

Maximize ACT
Assessments and Data
for Student Success:
*“Dan’s Wisconsin Data
Road Show”*

Spring 2024





Dean Simon
ACT Wisconsin State
Lead

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ACT Consultant

.....Around the Room

Housekeeping

- Interactive – Please!!!
- Last year/this year
- Power Point available
- Links (from email last week)
- Overall timing
- Time for exploration
- Facilities
- Breaks



ACT North Star - Learning Objectives

- *“We exist to fight for fairness in education and create a world where everyone can discover and fulfill their potential.”*
- Increase foundational knowledge of the WI ACT state testing tools
- Explore various ways in which ACT[®] PreACT[®], PreACT 8/9[®] and PreACT Secure[®] data can be utilized to directly benefit students***
- Discuss best practices to increase **readiness**, equity and access for all students – **Ongoing and please share!!!**
- Learn about various applications of ACT solutions to specifically support district goals
- Acquire knowledge on best practices for communicating data results to stakeholders



Agenda

- **Introductions, Housekeeping, Objectives**
- **ACT Foundation – Understanding Standards and Benchmarks**
- **Accessing ACT Online Reporting**
- **Macro to Micro (Live Demo)**
 - **Data Dig “A” – Select Subject/Reporting Categories of Need**
- **Group Sharing/Break**
- **Item Analysis (Significant Value)**
 - **Data Dig “B” Item Analysis to Drive Classroom Instruction**
- **Growth and Goal setting possibilities**
- **Next Steps: Staff Assessment Literacy and Professional Growth**
- **ACT Resources and Solutions (Embedded)**
- **AIM Reading Exercise (if time)**
- **Q and A**

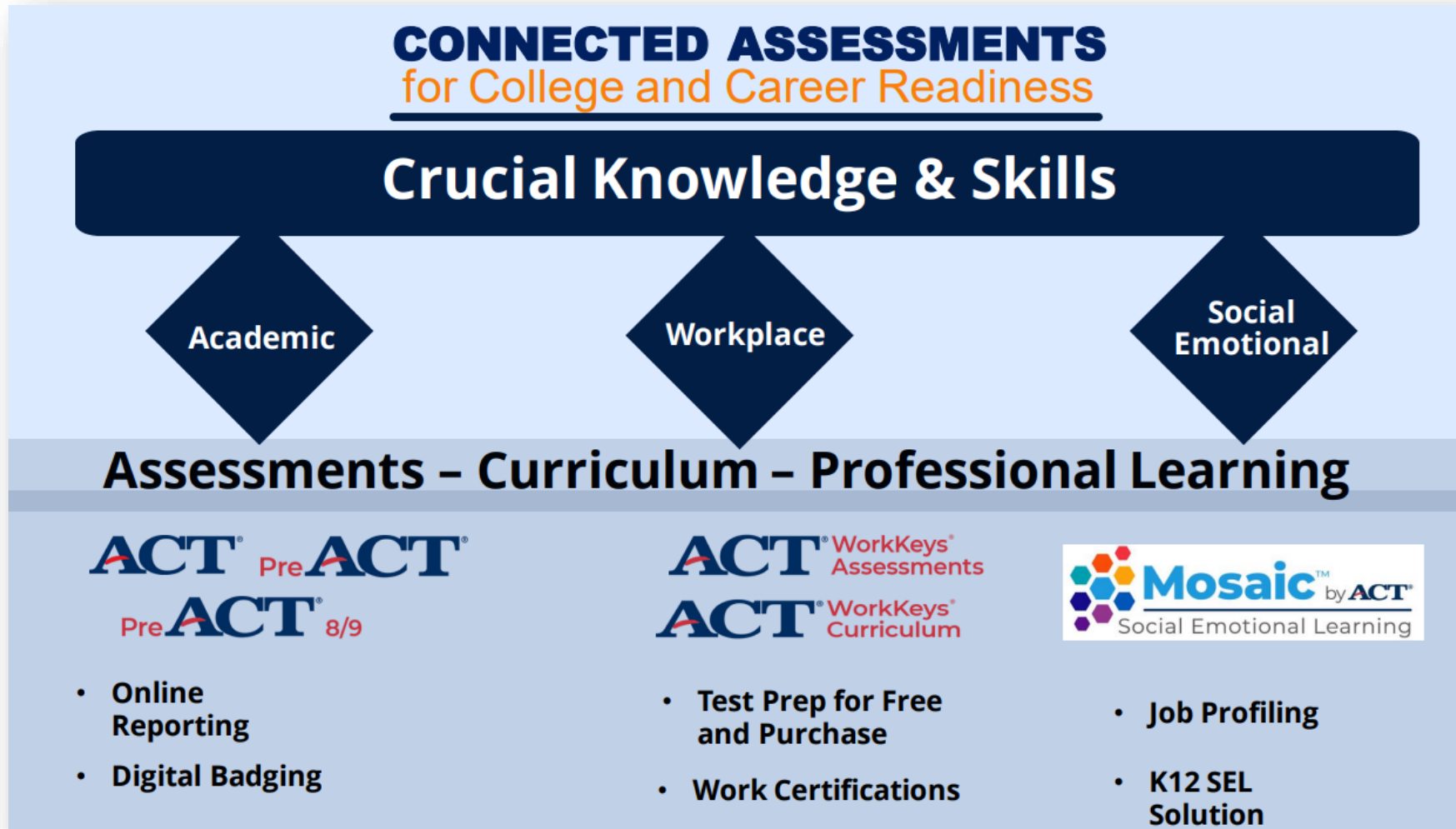


ACT Announces New Partnership With Nexus Capital Management LP (Big change/Small change)

ACT, the mission-driven provider of the assessments, research, and work-ready credentials designed to support education and workplace success, today announced a new partnership with Nexus Capital Management LP, a Los Angeles-based private equity firm.

Proceeds from the partnership will also fund the continuation of an Iowa nonprofit organization that will be headquartered in Iowa City. The nonprofit organization will conduct programs, services, and research focused on education and workplace success. The nonprofit will also retain an investment in the new public benefit corporation and have direct representation on ACT's board of directors.

ACT[®] Program and Services Overview



The Foundation

Readiness...

...for college means meeting benchmarks

- Success in credit-bearing, first-year courses
- Two- or four-year college, trade school, or technical school
- Without needing to take remedial courses

...for career requires knowledge and skills comparable to those expected of a first-year college student

Our readiness goal must be to educate all students according to a common academic expectation that prepares them for both postsecondary education and the workforce..... AND DAYS/EVENTS LIKE THIS ARE EVIDENCE!

TRUSTED POINTS OF REFERENCE

ACT National Curriculum Survey

ACT College and
Career Readiness
Standards

ACT College
Readiness
Benchmarks

ACT
Research

ACT Holistic Framework





ACT NATIONAL CURRICULUM SURVEY[®]

- Conducted every 3-5 years by ACT
- Includes sample survey of nearly 10,000 educators and industry leaders
- Shows skills and knowledge taught at each grade level
- Collects data about what high school grads should know and be able to do to be ready for college **AND/OR** career
- Consultation with content area experts

Area	Number of Respondents
Early elementary school	1,214
Upper elementary school	1,213
Middle school	1,623
High school	1,619
K–12 administrators	405
College instructors	2,883
Workforce supervisors	405
Workforce employees	406
TOTAL	9,768

ACT College and Career Readiness Standards and Benchmarks

“Understanding these tools and their relevance are the only way to truly gain value from your Wisconsin ACT data”



▶ ENGLISH

These Standards describe what students who score in specific score ranges on the English section of the ACT® college readiness assessment are likely to know and be able to do.

▶ MATHEMATICS

These Standards describe what students who score in specific score ranges on the mathematics section of the ACT® college readiness assessment are likely to know and be able to do.

For more information about the ACT College and Career Readiness Standards in Mathematics, go to www.act.org/standard/planact/math/mathnotes.html.

SCORE Topics in the flow to

▶ READING

These Standards describe what students who score in specific score ranges on the reading section of the ACT® college readiness assessment are likely to know and be able to do.

▶ SCIENCE

These Standards describe what students who score in specific score ranges on the science section of the ACT® college readiness assessment are likely to know and be able to do.

▶ WRITING

These Standards describe what students who score in specific score ranges on the writing section of the ACT® college readiness assessment are likely to know and be able to do.

SCORE RANGE Ideas and Analysis (I&A)

3-4
I&A 201. Understanding the task and writing with purpose
 A score in this range indicates that the writer is able to:
 – Generate a thesis that is unclear or not entirely related to the given issue
 – Respond weakly to other perspectives on the issue
I&A 202. Analyzing critical elements of an issue and differing perspectives on it
 A score in this range indicates that the writer is able to:
 – Provide analysis that is incomplete or largely irrelevant

Scores below 3 do not permit useful generalizations about students' writing abilities.

5-6
I&A 301. Understanding the task and writing with purpose
 A score in this range indicates that the writer is able to:

ACT[®] College and Career Readiness Standards[™]

	Beginner	Basic	Intermediate	Proficient	Advanced	Expert
Topics in the flow to...	Score Range 13–15	Score Range 16–19	Score Range 20–23	Score Range 24–27	Score Range 28–32	Score Range 33–36
Number and Quantity (N)	<p>N 201. Perform one-operation computation with whole numbers and decimals</p> <p>N 202. Recognize equivalent fractions and fractions in lowest terms</p> <p>N 203. Locate positive rational numbers</p>	<p>N 301. Recognize one-digit factors of a number</p> <p>N 302. Identify a digit's place value</p> <p>N 303. Locate rational numbers on the number line</p> <p><i>Note: A matrix as a representation of data is</i></p>	<p>N 401. Exhibit knowledge of elementary number concepts such as rounding, the ordering of decimals, pattern identification, primes, and greatest common factor</p> <p>N 402. Write positive powers of 10 by using</p>	<p>N 501. Order fractions</p> <p>N 502. Find and use the least common multiple</p> <p>N 503. Work with numerical factors</p> <p>N 504. Exhibit some knowledge of the complex numbers</p> <p>N 505. Add and subtract matrices that</p>	<p>N 601. Apply number properties involving prime factorization</p> <p>N 602. Apply number properties involving even/odd numbers and factors/multiples</p> <p>N 603. Apply number properties involving positive/negative numbers</p> <p>N 604. Apply the</p>	<p>N 701. Analyze and draw conclusions based on number concepts</p> <p>N 702. Apply properties of rational numbers and the rational number system</p> <p>N 703. Apply properties of real numbers and the real</p>

Descriptions of the essential skills and knowledge students need to be prepared for college and career

Scores = Knowledge and Skills Mastered

Readiness Benchmarks: More than a Score

ACT COLLEGE READINESS BENCHMARKS		
Subject	The ACT Test	First Year College Course
English	18	English Composition
Math	22	College Algebra
Reading	22	Social Sciences
Science	23	Biology
ELA	20	English Composition and Social Sciences
STEM	26	Calculus, Chemistry, Biology, Physics, and Engineering

Students who meet a benchmark on the ACT have approximately a **50% chance** of earning a **B or better** and approximately a **75% chance** of earning a **C or better** in the corresponding college course or courses.



IMPORTANCE OF UNDERSTANDING ASSESSMENTS FRAMEWORK

Generates Useful Data to...

- Provide timely interventions- **TODAY'S EVENT!**
- Inform instructional needs – **TODAY'S EVENT!**
- Monitor longitudinal growth - **TODAY'S EVENT!**
- Measure progress toward district goals - **TODAY'S EVENT!**
- Counsel students effectively (college and career)



Standards/Benchmarks Perception Reminder

The score range at the “Benchmark Level” generally reflect a level at which school leaders would suggest that **ALL their graduates** should master:

English = 18

Math = 22

Reading = 22

Science = 23

AF	Relate a graph to a situation described in terms of a starting value and an additional amount per unit (e.g., unit cost, weekly growth)
A	Evaluate algebraic expressions by substituting integers for unknown quantities
A	Add and subtract simple algebraic expressions
A	Solve routine first-degree equations
A	Multiply two binomials
A	Match simple inequalities with their graphs on the number line (e.g., $x \geq -\frac{3}{5}$)
A	Exhibit knowledge of slope
F	Evaluate linear and quadratic functions, expressed in function notation, at integer values

G	Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°)
G	Compute the area and perimeter of triangles and rectangles in simple problems
G	Find the length of the hypotenuse of a right triangle when only very simple computation is involved (e.g., 3-4-5 and 6-8-10 triangles)
G	Use geometric formulas when all necessary information is given
G	Locate points in the coordinate plane
G	Translate points up, down, left, and right in the coordinate plane
S	Calculate the missing data value given the average and all data values but one
S	Translate from one representation of data to another (e.g., a bar graph to a circle graph)

**What Score Range would you put these Math Standards in?
0-12, 13-15, 16-19, 20-23, 24-27, 28-32, 33-36**

Math 20-23 ACT Standards (22)

AF	403	Relate a graph to a situation described in terms of a starting value and an additional amount per unit (e.g., unit cost, weekly growth)
A	401	Evaluate algebraic expressions by substituting integers for unknown quantities
A	402	Add and subtract simple algebraic expressions
A	403	Solve routine first-degree equations
A	404	Multiply two binomials
A	405	Match simple inequalities with their graphs on the number line (e.g., $x \geq -\frac{3}{5}$)
A	406	Exhibit knowledge of slope
F	401	Evaluate linear and quadratic functions, expressed in function notation, at integer values

G	402	Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°)
G	403	Compute the area and perimeter of triangles and rectangles in simple problems
G	404	Find the length of the hypotenuse of a right triangle when only very simple computation is involved (e.g., 3-4-5 and 6-8-10 triangles)
G	405	Use geometric formulas when all necessary information is given
G	406	Locate points in the coordinate plane
G	407	Translate points up, down, left, and right in the coordinate plane
S	401	Calculate the missing data value given the average and all data values but one
S	402	Translate from one representation of data to another (e.g., a bar graph to a circle graph)

What skills in this range might be most difficult?

