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Standard Setting  
for the  
ACE Assessments  
Biology I, English II, & U.S. History

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# Standard Setting and Cut Scores

- Standard setting is the process that allows experts to make judgments about the content that a student should know and be able to do in order to be reported in a specific performance level.
- Cut scores determine the four performance levels utilized in Oklahoma: Advanced, Proficient, Limited Knowledge, and Unsatisfactory.

# Expert Committee Members

- The standard setting committees included educators and representatives of higher education, business, and the legislature.
  - Average of 16.5 years of experience and over 330 years total experience in Biology.
  - Average of 23 years of experience and over 490 years of total experience in English.
  - Average of 18 years of experience and over 365 years of total experience in U.S. History.

# ACE Biology I, English II, & U.S. History Cut Score Recommendations

- Standard setting committees convened in June to determine cut score recommendations.
- Standard setting panelists determine cut score recommendations based on test content, performance standards, and test item difficulty, NOT based on number of test items answered correctly.
  - Raw scores are mapped to scale scores as is standard procedure with large-scale assessments such as the NAEP, ACT or SAT.

# Oklahoma Core Curriculum Tests Performance Benchmarks or "Cut Scores"

- The committees' recommendations for cut scores are presented on the following slides.
- The results are provided as
  - a scale score which provides a consistent interpretation of assessments across years and administrations
  - and a raw score which can be interpreted only in terms of a particular set of questions.

# ACE Biology I

## Cut Score Recommendations with Standard Errors

	Limited Knowledge		Proficient		Advanced	
	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct
<b>+2 SEM</b>	27 (618)	45%	36 (678)	60%	58 (866)	97%
<b>+1 SEM</b>	25 (602)	42%	35 (672)	58%	50 (766)	83%
<b>High</b>	27 (618)	45%	42 (714)	70%	51 (773)	85%
<b>Median</b>	24 (594)	40%	33 (659)	55%	47 (745)	78%
<b>Low</b>	20 (555)	33%	25 (602)	42%	42 (714)	70%
<b>-1 SEM</b>	20 (555)	33%	32 (653)	53%	44 (726)	73%
<b>-2 SEM</b>	17 (517)	28%	32 (653)	53%	43 (720)	72%



Total of 60 operational Multiple Choice items

# ACE Biology I

## Recommended Cut Scores and Impact Data

Overall Median Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points		24	33	47
Percent of 1 <sup>st</sup> Time Test Takers	9%	19%	42%	30%



Impact Data from 2009 Spring Administration

# ACE Biology I

## Recommended Cut Scores and Impact Data

+1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points		25	35	50
Percent of 1 <sup>st</sup> Time Test Takers	10%	23%	46%	21%



Impact Data from 2009 Spring Administration

# ACE Biology I

## Recommended Cut Scores and Impact Data

- 1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
<b>Raw Score Cut Points</b>	/	20	32	44
<b>Percent of 1<sup>st</sup> Time Test Takers</b>	4%	21%	35%	40%



Impact Data from 2009 Spring Administration

# ACE English II

## Cut Score Recommendations with Standard Errors

	Limited Knowledge		Proficient		Advanced	
	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct
<b>+2 SEM</b>	31 (581)	47%	44 (665)	67%	60 (816)	91%
<b>+1 SEM</b>	28 (559)	42%	42 (652)	64%	57 (771)	86%
<b>High</b>	31 (581)	47%	50 (706)	76%	56 (759)	85%
<b>Median</b>	26 (543)	39%	41 (646)	62%	55 (749)	83%
<b>Low</b>	23 (516)	35%	37 (621)	56%	50 (706)	76%
<b>-1 SEM</b>	23 (516)	35%	40 (640)	61%	51 (714)	77%
<b>-2 SEM</b>	22 (506)	33%	38 (627)	58%	50 (706)	76%



Total of 61 operational Multiple Choice items on the English II assessment with a total of 66 score points, including Writing

# ACE English II

## Recommended Cut Scores and Impact Data

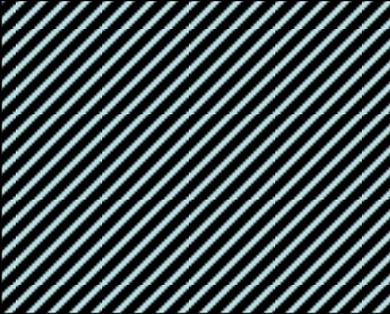
Overall Median Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points		26	41	55
Percent of 1 <sup>st</sup> Time Test Takers	3%	19%	49%	29%



Impact Data from 2009 Spring Administration

# ACE English II

## Recommended Cut Scores and Impact Data

+1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points		28	42	57
Percent of 1 <sup>st</sup> Time Test Takers	5%	20%	55%	20%



Impact Data from 2009 Spring Administration

# ACE English II

## Recommended Cut Scores and Impact Data

- 1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
<b>Raw Score Cut Points</b>	23	23	40	51
<b>Percent of 1<sup>st</sup> Time Test Takers</b>	2%	18%	34%	46%



Impact Data from 2009 Spring Administration

# ACE U.S. History

## Cut Score Recommendations with Standard Errors

	Limited Knowledge		Proficient		Advanced	
	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct	Raw Score (Scale Score)	% Correct
<b>+2 SEM</b>	26 (615)	43%	36 (681)	60%	49 (763)	82%
<b>+1 SEM</b>	24 (598)	40%	35 (675)	58%	47 (748)	78%
<b>High</b>	27 (623)	45%	37 (687)	62%	52 (790)	87%
<b>Median</b>	22 (579)	37%	33 (663)	55%	43 (722)	72%
<b>Low</b>	18 (527)	30%	31 (650)	52%	41 (710)	68%
<b>-1 SEM</b>	19 (542)	32%	32 (657)	53%	42 (716)	70%
<b>-2 SEM</b>	18 (527)	30%	30 (644)	50%	41 (710)	68%



Total of 60 operational Multiple Choice items

# ACE U.S. History

## Recommended Cut Scores and Impact Data

Overall Median Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points	/	22	33	43
Percent of 1 <sup>st</sup> Time Test Takers	7%	23%	29%	41%



Impact Data from 2009 Spring Administration

# ACE U.S. History

## Recommended Cut Scores and Impact Data

+1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
Raw Score Cut Points		24	35	47
Percent of 1 <sup>st</sup> Time Test Takers	10%	25%	36%	29%



Impact Data from 2009 Spring Administration

# ACE U.S. History

## Recommended Cut Scores and Impact Data

- 1 SEM Cut Scores	Unsatisfactory	Limited Knowledge	Proficient	Advanced
<b>Raw Score Cut Points</b>	/	19	32	42
<b>Percent of 1<sup>st</sup> Time Test Takers</b>	3%	24%	28%	45%



Impact Data from 2009 Spring Administration

# Recommendation

- Accept the median recommended cut scores of the committees for the 2008-2009 school year and the following two years.
- Phase in the cut scores to increase in rigor at plus one standard error of measurement beginning in the school year 2011-2012.