebra test.
Item Format	50 items total: 45 multiple-choice items and 5 gridded-response items	12 multiple-choice questions; multiple choice items are computer- adaptive for the online version
Administration	<ul> <li>Administered in May, July, and December</li> <li>Administered online and on paper</li> <li>Administered by trained school personnel</li> <li>4 hour time limit</li> </ul>	<ul> <li>Administered on a schedule determined by colleges and universities</li> <li>Administered by colleges and universities</li> <li>Administered online: computer-adaptive test</li> <li>The test is untimed</li> </ul>
Performance Standards	Performance standards will be established and implemented in spring 2012	The passing score for the ACCUPLACER algebra assessment under the Texas Success Initiative is a scale score of 63.