What is preventing students from mastering these skills?

Reference: PreACT “Cheat Sheet” with Item Numbers

SPECIFICATION RANGES BY REPORTING CATEGORY FOR ENGLISH

Reporting Category	Number of Items	Percentage of Test
Production of Writing	22–24	29–32%
Knowledge of Language	11–13	15–17%
Conventions of Standard English	39–41	52–55%
Total Number of Items	75	100%

SPECIFICATION RANGES BY REPORTING CATEGORY FOR READING

Reporting Category	Number of Items	Percentage of Test
Key Ideas & Details	21–24	53–60%
Craft & Structure	10–12	25–30%
Integration of Knowledge & Ideas	6–9	15–23%
Total Number of Items	40	100%

SPECIFICATION RANGES BY REPORTING CATEGORY FOR MATHEMATICS

Reporting Category	Number of Items	Percentage of Test
Preparing for Higher Mathematics	34–36	57–60%
Number & Quantity	5–7	8–12%
Algebra	7–9	12–15%
Functions	7–9	12–15%
Geometry	7–9	12–15%
Statistics & Probability	5–7	8–12%
Integrating Essential Skills	24–26	40–43%
Modeling	≥12	≥20%
Total Number of Items	60	100%

Notes: Each item reported in Modeling is also reported in either Preparing for Higher Mathematics (and the appropriate subcategory) or in Integrating Essential Skills.

SPECIFICATION RANGES BY REPORTING CATEGORY FOR SCIENCE

Reporting Category	Number of Items	Percentage of Test
Interpretation of Data	16–20	40–50%
Scientific Investigation	8–12	20–30%
Evaluation of Models, Inferences & Experimental Results	10–14	25–35%
Total Number of Items	40	100%

All subjects test DOK Levels 1, 2, and 3
For Science: Almost all items are DOK Levels 2 and 3

DO: Review the ACT Reporting Categories

- Review the Reporting Category Interpretive Guide

ACT WORKING PAPER 2016 (05)

ACT Reporting Category Interpretation Guide Version 1.0

Sonya Powers, PhD
Dongmei Li, PhD
Hongwook Suh, PhD
Deborah J. Harris, PhD

October, 2016

What are the ACT reporting categories?

The ACT reporting categories are new scores... There are three reporting categories each for 1 categories for mathematics. These scores can be used to identify components of the sub each test taker.

Tables 1 through 4 provide a description of the target range of items within each reporting category may fluctuate slightly across forms though the forms. Older ACT test forms may deviate slightly match the target ranges as closely as possible.

Table 1. ACT English Reporting Categories

Reporting Category Labels and Descriptions	Number of Items	Target Range
Production of Writing	4-6	4-6
Knowledge of Language	7-9	7-9
Conventions of Standard English	7-9	7-9
Modeling*	≥ 16	≥ 16
TOTAL	60	60

Table 2. ACT Mathematics Reporting Categories

Reporting Category Labels and Descriptions	Number of Items	Target Range
Preparing for Higher Math	34-36	34-36
Number & Quantity	4-6	4-6
Algebra	7-9	7-9
Functions	7-9	7-9
Geometry	7-9	7-9
Statistics & Probability	5-7	5-7
Integrating Essential Skills	24-26	24-26
Modeling*	≥ 16	≥ 16
TOTAL	60	60

Table 3. ACT Reading Reporting Categories

Reporting Category Labels and Descriptions	Target Ranges	
	Number of Items	Percentage of Test
Key Ideas and Details	22-24	55-60%
Craft and Structure	10-12	25-30%
Integration of Knowledge and Ideas	6-7	15-18%
TOTAL	40	100%

Table 4. ACT Science Reporting Categories

Reporting Category Labels and Descriptions	Target Ranges	
	Number of Items	Percentage of Test
Interpretation of Data	18-22	45-55%
Scientific Investigation	8-12	20-30%
Evaluation of Models, Inferences, and Experimental Results	10-14	25-35%
TOTAL	40	100%



ACT Working Paper Series

ACT working papers document preliminary... The papers are intended to promote discussion... feedback before formal publication. The... not necessarily reflect the views of ACT.

Helping people achieve education and workplace success.



Anatomy of the ACT

ACT[®]

Table 3.1 Level Descriptions for English

Depth of Knowledge Level	Description
DOK1	Requires the recall of information, such as a fact, term, definition, or simple procedure. Requires students to demonstrate a rote response or perform a simple procedure.
DOK2	Requires mental processing that goes beyond recalling or reproducing an answer. Students must make some decisions about how to approach a problem.
DOK3	Requires planning, thinking, explaining, justifying, using evidence, conjecturing, and postulating.

3.2.2 English Scores and Reporting Categories

Four scores are reported for the ACT English test: a total test score based on all 75 items and three reporting category scores. The three reporting categories associated with the English test are Production of Writing; Knowledge of Language; and Conventions of Standard English. These reporting categories are subdivided into six elements, each of which targets an aspect of effective writing. A brief description of the reporting categories and the approximate percentage of the test items in each reporting category are given below. In addition, the overall English test score, along with the reading test score and the writing scale score, is used to determine the ELA score (see Chapter 7 for more description in forming the ELA score).

Production of Writing

Students apply their understanding of the rhetorical purpose and focus of a piece of writing to develop a topic effectively and use various strategies to achieve logical organization, topical unity, and general cohesion.

ACT Test Descriptions

The full ACT consists of four multiple-choice sections—in English, mathematics, reading, and science—with an optional writing section.

Test	Number of Questions	Minutes Per Test
English	75	45
Mathematics	60	60
Reading	40	35
Science	40	35
Writing (optional)	1 essay	40

ACT Scale	English	Math	Reading	Science	ACT Scale
36	72-75		39-40	39-40	36
35	68-71	58	37-38	38	35
34	66-67	56	36		34
33	65	55	35	36	33
32	64		34	35	32
31	63	53	33	34	31
30	62	51-52	32	33	30
29	61	49-50	31	32	29
28	59-60	48	30		28
27	58	44-47	29	31	27
26	56-57	41-43		30	26
25	54-55	39-40	28	28-29	25
24	51-53	37-38	26-27	26-27	24
23	49-50	35-36	25	24-25	23
22	47-48	34	23-24	22-23	22
21	44-46	32-33	22	21	21
20	41-43	31	21	19-20	20
19	39-40	29-30	19-20	17-18	19
18	37-38	27-28	18	16	18
17	35-36	24-26	17	14-15	17
16	33-34	20-23	16	13	16

How hard is it to increase a score?

The number of questions to answer correctly to meet the subject-area benchmarks is highlighted in green.

This scale can vary slightly from test to test, but notice that, in most cases, students only need to get 2-3 more questions correct in order to hit the next score level for each subject.

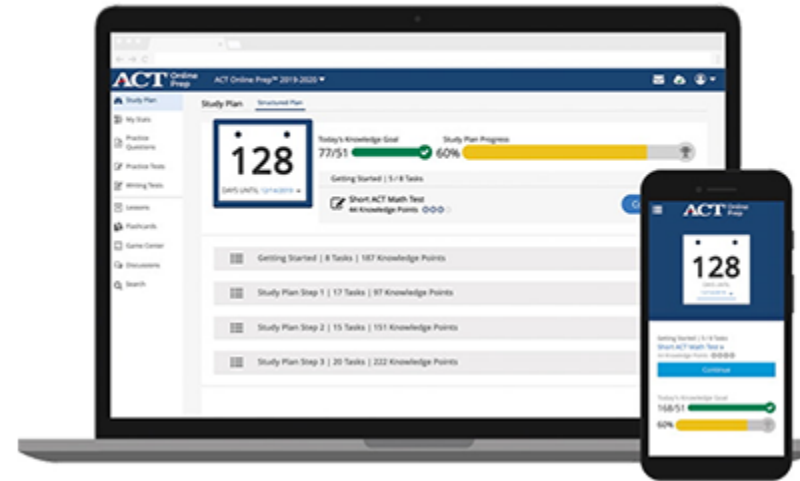


ACT Scale	English	Math	Reading	Science	ACT Scale
26	56-57	41-43		30	26
25	54-55	39-40	28	28-29	25
24	51-53	37-38	26-27	26-27	24
23	49-50	35-36	25	24-25	23
22	47-48	34	23-24	22-23	22
21	44-46	32-33	22	21	21
20	41-43	31	21	19-20	20
19	39-40	29-30	19-20	17-18	19
18	37-38	27-28	18	16	18
17	35-36	24-26	17	14-15	17
16	33-34	20-23	16	13	16

Benefits of ACT Online Prep

ACT Online Prep

- **Target Grade:** 10th-11th grades
- **Purpose (Students):** Assist students with increasing their academic knowledge in the ACT subject areas
- **Alternative Purpose (Teachers):** Purchase licenses for teachers to use the curriculum to teach whole group lessons in the classroom with students or in intervention groups
- **Follow-Up Activities:** Discuss areas of difficulty with the student and create a study plan



ACT Online Prep provides you:

- A short-form ACT test to get started
- A personalized learning path
- Tools to track your progress
- Daily goals to help you stay on target
- Flashcards customized for your review needs
- A game center to further test your knowledge
- Full-length practice tests to simulate the actual exam
- A free mobile app

AOP implementation is highly effective when used this way as part of a classroom curriculum!

ACT® **Online Prep**™

Helping people achieve education and workplace success.

ACT®

Accessing ACT Online Reporting



Experience Level in OLR?

- A. Minimal to no experience in ACT Online Reporting (success.act.org)
- B. Moderate experience in OLR (accessed it multiple times and have shared data reports with others, etc.)
- C. Significant experience in OLR (access site often, use reports, download data, etc.)



Sign In

Sign In or [Create Account](#)

Email

Password

[Forgot password?](#)

Sign In

Welcome to Success!

The Success community provides ACT customers access to the tools and resources needed to be successful. To view your organization's information, create an account. Accounts will have access to:

Online Reporting: Looking for your school's data, trends, and scores? Sign in here to access your personalized data.

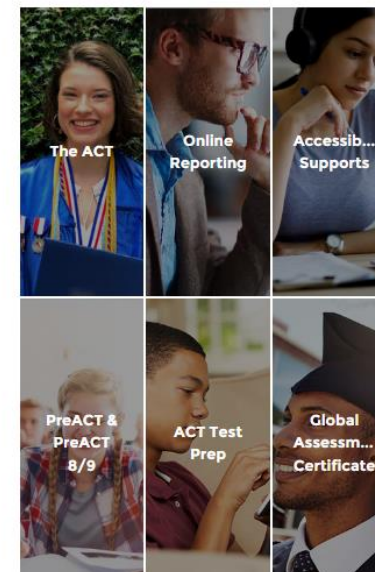
Test Accessibility and Accommodations: Test Accommodation Coordinators will use this system to request student's accommodations or English Learner supports, receive decision notifications, and agree to test previously approved students through Special Testing. **Note- if you are new to Success and have a previous TAA account, please use your TAA email when creating an account.*

PearsonAccess^{next}: Sign in and access the administration system for the ACT.

Resources

Unsure where to begin? Start by exploring the **Knowledge Hub**, our one-stop resource area for all products and services offered by ACT. Simply select a product on the right or through the dropdown menu on the top (no login needed).

Resources



ACT Online Reporting Access Levels and User Roles

• Data Access

- **State Users** – visibility of state, districts, and schools in jurisdiction
- **District Users** – visibility of district and schools in jurisdiction
- **School Users** – visibility of school

• User Roles

- **Detailed Viewer** – view and export summary and detailed individual student data
- **Summary Viewer** – view and export summary data and reports
- **Trusted Agent**
 - View, add and remove users at district and school level
 - View and export summary and detailed individual data and reports

ACT Online Reporting – Knowledge Hub

← → ↻ <https://success.act.org/s/>

Login | Salesforce Athena Health Login

ACT Knowledge Hub Search...

- The ACT
- Accessibility Supports
- PreACT & PreACT 8/9
- Online Reporting
- ACT Aspire
- Mosaic By ACT Social Emotional Learning Solution
- ACT Professional Services
- ACT Test Prep
- Global Assessment Certificate
- Workforce US
- More Topics...

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Success!

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Resources

- The ACT
- Online Reporting
- Accessibility Supports
- PreACT & PreACT 8/9
- ACT Test Prep
- Global Assessment Certificate



ACT Knowledge Hub

ACT Knowledge Hub

- > The ACT
- > Accessibility Supports
- > PreACT & PreACT 8/9
- ▼ Online Reporting
 - > Online Reporting Getting Started
 - Online Reporting Accessibility & Accommoda...
 - Online Reporting Data & Reports
 - Online Reporting FAQ
 - > Online Reporting Product Support
- > ACT Aspire
- > Mosaic By ACT Social Emotional Learning Soluti...
 - ACT Professional Services
- > ACT Test Prep
 - Global Assessment Certificate
- > Workforce US

Online Reporting Training Resources

Comprehensive list of training resources that are available in the Knowledge Hub to support all users in Online Reporting. Note: Some resources are accessed after user login.

🕒 Feb 2, 2023 · Knowledge Base

Description

Online Reporting Training Resources

Looking for a specific support for Online Reporting? The links below provide a comprehensive listing of support articles in the Knowledge Hub to support all Online Reporting users.

Getting Started with Online Reporting (No login required)

- [Getting Started](#)
- [Requesting Access](#)
- [Online Reporting User Access Levels and User Roles](#)
- [Online Reporting User Guide](#)

Getting Started Videos (No login required)

- [Online Reporting Access](#)
- [Online Reporting Reports](#)
- [Online Reporting Options](#)
- [Are You Ready for Online Reporting?](#)
- [5 Steps to Accessing Student Data](#)

Training Resources (Login required)

- [Approving Hierarchy in Online Reporting \(Trusted Agent\)](#)
- [Hierarchy Change Request \(Non-Trusted Agents\)](#)
- [Inviting Users to Online Reporting](#)

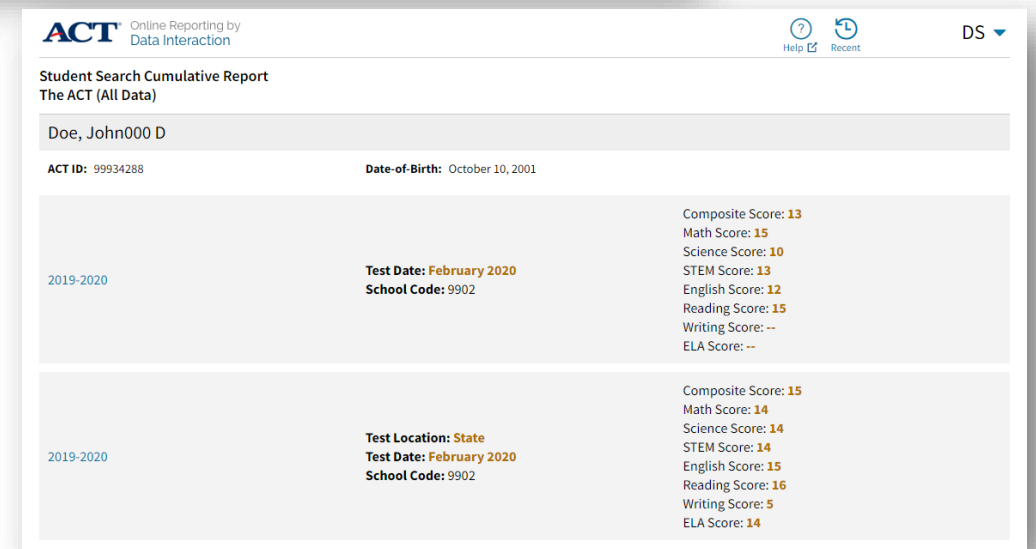
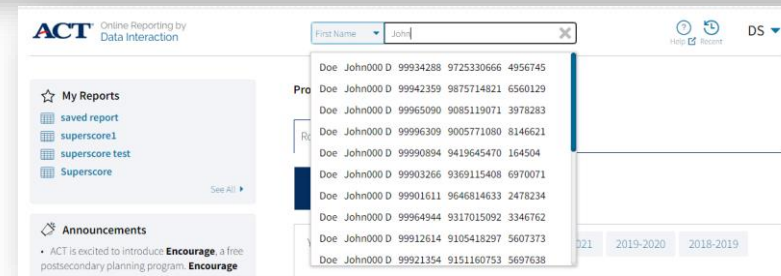
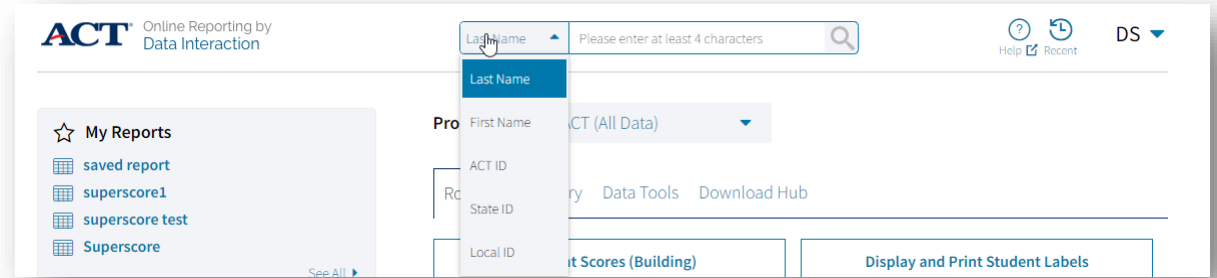
<https://success.act.org/s/article/Online-Reporting-Training-Resources>



Live Demo – **Workshop Options

“Student Search” “Profile Report”

- Purpose: The student search feature provides access to individual ACT results for all organizations that a user has access to. A student can be searched for using one of the following options: Last Name, First Name, ACT ID, State ID, and Local ID.



Macro to Micro Data

Part 1



Terminology

Pre **ACT**[®] 8/9

Pre **ACT**[®]

Pre **ACT**[®] **Secure**[™]



ACT[®]
COLLEGE
AND CAREER
READINESS
WORKSHOP
2022



PreACT and PreACT 8/9 – “Brothers” (NOTE: *ACT Now* ordering)

Feature	PreACT and PreACT 8/9
Test Window	Flexible Dates – Most Wisconsin schools assess early in school year through February – Some PreACT 8/9 in Spring
Timing	2 hours 10 minutes
Assessment Mode	Paper and Pencil or Online!! – Flexible administration
Non-Cognitive Portion	Interest Inventory and Planned High School Course Work
Reporting	5-10 days after receipt of answer documents
Features	Item Analysis, keep test booklets (or online pdf), predicted ACT score, 2 hard copies of student report

PreACT Secure (State Test for 9th-10th) – “Cousin” (ACT Now)

Feature	PreACT and PreACT 8/9
Test Window	March 20 to April 28 (2023)
Timing	2 hours 35 minutes
Assessment Mode	Online Only – one sitting
Non-Cognitive Portion	Not available
Reporting	3 to 8 weeks after testing
Features	Predicted ACT score, mirrors ACT experience

Data Dig A: **Goal-** Identify Subject Area and Reporting Category of Need

**ACT, PreACT Secure, PreACT*,
PreACT 8/9*: Longitudinal**



All Schools – ACT Online Reporting

“Summary Tab”

- 5-Year **ACT**, trends -Pick a **subject** of need (Summary Tab)

Group	Year	Composite		Math	Science	STEM	English
		Valid Number	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score
GH SCHOOL	2023-2024	52	22.8	22.7	22.9	23.0	22.1
GH SCHOOL	2022-2023	44	22.7	22.8	22.2	22.8	22.2
GH SCHOOL	2021-2022	46	21.8	22.4	22.1	22.5	20.3
GH SCHOOL	2020-2021	57	22.8	22.8	22.7	23.0	21.9
GH SCHOOL	2019-2020	49	22.7	22.3	22.7	22.7	22.3

All Schools – ACT Online Reporting

“Summary Tab”

Use ACT data to dig for a **Reporting Category** of concern –(Summary Tab) and % below benchmark

		Math																
		Mean Score	Preparing for Higher Math-Readiness		Number and Quantity-Readiness		Algebra-Readiness		Functions-Readiness		Geometry-Readiness		Statistics and Probability-Readiness		Integrating Essential Skills-Readiness		Modeling-Readiness	
Year			% Met	% Not Met	% Met	% Not Met	% Met	% Not Met	% Met	% Not Met	% Met	% Not Met	% Met	% Not Met	% Met	% Not Met	% Met	% Not Met
100L	2023-2024	22.7	56	44	63	37	71	29	54	46	54	46	38	62	58	42	58	42
100L	2022-2023	22.8	57	43	64	36	55	45	41	59	48	52	50	50	61	39	57	43
100L	2021-2022	22.4	52	48	54	46	57	43	54	46	61	39	43	57	52	48	46	54
100L	2020-2021	22.8	51	49	53	47	58	42	39	61	60	40	56	44	58	42	56	44
100L	2019-2020	22.3	47	53	51	49	47	53	41	59	55	45	41	59	57	43	59	41



All Schools – ACT Online Reporting

“Roster Tab”

Optional: Use **PreACT Secure** or **PreACT** to confirm or revise – (Roster Tab) total % Correct via download

Class of 26 (Sophs)		Year	Num	Math	Math Met	Math OC	Tot				
Group											
Fall PreACT 8/9	22-23	66	16 (17)	24	52	76					
Spring PreACT Secure	22-23	66	15.9 (18)	17	24	41					
Fall PreACT	23-24	66	15.8 (19)	15	14	29					
	Fall 2023 PreACT RC's	Math Score	15.8	30.3	22.1	31.2	31.8	29.4	35.2	40.3	35.3
				Preparing for Higher Math	Number & Quantity	Algebra	Functions	Geometry	Statistics & Probability	Integrating Essential Skills	Modeling
	Combined Fall 23 RC's	16.5	33.6	24.3	31.3	34.8	38.0	36.9	44.0	39.5	



Content Standards and Ideas for Progress Tool

“Tableau Site”

(Includes Curriculum Review Worksheets)

tableau public Create Learn Sign In

Who are the DataFam and what do they do on Tableau Public? Watch a 2-minute overview →

Content Standards and Ideas for Progress by ACT, inc.

Content Standards Dashboard Ideas for Progress Dashboard Downloadable Curriculum Wor...

ACT ACT Content Standards for Mathematics (Benchmark = 22)

Skills Demonstrated within Select ACT College and Career Readiness Standards (CCRS) Score Range(s)

Reporting Category	Content Substrand	Score Range	Standard Description
Geometry (G)	N/A		G 401. Use properties of parallel lines to find the measure of an angle.
			G 402. Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°).
			G 403. Compute the area and perimeter of triangles and rectangles in simple problems.

Select Content Area
Mathematics (Benchmark = ...)

Select ACT Score Range(s)

- 13-15
- 16-19
- 20-23
- 24-27
- 28-32
- 33-36

Select Reporting Category/Ca...

- (All)
- Number and Quantity ...
- Algebra (A)
- Functions (F)
- Geometry (G)

Select Content Sub-Strand(s)
(English and Reading Only)

Standards and Ideas for Progress

- Filter by Standard Score Range (Math 20-23)
- Filter by Reporting Category (Geometry)

20-23	G 404. Find the length of the hypotenuse of a right triangle when only very simple computation is involved.	Standard Score Range(s)
G	G 405. Use geometric formulas when all necessary information is given.	Category/Category
	G 406. Locate points in the coordinate plane.	Quantity
		Strand(s) Reporting Only

Standards and Ideas for Progress

“Tableau Site”

- Filter by Score Range and Reporting Category (20-23, Geometry)

Examining “Ideas for Progress”

Describe the relative locations of two points in the coordinate plane in terms of horizontal (e.g., run) and vertical (e.g., rise) distances.

Describe the relative locations of two points in the coordinate plane in terms of horizontal (e.g., run) and vertical (e.g., rise) distances.

Identify and describe midpoints and bisectors.

Identify the basic trigonometric ratios.

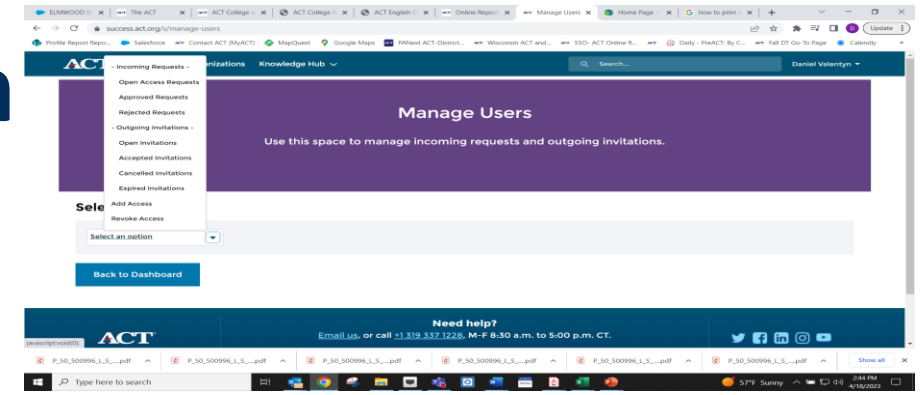
nt Strand(s)
and Quantity
s
y
nt Sub-Strand(s)
Reading Only)

20-23

Live Demo – Data Consolidation

Choose a Subject and Reporting Category
Area of Need

- **Worksheet 1** (Charts 1-4)
 - ACT and PreACT Secure
 - Subject Scores vs State
 - Optional PreACT Charts
- **Worksheet 2** (Charts 5-8)
 - ACT Reporting Categories
- **Worksheet 3** (Charts 9-12)
 - PreACT Secure Reporting Categories



Executive Summary

- [Average Composite Scores](#)
- [Percent Meeting All 4 Benchmarks](#)
- [Percent Meeting STEM Benchmark](#)
- [Percent Taking A Core Curriculum](#)
- [Percent of Students Who Met College Readiness Benchmarks](#)
- [Average ACT Scores](#)
- [Average ACT Scores Statewide](#)
- [Average ACT Scores by Level of Preparation](#)
- [Average Composite Score by Race/Ethnicity](#)
- [Achievement in STEM](#)
- [Proficiency in Understanding Complex Text](#)

Aggregate View: The ACT State Contract, BELMONT COMMUNITY SCHOOL DISTRICT, 2021-2022, Spring



Tables Based on Contract Testing Profile Reports

Academic Achievement

- [Average ACT Composite Score by Race and Core Curriculum Status](#)
- [ACT Score Distributions, Cumulative Percents, and Score Averages](#)
- [English Reporting Categories](#)
- [Mathematics Reporting Categories](#)
- [Reading Reporting Categories](#)
- [Science Reporting Categories](#)
- [Average ACT Composite Scores for Race/Ethnicity by Level of Preparation](#)
- [Average ACT Scores by Race/Ethnicity](#)

College and Career Readiness and the Impact of Course Rigor

- [Percent of Students Meeting All 4 College Readiness Benchmarks by Core College Curriculum Status](#)
- [Percent of Students in College and Career Readiness \(CCRS\) Score Ranges](#)
- [Percent of Students Who Met College Readiness Benchmark Scores by Gender](#)
- [Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity](#)
- [Likely ACT National Career Readiness Certificate \(NCR\) Level Based Upon ACT Composite Score](#)
- [College Readiness Benchmark Percent and Average ACT Scores by Overall High School Curriculum](#)
- [College Readiness Benchmark Percent and Average ACT Scores by Content-Specific Curriculum \(English\)](#)

Worksheet #1 – All Subject Scores – All Tools

Worksheet # 1

“Average ACT Composite Scores” Chart 1

Year	Composite School	Composite State	Met all 4 School	Met All 4 State
2019-20		19.8		23%
2020-21		19.1		18%
2021-22		19.2		19%
2022-23		19.3		19%
2023-24				

“Average ACT Scores” Chart 2

Year	Comp School	Comp State	Math School	Math State	Science School	Science State	English School	English State	Reading School	Reading State
2019-20		19.8		19.8		20.3		18.6		20.0
2020-21		19.1		19.1		19.6		17.8		19.3
2021-22		19.2		19.0		19.7		18.0		19.6
2022-23		19.3		19.0		19.8		18.3		19.5
2023-24										

“ACT Percentage of Students Meeting Benchmark” Chart 2.5

Year	Math School	Math State	Science School	Science State	English School	English State	Reading School	Reading State
2019-20		36%		35%		53%		38%
2020-21		29%		30%		48%		36%
2021-22		30%		31%		49%		37%
2022-23		30%		32%		52%		37%
2023-24								

“Average Spring PreACT Secure Scores” 9th Chart 3

Year	Comp School	Comp State	Math School	Math State	Science School	Science State	English School	English State	Reading School	Reading State
2022-23		16.5		17.1		16.4		16.2		17.2
2023-24										

“Average Spring PreACT Secure Scores” 10th Chart 4

Year	Comp School	Comp State	Math School	Math State	Science School	Science State	English School	English State	Reading School	Reading State
2022-23		17.7		18.3		17.6		17.4		18.3
2023-24										

(Over)

place success.



ACT State Contract Data - Summary Tab - Worksheet 2

"My Summary Results" ACT Reporting Categories, 5-Year Trend

Worksheet # 2

Instructions: Enter the data for each academic year.



Math (Chart 5)

Admin	Math Score	Prep HM % Met	Prep HM % Not Met	Num & Quan % Met	Num & Quan % Not Met	Algebra % Met	Algebra % Not Met	ExpC % Met	ExpC % Not Met	Geom % Met	Geom % Not Met	Stats & Prob % Met	Stats and Prob % Not Met	IES % Met	IES % Not Met	Mod % Met	Mod % Not Met
19-20																	
20-21																	
21-22																	
22-23																	
23-24																	

English (Chart 6)

Admin	English Score	Production of Writing % Met	Production of Writing % Not Met	Knowledge of Language % Met	Knowledge of Language % Not Met	Conventions of Standard English % Met	Conventions of Standard English % Not Met
19-20							
20-21							
21-22							
22-23							
23-24							

Reading (Chart 7)

Admin	Reading Score	Key Ideas and Details % Met	Key Ideas and Details % Not Met	Craft and Structure % Met	Craft and Structure % Not Met	Integration of Knowledge and Ideas % Met	Integration of Knowledge and Ideas % Not Met
19-20							
20-21							
21-22							
22-23							
23-24							

(Over)

**PreACT Secure State Contract Data
Summary Tab - Worksheet 3
“My Summary Results” PreACT Secure Reporting
Categories, 5-Year Trend**

Instructions: Enter the data for each academic year.

Math (Chart 9)

Admin	Math Score	Preparing for Higher Math % Correct	Number & Quantity % Correct	Algebra % Correct	Functions % Correct	Geometry % Correct	Statistics & Probability % Correct	Integrating Essential Skills % Correct	Modeling % Correct
22-23									
23-24									

English (Chart 10)

Admin	English Score	Production of Writing % Correct	Knowledge of Language % Correct	Conventions of Standard English % Correct
22-23				
23-24				

Reading (Chart 11)

Admin	Reading Score	Key Ideas and Details % Correct	Craft and Structure % Correct	Integration of Knowledge and Ideas % Correct
22-23				
23-24				

Science (Chart 12)

Admin	Science Score	Interpretation of Data % Correct	Scientific Investigation % Correct	Evaluation of Models and Inferences % Correct
22-23				
23-24				

Break Time



ACT[®]

Macro to Micro Data

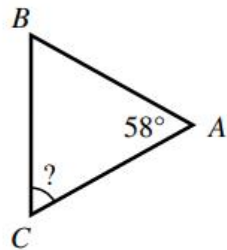
Part 2



Macro to Micro Part 2: The Value of Item Analysis

Goal: To be able to (from your actual items-data and/or sample items-data) to nail down skills and performances that your teaching staff can prioritize and attack instructionally.

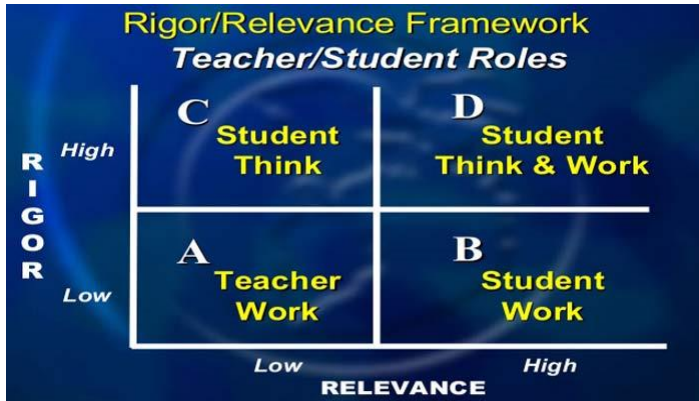
25. In $\triangle ABC$ shown below, the measure of $\angle A$ is 58° , and $\overline{AB} \cong \overline{AC}$. What is the measure of $\angle C$?



- A. 32°
- B. 42°
- C. 58°
- D. 61°
- E. 62°

Reporting Category	Item Information		Response Analysis			
	Item	Key	A / F	B / G	C / H	D / J
Geometry	6	A/F	*65	18	12	4
Geometry	16	C/H	6	8	*35	27
Geometry	23	C/H	8	8	*41	14
Geometry	26	D/J	33	10	8	*20
Geometry	30	D/J	39	20	27	*6
Geometry	6	A/F	*72	6	14	8
Geometry	16	C/H	14	14	*56	8
Geometry	23	C/H	11	11	*36	28
Geometry	26	D/J	14	8	22	*44
Geometry	30	D/J	22	22	33	*19
Geometry	6	A/F	*50	0	0	0

Brief Primer on Cognitive Rigor, Item Analysis, and Item Quality Analysis



45. For all $x \neq \pm y$, $\frac{x}{x+y} + \frac{y}{x-y} = ?$

- A. $\frac{1}{x-y}$
- B. $\frac{x+y}{x-y}$
- C. $\frac{x+y}{2x}$
- D. $x^2 + y^2$
- E. $\frac{x^2 + y^2}{x^2 - y^2}$

Passage III

Scientists studied the effects of pH and of nickel concentration on plant growth and on the uptake of iron and zinc by plants. Recently germinated seedlings of Species M and Species U were fed 1 of 12 nutrient solutions (Solutions 1–12) for 8 days and then were harvested. Solutions 1–12 differed only in pH and/or nickel concentration. Table 1 shows, for each species, the average dry mass of the plants that were fed each nutrient solution. Figure 1 shows, for each species, the average iron content and the average zinc content of the plants that were fed Solutions 1–4.

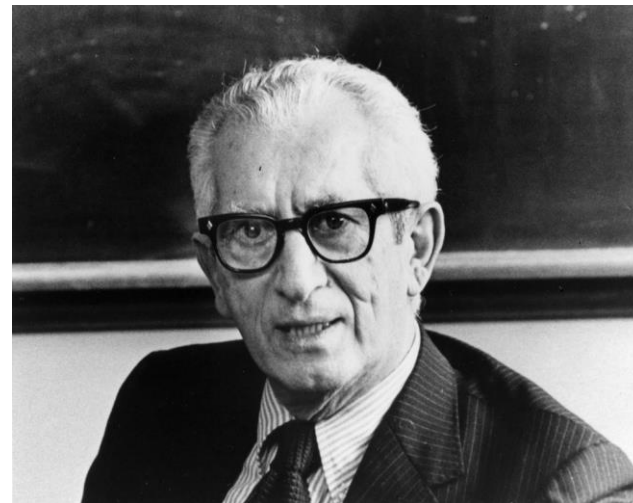
Solution	pH	Nickel concentration (μM^*)	Average dry mass (g) of plants of Species:	
			M	U
1	7	0	33.9	10.7
2	7	5	28.8	10.7
3	7	10	23.8	9.6
4	7	15	18.7	8.5
5	6	0	33.9	9.2
6	6	5	28.8	9.2
7	6	10	23.8	8.1
8	6	15	18.7	7.0
9	5	0	27.8	7.7
10	5	5	22.7	7.7
11	5	10	17.6	6.6
12	5	15	12.4	5.4

* μM = micromoles per liter

Complexity of Skills and Knowledge – Generally Accepted Matrices

Bloom's Taxonomy - **A hierarchical ordering of cognitive skills**

that can, among countless other uses, help teachers teach, and students learn. Benjamin Bloom in 1956, published as a kind of classification of learning outcomes and objectives that have, in the more than half-century since, been used for everything from framing digital tasks and evaluating apps to writing questions and assessments.



Complexity of Skills and Knowledge – Generally Accepted Matrices

Webb's Depth of Knowledge- A system designed to categorize activities based on the **complexity of thinking** required to complete them. It serves as a framework for educators to create more cognitively engaging and challenging tasks. DOK is essential for educators since it helps them to identify the cognitive demand of activities and **make informed decisions on how to design effective learning experiences** for their students.



Depth of Knowledge: Four Levels

- **Depth of Knowledge Level One:**
 - *What is the knowledge?*
- **Depth of Knowledge Level Two:**
 - *How can the knowledge be used?*
- **Depth of Knowledge Level Three:**
 - *Why can the knowledge be used?*
- **Depth of Knowledge Level Four:**
 - *How else can the knowledge be used?*



Depth of Knowledge: DOK Model

- Developed by Norman Webb at the University of Wisconsin to align standards and assessments
- Depth of Knowledge is the complexity of reasoning that we expect from our students based on the questions we ask in instruction and on assessments
- Depth of Knowledge parallels the **level of desired outcomes** (student performance/assessment)
- **Depth of Knowledge purpose is to respectfully challenge all students; it is not developmental in nature**
- **It differs from Bloom's Taxonomy in that Bloom's relates to the type of instruction and strategies you are using as you teach**

ACT Technical Manual

Table 3.3. DOK Level Descriptions for Mathematics

Depth of knowledge level	Description
DOK1	Requires the recall of information, such as a fact, term, definition, or simple procedure. Requires students to demonstrate a rote response or perform a simple procedure.
DOK2	Requires mental processing that goes beyond recalling or reproducing an answer. Students must make some decisions about how to approach a problem.
DOK3	Requires planning, thinking, explaining, justifying, using evidence, conjecturing, and postulating. <u>The cognitive demands are complex and abstract.</u>

Complexity of Skills and Knowledge – Generally Accepted Matrices

The Hess Cognitive Rigor Matrix—Assists teachers in applying what cognitive demand might look like in the classroom and guides test developers in designing and aligning test items and performance tasks. Content-specific descriptors in each of the CRMs are used to categorize and plan for various levels of abstraction – meaning **an analysis of the mental processing required of assessment questions and learning tasks.**



Hess Cognitive Rigor Matrices



TOOL 2

HESS COGNITIVE RIGOR MATRIX | A

Integrating Depth-of-Knowledge Levels with Bloom

Revised Bloom's Taxonomy	DOK Level 1 Recall and Reproduction	DOK Level 2 Skills and Concepts
<p>Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify</p>	<ul style="list-style-type: none"> o Recall, observe, and recognize facts, principles, properties o Recall/ identify conversions among representations or numbers (e.g., customary and metric measures) 	<p style="text-align: center;">Use these Hess C or so</p>
<p>Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare-contrast, match like ideas, explain, construct models</p>	<ul style="list-style-type: none"> o Evaluate an expression o Locate points on a grid or number on number line o Solve a one-step problem o Represent math relationships in words, pictures, or symbols o Read, write, compare decimals in scientific notation 	<ul style="list-style-type: none"> o Specify and explain relationships (e.g., non examples or examples; cause-effect) o Make and record observations o Explain steps followed o Summarize results or concepts o Make basic inferences or logical predictions from data or observations o Use models or diagrams to represent or explain mathematical concepts o Make and explain estimates
<p>Apply Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task</p>	<ul style="list-style-type: none"> o Follow simple procedures (recipe-type directions) o Calculate, measure, apply a rule (e.g., rounding) o Apply algorithm or formula (e.g., area, perimeter) o Solve linear equations o Make conversions among representations or numbers, or within and between customary and metric measures 	<ul style="list-style-type: none"> o Select a procedure according to criteria and perform it o Solve routine problem applying multiple concepts or decision points o Retrieve information from a table, graph, or figure and use it solve a problem requiring multiple steps o Translate between tables, graphs, words, and symbolic notations (e.g., graph data from a table) o Construct models given criteria

Hess Cognitive Rigor Matrices



TOOL 2

HESS COGNITIVE RIGOR MATRIX | A

Integrating Depth-of-Knowledge Levels with Bloom

Revised Bloom's Taxonomy

Remember

Retrieve knowledge from long-term memory, recognize, recall, locate, identify

Understand

Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare-contrast, match like ideas, explain, construct models

Apply

Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task

- o Evaluate an expression
- o Locate points on a grid or number on number line
- o Solve a one-step problem
- o Represent math relationships in words, pictures, or symbols
- o Read, write, compare decimals in scientific notation

DOK Level 2 Is and Concepts

Use these Hess C...
or so

explain relationships (e.g., es or examples; cause-effect)
record observations
s followed
results or concepts
inferences or logical
from data or observations
or diagrams to represent or
mathematical concepts
explain estimates

cedure according to criteria
it
e problem applying multiple
decision points
ormation from a table, graph,
d use it solve a problem
ultiple steps
etween tables, graphs, words,
and symbolic notations (e.g., graph data
from a table)
o Construct models given criteria

sentations of numbers, or within
and between customary and metric
measures

Item Quality Reminders – The purpose of “Distractors” or “Common Mistakes” DV

(ACT Professional Learning Workshop Materials)

Multiple-choice item stems should be carefully crafted to focus on the central knowledge or skill to be measured, but equal consideration should be given to the possible answer options for the test results to be instructionally meaningful for students and educators.

*Distractors should be strategically designed to attract students who have **not completely mastered the content.***

*Well-designed **distractors can identify interventions** needed to correct misconceptions that need to be corrected for students.*

Evaluating Test Item Options

What content knowledge must students demonstrate to arrive at the correct answer?

What strategies might students employ as they work through the question?

What flawed strategies or misconceptions would lead to an incorrect response?

Review P. 25 Exercise

P. 25 - Item Distractor Sample

Mathematics (Elementary)

Standard(s): Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. Model with mathematics.

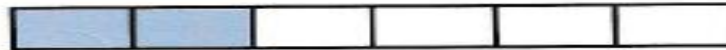
Correct response: [REDACTED]

DOK Level: 2

A total of 8 students decorated the front surface of 2 different bulletin boards, 1 in the computer lab and 1 in the library.

The computer lab bulletin board has 4 sides and 4 right angles and is 10 feet long and 9 feet tall.

The library bulletin board is divided into 6 equal parts, as shown below, and is shaded to show the fraction of the front surface the students finished decorating on Tuesday.



Item:

Each student decorated one or the other of the bulletin boards. More students decorated the computer lab bulletin board than the library bulletin board. Which of the following numbers could be the fraction of students who decorated the computer lab bulletin board?

- A. $\frac{1}{3}$
- B. $\frac{1}{5}$
- C. $\frac{4}{8}$
- D. $\frac{4}{5}$
- E. $\frac{5}{8}$

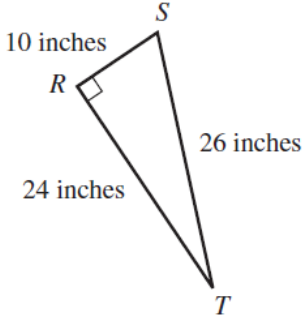
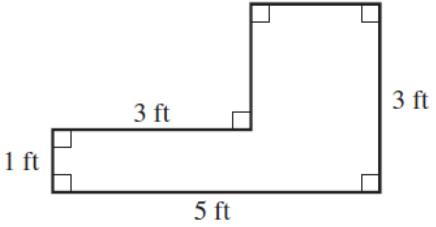
Rationale:

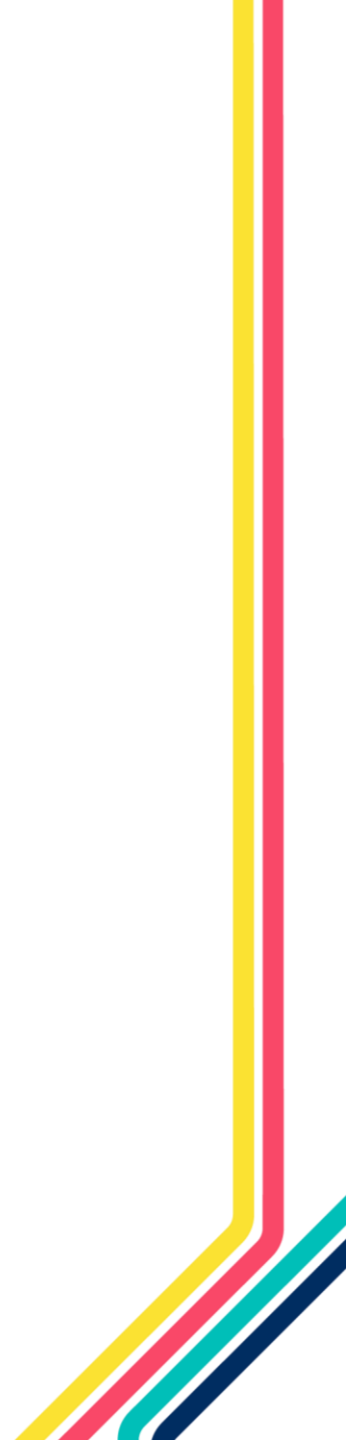
1. **What content knowledge must students demonstrate to arrive at the best answer?**

This question requires students to represent quantities as proper fractions in an applied setting. Students would also need a firm grasp of fraction equivalents.

2. **Using this knowledge, what strategies might students typically employ as they work through the test question?**

CONNECTING COLLEGE READINESS STANDARDS™ TO THE CLASSROOM (ACT 2008)

<p>20–23</p>	<p>Compute the area and perimeter of triangles and rectangles in simple problems</p> <p>Use geometric formulas when all necessary information is given</p>	<p>In the triangle below, $\angle R$ is a right angle and the lengths of the sides are as marked. In square inches, what is the area of $\triangle RST$?</p> <p>A. 60 *B. 120 C. 130 D. 240 E. 312</p> 
<p>24–27</p>	<p>Compute the area of triangles and rectangles when one or more additional simple steps are required</p> <p>Compute the area and circumference of circles after identifying necessary information</p> <p>Compute the perimeter of simple composite geometric figures with unknown side lengths</p>	<p>How many feet long is the perimeter of the figure sketched below?</p> <p>A. 12 B. 14 C. 15 *D. 16 E. 18</p> 



Nonnegotiable Knowledge and Skills for Eighth-Grade Students to Be on Target for College and Career Readiness (8th)

			Graphical Representations	
Basic Operations and Applications	Probability, Statistics, and Data Analysis	Numbers: Concepts and Properties	Properties of Figures	Measurement
<p>Perform one-operation computation with whole numbers and decimals</p> <p>Solve problems in one or two steps using whole numbers</p> <p>Perform common conversions (e.g., inches to feet or hours to minutes)</p> <p>Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent</p> <p>Solve some routine two-step arithmetic problems</p>	<p>Calculate the average of a list of positive whole numbers</p> <p>Perform a single computation using information from a table or chart</p> <p>Calculate the average of a list of numbers</p> <p>Calculate the average, given the number of data values and the sum of the data values</p> <p>Read tables and graphs</p> <p>Perform computations on data from tables and graphs</p> <p>Use the relationship between the probability of an event and the probability of its complement</p>	<p>Recognize equivalent fractions and fractions in lowest terms</p> <p>Recognize one-digit factors of a number</p> <p>Identify a digit's place value</p>	<p>Identify the location of a point with a positive coordinate on the number line</p> <p>Locate points on the number line and in the first quadrant</p>	<p>Estimate or calculate the length of a line segment based on other lengths given on a geometric figure</p> <p>Compute the perimeter of polygons when all side lengths are given</p> <p>Compute the area of rectangles when whole number dimensions are given</p>



Kimberly High School - Example



PreACT 8/9, PreACT and ACT (Practice) Test Item Review for Standards and Instructional Alignment
 Kim Rasmussen and Sherry Reed , ACT 2022

Test Reviewed:		Subject Area:		Date:	Reviewer(s):			
Item #	Nouns – “what” for instruction	Verbs – “how” for instruction	What Content/Topic(s)	DOK	ACT Standard(s)	Local Standard(s)	Grade/Course	What Unit/Chapter

Data Dig B: Find items of concern and discuss how to use in classroom instruction (Use “Hess” to consider DOK, etc,)

PreACT, PreACT 8/9 (Actual data)

“Preparing for the ACT”, PreACT, PreACT Secure Practice Tests (sample data)



ACT, PreACT and PreACT Secure Item Analysis

- Use **23-24 PreACT Test Booklet** and associated [cheat sheet](#) to find items in the selected Reporting Category (actual or sample)
- Use **“Preparing for the ACT 2023-2024”** Find Item Reporting Category listing on “Scoring” page (sample)
- For additional items (not documented Reporting Categories) use **PreACT Secure Practice Test (sample)**
https://www.act.org/content/dam/act/secured/documents/pdfs/PreACT_Secure_Practice_805.pdf
- Departments now evaluate

PreACT and PreACT 8/9 actual Item Analysis

Reporting Category	Item Information		Response Analysis			
	Item	Key	A / F	B / G	C / H	D / J
Geometry	6	A/F	*65	18	12	4
Geometry	16	C/H	6	8	*35	27
Geometry	23	C/H	8	8	*41	14
Geometry	26	D/J	33	10	8	*20
Geometry	30	D/J	39	20	27	*6
Geometry	6	A/F	*72	6	14	8
Geometry	16	C/H	14	14	*56	8
Geometry	23	C/H	11	11	*36	28
Geometry	26	D/J	14	8	22	*44
Geometry	30	D/J	22	22	33	*19
Geometry	6	A/F	*50	0	0	0

Classroom Applications (Dean)

- Which items cause the greatest concern?
- Work in teams or with other colleagues to discuss ways to use these items instructionally
 - Incorporate into classroom assessments and share/identify with students
 - Bell Ringers, Ticket to leave, etc.
 - Weekly 20 min. focus (Choose one standard/Idea for Progress)
 - Other?
- Share methods being used at your school if you've already implemented this type of activity

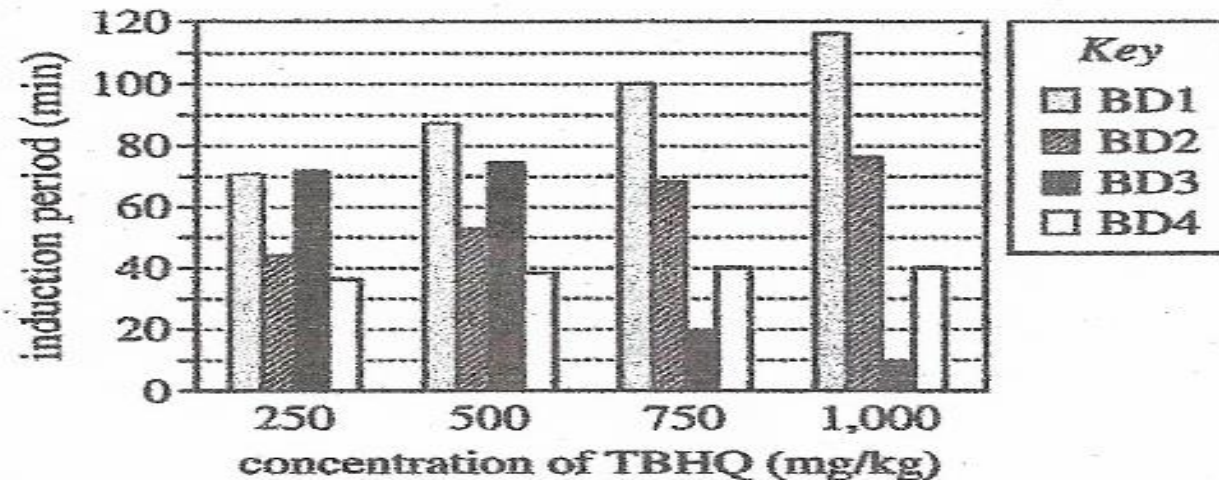


Reminder for ALL Departments!

25. In Experiment 3, which of the biodiesels having a TBHQ concentration of 750 mg/kg decomposed most quickly in the AOA ?
- A. BD1
 - B. BD2
 - C. BD3
 - D. BD4

Experiment 3

The induction period was determined for fresh samples of BD1–BD4 at 110°C. Each sample contained a different concentration of the antioxidant TBHQ (see Figure 3).



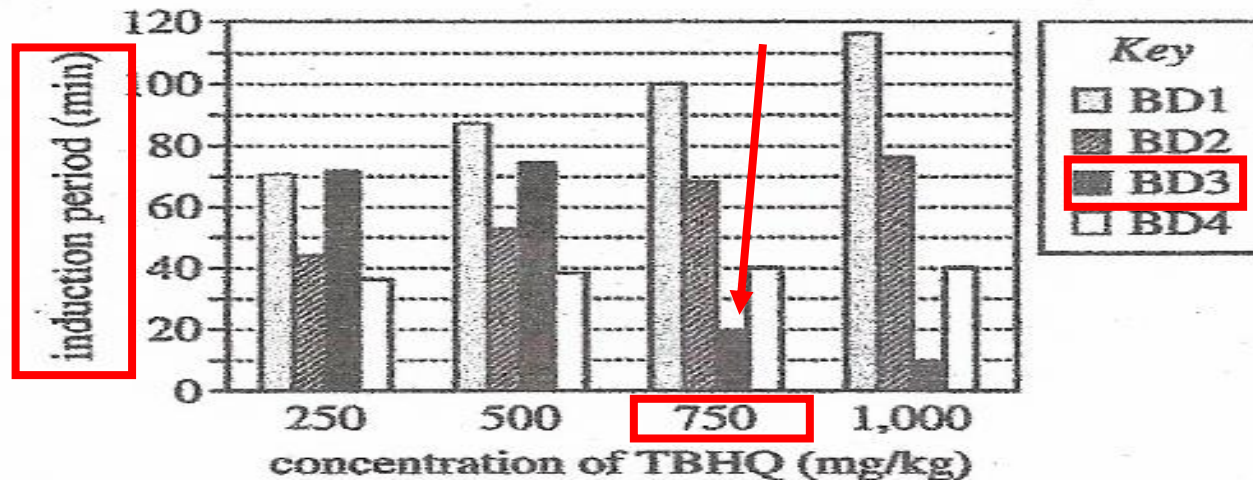
Choose the correct response

25. In Experiment 3, which of the biodiesels having a TBHQ concentration of 750 mg/kg decomposed most quickly in the AOA?

- A. BD1
- B. BD2
- C. BD3
- D. BD4

Experiment 3

The induction period was determined for fresh samples of BD1–BD4 at 110°C. Each sample contained a different concentration of the antioxidant TBHQ (see Figure 3).



Passage V

When an oil is exposed to air, small amounts of reactive *peroxides* can form in the oil. If the peroxide concentration reaches a certain level, the oil will rapidly decompose to form acidic organic compounds such as formic acid. Scientists use an *accelerated oxidation apparatus*, to model this process on a short time scale (see diagram).

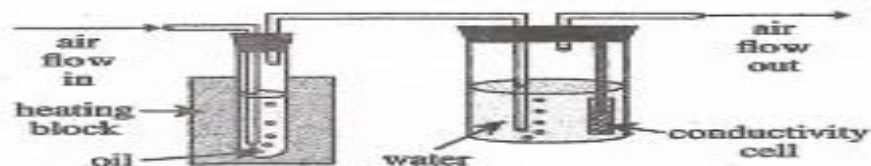


diagram of AOA

A 3 g oil sample is heated to a certain temperature. Starting at time = 0 min, dry air is bubbled through the sample at a constant rate. The flow of air carries organic acids produced in the sample into the flask containing water. The *conductivity* (ease of electric flow) of the water is monitored. The conductivity of the water stays relatively constant until the oil rapidly decomposes. As the oil rapidly decomposes, the conductivity sharply increases. The length of time from 0 min until this increase occurs is the *induction period*.

Biodiesels are renewable fuel oils typically made from soybeans. Scientists did 3 experiments to study 4 biodiesels (BD1–BD4). BD2 was a 50/50 mixture of BD1 and BD4 by volume.

Experiment 1

The induction period was determined for fresh samples of BD1–BD4 at 4 temperatures (see Figure 1).

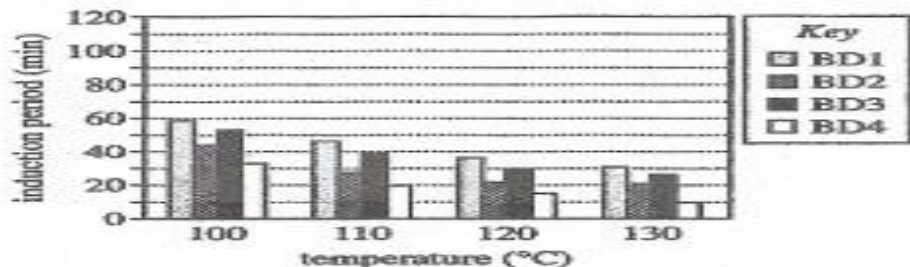


Figure 1

Experiment 2

The induction period was determined for fresh samples of BD1–BD4 at 110°C. Each sample contained 1 of 4 *antioxidants* at a concentration of 500 mg/kg (see Figure 2). Antioxidants are compounds that can inhibit the decomposition of oils exposed to air.

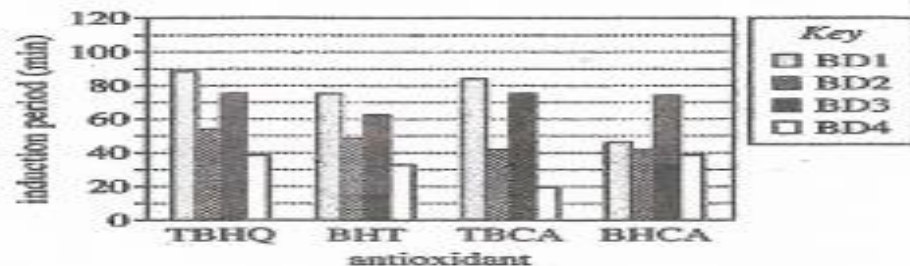


Figure 2

Experiment 3

The induction period was determined for fresh samples of BD1–BD4 at 110°C. Each sample contained a different concentration of the antioxidant TBHQ (see Figure 3).

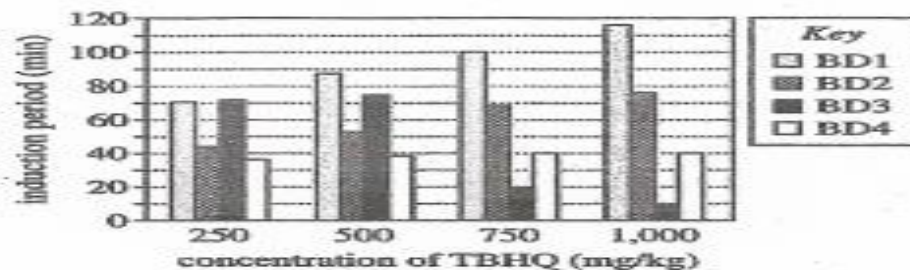


Figure 3

Figures adapted from S. R. Westbrook, *An Evaluation and Comparison of Test Methods to Measure the Oxidation Stability of Neat Biodiesel*. National Renewable Energy Laboratory, 2005.

Discussion – Minimum 1 item per classroom assessment??

- Can Encore teachers replicate items of this kind from your class curriculum/content in a classroom assessment? *Thoughts?*
- Can Core/Encore teachers replicate and discuss the format of these kinds of test items (*and other types as well*) with your students? *Yes, using your PreACT Test Booklets in the five minutes or so in which we just did!*
- 9th, 10th, and 11th graders will see these types of items in the spring on PreACT Secure and the ACT.
- More importantly, in terms of “readiness” this is a skill that is relevant at the next level: Career, post-secondary, etc.

Student Item Analysis ([Kelly Lam](#))

PreACT Unsecure 2023 Item Analysis Guide

PLEASE MAKE A COPY AND SHARE IT WITH YOUR OT COACH. YOU WILL ADD THIS TO YOUR OT SCHOology PORTFOLIO.

Using your PreACT results, you will complete the following:

- Go over what your [scores](#) mean (it is an unofficial score)
- Analyze each section by [questions](#)
- Reflect on your [learning](#)

RECORD YOUR SCORES HERE:

Remember - this can be used as one of your ACP experiences - Growth of 1 point!

Composite	English	Math	Reading	Science

PreACT Question Analysis Activity

Here are the instructions:

Staff Item Analysis (Kelly Lam)

PreACT Unsecure 2023 Item Analysis Guide

PLEASE MAKE A COPY AND SHARE IT WITH KELLY LAM AND MALLORY SMITH. BE SURE TO ADD YOUR DEPARTMENT NAME WHEN YOU MAKE THE COPY.

Using the **PreACT Unsecure 23-24 Item Analysis Data - insert your school data here**, as a department consider which PreACT subject test over which you could have the biggest impact.

Each subject test item analysis is on a different tab, and then is sorted by reporting category and grade. Within your chosen test, consider at least 3 questions per reporting category. For each question:

- Locate and read the student facing questions in the PreACT Unsecure test booklet
- Consider the content contained within the question and what opportunities students have to encounter the content within your course(s)
- Consider the responses students gave and the correct response
- Consider how the number of students who answered the questions correctly changed between grade levels
- Consider how you (individually and as a department) could impact student learning related to the content of the selected question

Break Time



ACT[®]

Growth and Goal Setting

- **Spring to Spring**
- **Fall to Spring**
- **Multiple Years**



Live Demo (Growth)

- Program: PreACT Secure only (Spring to Spring)
- Summary Tab
 - “% of Students at Benchmark
 - All Subjects
- Worksheet 4

The screenshot shows the PreACT Secure interface. At the top, there is a search bar with a dropdown menu labeled 'Last Name' and a text input field with the placeholder 'Please enter at least 4 characters'. To the right of the search bar are icons for 'Help' and 'Rece'. Below the search bar, the 'Program' is set to 'PreACT Secure'. A navigation bar contains four tabs: 'Roster', 'Summary', 'Data Tools', and 'Download Hub'. The 'Summary' tab is circled in red. Below the navigation bar, a button labeled 'Student Scores (District)' is circled in red, with 'Roster View' written below it.

Worksheet #4 – PreACT Secure Benchmarks and Growth (Year over Year and Within Year)

PreACT Secure Scores” Current 9th (Class of 2027)

Year	Comp Score	Math Score	Math % Met	Math % Close	Science Score	Science % Met	Science % Close	English Score	English % Met	English % Close	Reading Score	Reading % Met	Reading % Close
2022-23	*	*	*	*	*	*	*	*	*	*	*	*	*
2023-24													

PreACT Secure Scores” Current 10th (Class of 2026)

Year	Comp Score	Math Score	Math % Met	Math % Close	Science Score	Science % Met	Science % Close	English Score	English % Met	English % Close	Reading Score	Reading % Met	Reading % Close
2022-23													
2023-24													

PreACT Secure Scores” Current 11th (Class of 2025)



Year	Comp Score	Math Score	Math % Met	Math % Close	Science Score	Science % Met	Science % Close	English Score	English % Met	English % Close	Reading Score	Reading % Met	Reading % Close
2022-23													
2023-24 (ACT)													

“%Close” can be removed or arbitrarily set

Tends to take a dip due to jump to full ACT format

(Over)

“Typical” Growth –Side Note

- Individual/Group growth measures (PreACT to ACT only)
- Set Goals on achieving >50th percentile

PreACT	The ACT	10-11	1 Year	2020: Sample of examinees who tested in consecutive years with 10-14 months between tests, using data collected from spring 2016 through spring 2020 (CSV)
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2019: Sample of examinees who tested in consecutive years with 10-14 months between tests, using data collected from spring 2016 through spring 2019 (CSV)

2018: Sample of examinees who tested in consecutive years with 10-14 months between tests, using data collected from spring 2016 through spring 2018 (CSV)

Growth Modeling Resource (PreACT to ACT)

Composite and all subject scores

Sample Goal:

60% of Class > 50% Growth Percentile

Class Avg > 50% Growth Percentile

version	span	test_1	test_2	prior_grad	current_gr	subject	prior_scor	current_sc	sgp
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	18	15
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	19	26
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	20	45
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	21	65
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	22	81
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	23	90
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	24	97
2020	10-14 mor	PreACT	ACT	10	11	Composite	19	25	99
Class Avg							19.1	20.7	~55

[Growth Modeling Resources](#)

[Answers to Administrators Questions about Student Growth](#)

Live Demo only – Fall to Spring (Excel downloads) “Be Careful” doc

- PreTest-PostTest: PreACT to PreACT Secure (Fall to Spring)
- Roster Tab
 - “Student Scores” Individual side by side
- Summary Tab
 - “Group Scores” side by side
- Leads back to “Item Response Analysis” for Fall

The screenshot shows the ACT PreACT interface. At the top, there is a search bar with the text "Last Name" and a dropdown arrow, followed by the instruction "Please enter at least 4 characters" and a magnifying glass icon. To the right of the search bar are icons for "Help" (a question mark) and "Receive" (a refresh symbol). Below the search bar, the "Program" dropdown menu is set to "PreACT Secure". Below the program dropdown, there are four tabs: "Roster", "Summary", "Data Tools", and "Download Hub". The "Roster" tab is highlighted with a red circle. Below the tabs, there is a button labeled "Student Scores (District)" with "Roster View" underneath it.

Progress Tracker (Staff) – Benchmark Chart: PreACT Interpretive Guide

Grade / Season of PreACT test	Subject	PreACT Readiness Level			PreACT	ACT
		In Need of Intervention	On the Cusp	On Target	Readiness Benchmark	Benchmark
9th grade fall	English	1-8	9-11	12-35	12	18
	Math	1-14	15-16	17-35	17	22
	Reading	1-13	14-16	17-35	17	22
	Science	1-15	16-17	18-35	18	23
	STEM	1-18	19-20	21-35	21	26
9th grade spring	English	1-9	10-12	13-35	13	18
	Math	1-15	16-17	18-35	18	22
	Reading	1-14	15-17	18-35	18	22
	Science	1-15	16-18	19-35	19	23
	STEM	1-19	20-21	22-35	22	26

Classroom Teacher - Fall Goals Example

Name	English	POW	KOL	CONV	
IZEYAH	6	14	14	17	
ASHLEY	9	29	0	33	In Need of Support 6%
NOAH	9	36	0	29	
ALYSSA	10	36	29	25	
PAYTON	10	43	14	25	
DANIEL	11	36	0	42	
RYLAND	11	21	57	33	On the Cusp 9%
PEYTON	11	43	29	25	
ZANE	12	36	0	46	
ABBY	13	43	0	46	
ALEXIS	13	21	43	46	
ALIVIA	13	29	43	42	
WUSHUANG	13	29	0	54	
KEAGEN	14	36	29	46	
LUKEN	14	50	29	38	
PAIGE	14	50	0	46	
GAVIN	14	43	29	46	Met Benchmark 85%
MAURICIO	14	36	71	33	
SAMANTHA	14	50	14	46	

Using Predicted Scores to Measure Growth

Worksheet #4 – *PreACT Secure* Benchmarks and Growth (Year over Year and Within Year)

Using Predicted Scores to Measure Growth –

PreACT 8/9 to PreACT,
PreACT and PreACT Secure to ACT



<u>F. Name</u>	Composite	Pred ACT Low	Pred ACT High	Actual ACT
RICHARD	25	24	27	
LORINE	16	15	18	
KYLEIGH	18	16	20	
CARTER	15	14	17	
CALEB	19	17	21	
TROY	25	24	27	
NATHAN	15	14	17	
CRISTIAAN	16	15	18	
GRACE	22	21	24	
JUDE	13	12	15	
KYLER	16	15	18	
ELISE	30	30	34	
PORTIA	22	21	24	



Predicted Growth Compilation

Students (69)	PreACT Composite	Pred ACT Composite	ACT Composite	PreACT Math	Pred ACT Math	ACT Math	PreACT Science	Pred ACT Science	ACT Science	PreACT STEM	Pred ACT STEM	ACT Science
MARYANN	14	14 - 17	17	15	14 - 18	16	12	13 - 18	15	14	14 - 17	1
AIDEN	15	15 - 18	25	18	17 - 21	22	13	13 - 18	29	16	16 - 19	2
AVA	25	25 - 28	26	20	19 - 23	20	31	28 - 33	28	26	25 - 29	2
FAITH	16	16 - 19	17	18	17 - 21	19	15	15 - 20	18	17	17 - 20	1
KIMBERLY	14	14 - 17	16	15	14 - 18	14	15	15 - 20	17	15	15 - 18	1
SOPHIA	23	23 - 26	27	18	17 - 21	20	20	18 - 23	26	19	18 - 22	2
WESLEY	14	14 - 17	17	20	19 - 23	20	14	14 - 19	20	17	17 - 20	2
MADISON	30	30 - 34	32	21	20 - 24	28	35	32 - 36	34	28	27 - 31	3
DREW	11	11 - 14	16	14	13 - 17	17	12	13 - 18	15	13	13 - 16	1
BRADEN	12	12 - 15	16	14	13 - 17	18	15	15 - 20	20	15	15 - 18	1
MORGAN	14	14 - 17	17	15	14 - 18	17	15	15 - 20	16	15	15 - 18	1
HAILEY	17	17 - 20	21	17	16 - 20	18	21	19 - 24	24	19	18 - 22	2
LINDSAY	13	13 - 16	17	15	14 - 18	16	15	15 - 20	17	15	15 - 18	1
BROCK	18	18 - 21	19	16	15 - 19	16	18	17 - 22	18	17	17 - 20	1
GEORGIA	21	21 - 24	20	16	15 - 19	20	19	18 - 23	17	18	18 - 21	1

Predicted Growth Compilation

	% Exceeded Pred Growth	% Met Pred Growth	% Met or Exceeded Pred Growth	% Below Pred Growth
Composite	36%	59%	94%	4%
Math	28%	71%	99%	1%
Science	26%	68%	94%	6%
STEM	29%	70%	99%	1%
English	42%	54%	96%	4%
Reading	22%	62%	84%	16%

**ACT State Contract Data
PreACT Secure Summary Tab
Worksheet 5**

**Current 9th Grade (Chart 13)
“% Goals 2025”**

Subject	% at, or Close: Spring '24	Goal % at, or Close: Spring '25
English	_____	_____
Math	_____	_____
Reading	_____	_____
Science	_____	_____

**Current 10th Grade (Chart 14)
“% Goals 2025”**

Subject	% <u>Met</u> Spring '24	Goal % for '25 (ACT Benchmark <u>Met</u>)
English	_____	_____
Math	_____	_____
Reading	_____	_____
Science	_____	_____

Set Group Goals

- Goal based on high end of avg. estimated group range and % of students reaching goal (ACT)

A	B	C	D	E
LASTNAME	FRSTNAME	EST_COMP_LO	EST_COMP_HI	Actual
Smith	MAXWELL	25	28	
Jones	NAUDI	17	20	
Williams	ELIZABETH	17	20	
Henry	KYRA	15	18	
Rollins	TAYLOR	19	22	
O'Brien	KAITLYN	21	24	
Hietpas	SHANE	23	26	
VanCalster	ZJONTI	13	16	
Kortz	KAMERYN	18	21	
Voster	PENNY	19	22	
Greiner	BRITNEY	22	25	
Effa	ALIYAH	20	23	
Hermsen	BRANDY	17	20	
Johnson	HANNAH	22	25	
		19.14	22.14	

Group Goals

- Class Avg. = >22
- % of Class meeting ind. goal = 60%

Set Group Goals

- Goal based on high end of average estimated group range and % of students reaching that

LASTNAME	FRSTNAME	EST_COMP_LO	EST_COMP_HI	Actual
Smith	MAXWELL	25	28	29
Jones	NAUDI	17	20	20
Williams	ELIZABETH	17	20	18
Henry	KYRA	15	18	16
Rollins	TAYLOR	19	22	22
O'Brien	KAITLYN	21	24	24
Hietpas	SHANE	23	26	25
VanCalster	ZJONTI	13	16	18
Kortz	KAMERYN	18	21	21
Voster	PENNY	19	22	22
Greiner	BRITTNEY	22	25	27
Effa	ALIYAH	20	23	22
Hermsen	BRANDY	17	20	19
Johnson	HANNAH	22	25	25
		19.14	22.14	22.00

Group Goals

- Class Avg. = >22
- % of Class meeting ind. goal = 60%

Comp Avg = 22.0

Met Goal 9/14 (64%)

Connected Progress Tracker

Complete by entering:		ACT Connected System of Assessments: Benchmarking and Progress									
		*Enhanced by Item Response Summary Report from PreACT 8/9/10									
Subject = Mean Score (PreACT(s) benchmarked by administration season)	2018 - 19					2019 - 20					
	Pre 8*	Pre 9*	Pre 10*	ACT 11	ACT 12	Pre 8*	Pre 9*	Pre 10*	ACT 11	ACT 12	
Reporting Categories = % correct or N/A (items in try-out this form)	S	S	S			S	S	S			
Math	16	18	19	22	22	16	18	19	22	22	
	15.75	16	19.5			17.25	17.8	19	23		
Preparing for Higher Math	67	58	78			67	73	58	81		
PHM - Number and Quantity	100	88	95			100	100	88	95		
PHM - Algebra	61	66	75			61	68	66	80		
PHM - Functions	83	75	88			83	83	75	88		
PHM - Geometry	33	33	51			33	51	42	67		
PHM - Statistics and Probability	40	38	51			40	40	38	51		
Integrating Essential Skills	50	50	69			50	50	50	69		
Modeling	40	42	58			40	40	42	58		
Science	18	19	20	23	23	18	19	20	23	23	
	16.15	18	21.25			16.15	18	19	23.78		
Interpretation of Data	67	76	88			67	67	76	88		
Scientific Investigation	76	65	88			76	76	65	88		
Evaluation of Models/Inferences	67	88	95			67	67	88	95		

Student Progress Tracker

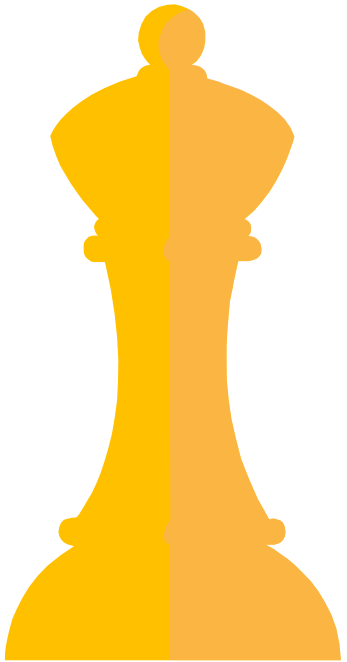
Complete by entering:	Student:					Notes:
Subject = Mean Score (PreACT(s) benchmarked by administration season)						
Reporting Categories = % correct or N/A (items in try-out this form)	Pre 8*	Pre 9*	Pre 10*	ACT 11	ACT 12	8th: I was surprised by the
	S	S	S			
Math	16	18	19	22	22	
	19	19	20			
Preparing for Higher Math	61	58	67			9th: My Geometry improved, but my Prob and Stats dropped
PHM - Number and Quantity	100	93	93			
PHM - Algebra	67	67	67			
PHM - Functions	83	83	83			10th Geometry!!
PHM - Geometry	33	45	65			
PHM - Statistics and Probability	40	35	45			
Integrating Essential Skills	50	50	55			
Modeling	40	40	50			11th
Science	18	19	20	23	23	
	17	18	20			
Interpretation of Data	64	64	76			
Scientific Investigation	83	83	83			
Evaluation of Models/Inferences	50	58	67			Take-Aways for Post-Secondary Plans:
STEM	20	22	24	26	26	
Composite						

ACT Reading: Closer Look

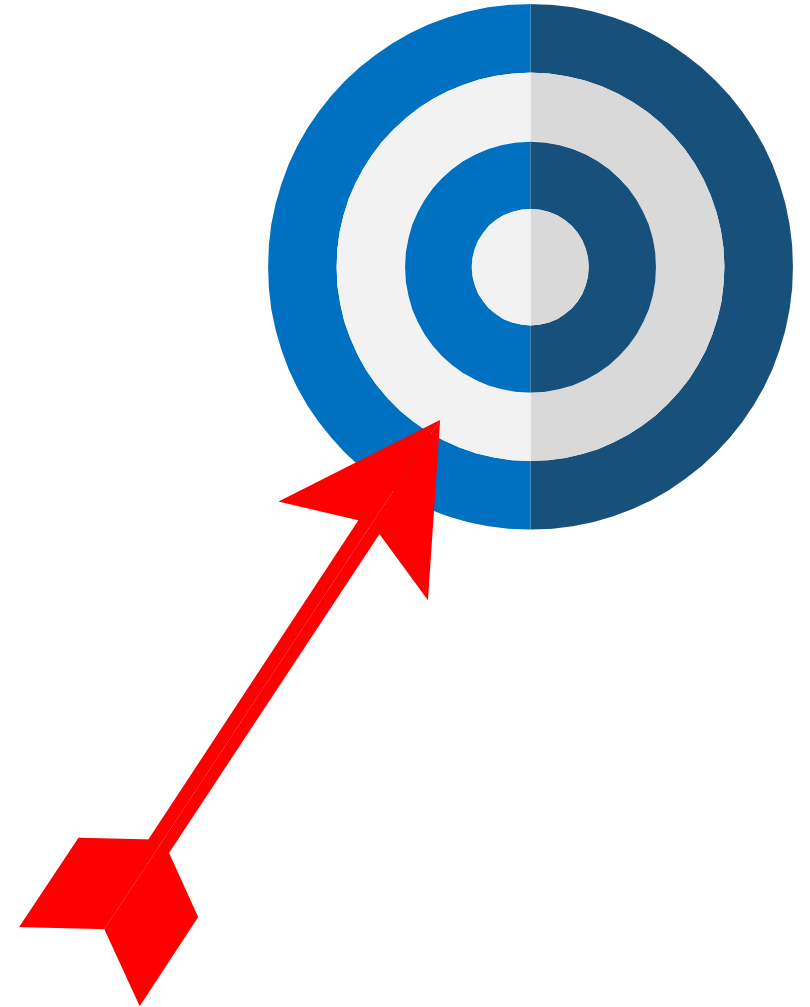
ACT Instructional Mastery – AIM (Optional)

AIM Reading Training Goals

Participants will:



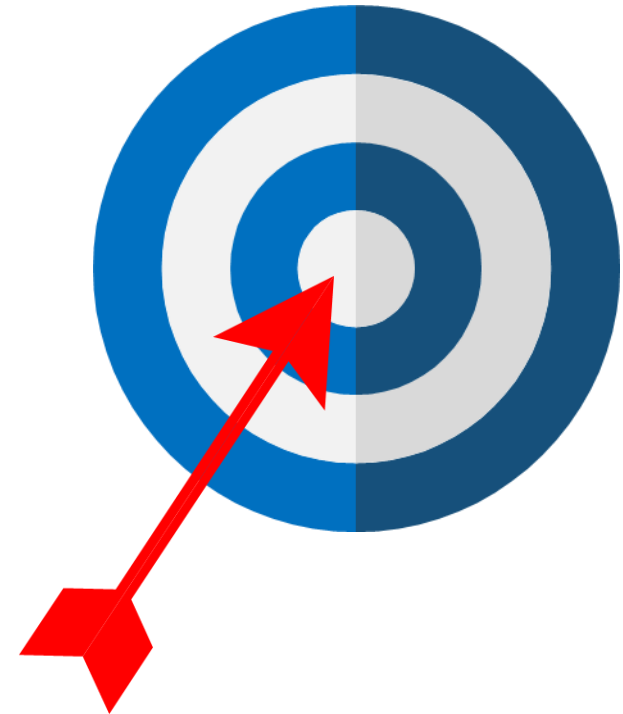
- learn the ACT Reading Test structure and content
- learn to identify and recommend ACT Reading Test-taking strategies
- understand how to provide effective instruction that strengthens student readiness for the test



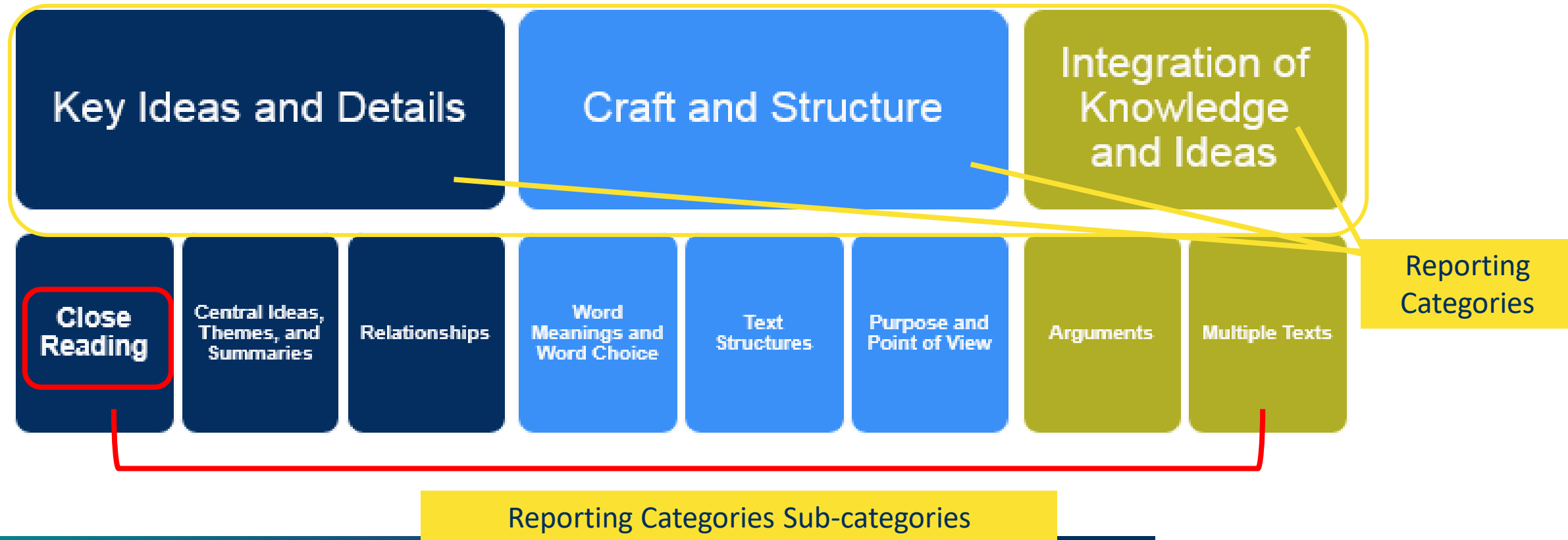
Four Representative Activities

(From AIM Training)

- Annotate
- Answer
- Code for Skills*
- Identify Answer Traps



Reading



Code the Items: What Skills are These Items Measuring?

Find one or two items among the ten for each of the following most frequently measured ACT Reading skills (note, one item will not be one of these four).

- Key Ideas and Details: Close Reading: *Locate facts or details in the passage*
- Key Ideas and Details: Close Reading: *Draw Logical Conclusions*
- Key Ideas and Details: *Central Ideas, Themes, and Summaries*
- Craft and Structure: *Word Meanings and Implications*

Answer Key

- Key Ideas and Details: Close Reading: Locate facts or details in the passage
 - Item 27, 28, and 29
- Key Ideas and Details: Close Reading: Draw Logical Conclusions
 - Item 22 and 26
- Key Ideas and Details: Identify Central Ideas
 - Item 25
- Craft and Structure: Word Meanings and Implications
 - Item 23, 24, 30



Discussion

*How frequently do
your students learn
and
practice these skills?*

- Key Ideas and Details: Close Reading: Locate facts or details in the passage:
- **Explicit info**

27. In the passage, the author notes that a strange aspect of the photo of Goyathlay with a rifle is that the photo was taken:

- A. by an unknown photographer.
- B. when Goyathlay was a prisoner of war.
- C. with Goyathlay's permission.
- D. by a US government photographer.

28. The author directly refers to which of the following aspects of the photograph of Goyathlay in a garden as being ironic?

- F. Goyathlay was not a gardener but instead was in the midst of trying to stop the US government's attack on his people.
- G. Goyathlay's people had long practiced farming, but the photo seemed to suggest that Goyathlay had learned farming from others.
- H. People do not automatically think of Goyathlay as a man of peace.
- J. For years it was assumed to be a photograph of someone other than Goyathlay.

29. The author indicates that for the sake of an unbiased interpretation, compared to reading written documents with care, reading photographs with care is:

- A. significantly more important.
- B. slightly more important.
- C. just as important.
- D. slightly less important.

but, strangely, it was taken about two to four years after Goyathlay surrendered—while he was a prisoner of war. Why, then, was this photo taken? What meaning

life? Ironically, the Apaches had long farmed as part of the traditional life they fought so tenaciously to protect.

easily tell as many lies as truths. As much as any written document, they have to be read with care in order to be understood accurately in unbiased and non-stereotypical terms. Every photo of people contains his-

- Key Ideas and Details: Close Reading: Draw Logical Conclusions
- **Implicit Info**

22. It can most reasonably be inferred that the author's statements about the educational use of photographs apply to photographs taken during what time period?
- F. Any time period since photographs were first taken
 - G. In the nineteenth century exclusively
 - H. Any time period prior to the digital age, but not beyond
 - J. Only in the ten years after photographers first joined government expeditions to the West

Using photographs as educational resources presents particular challenges and must be done with care. There is always more than face value in any photo, and historical photos of American Indians are no exception.

26. The author most strongly suggests that one reason commercial photographers began to photograph Native American communities was that commercial photographers were:
- F. instructed to do so by the US government.
 - G. devoted to creating educational resources about Native American communities.
 - H. committed to overcoming their preconceived ideas about the West.
 - J. influenced to do so by the photographers who had joined government expeditions to the west.

Photographers also accompanied government expeditions to the West where they documented traditional cultures, leading the way for tourists and commercial photographers who followed, carrying their cameras and preconceptions into Native American communities. These efforts generated a legacy of photo-

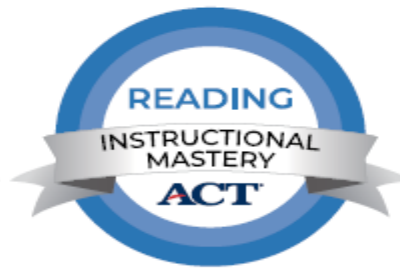
- Craft and Structure:
Word Meanings and Implications

23. Which of the following words is most nearly given a negative connotation in the passage?
- A. Educational (line 1)
 - B. Old (line 10)
 - C. Romanticized (line 28)
 - D. Traditional (line 34)
24. Which of the following actions referred to in the passage most clearly characterizes a hypothetical event rather than an actual event?
- E. “Traveled to” (line 17)
 - G. “Defend” (line 18)
 - H. “Farmed” (line 72)
 - J. “Stand next to” (line 83)

30. In line 86, the word *framed* is used figuratively to describe:
- F. the way background research can support the proper viewing of a photograph.
 - G. a common means of preserving a photograph.
 - H. a technique in which a photograph is displayed with factual information surrounding it.
 - J. the manner in which many photographs of Goyathlay are displayed in museums.

ACT INSTRUCTIONAL MASTERY

AT A GLANCE



Y

Overview

ACT Instructional Mastery is a valuable training providing certificates and digital badges documenting instructional mastery qualification.

ACT Instructional Mastery is the successor program replacing ACT Certified Educator.

What is ACT Instructional Mastery(AIM)?

- AIM is an extensive training program designed for schools and districts seeking professional development for educators.
- AIM provides educators with teaching strategies that can be integrated immediately into regular classroom instruction while also boosting teacher knowledge, skills, and confidence.
- All courses are highly interactive and practical and provide an opportunity to share ideas and teaching techniques with colleagues. ([AIM Science Guide](#))
- Courses available Onsite or Online

ACT Instructional Mastery Workshops

- Typically, 2-days, 12-14 hours
- Subject-Specific Deep Dives
- Designed to Improve ACT Preparatory Instruction
- Capped at 30 participants
- Highly Expert Trainers
- Culminates in 30-minute Knowledge Check with badges awarded to participants who pass the assessment
- 96% Would Recommend to Others Survey Responses



ACT[®] Instructional
Mastery

Badges and Certificates

- Participants who complete a course will receive a certificate of completion.
- Digital badges will be earned by those who pass the knowledge checks throughout each course.



Details

- Courses are offered in all 5 content areas of the ACT: English, math, reading, science and writing.
- Quarterly national level offerings of courses for individuals at \$659 per course. (November, February, March, May, June evenings, Virtual Individual)
- Onsite/Online Contracted-Scheduled: 2-day workshop, totaling 14 hours of content. Each day is 7.5-hours with a 30-minute lunch break. Up to 30 participants can attend a course
- Pricing Contracted: Onsite \$6,930 Online \$4,935

**Pricing for Sept. 1, 2022-August 31, 2023*

June Weekday Sessions

Dates	Session	Time	Registration Deadline
June 10-11	English	9:00 a.m. – 3:30 p.m. *Central Time	May 24, 2024
June 10-11	Math	8:00 a.m. – 3:30 p.m. *Central Time	May 24, 2024
June 12-13	Reading	9:00 a.m. – 3:30 p.m. *Central Time	May 24, 2024
June 12-13	Science	9:00 a.m. – 3:30 p.m. *Central Time	May 24, 2024
June 17-18	Writing	9:00 a.m. – 3:30 p.m. *Central Time	May 24, 2024

July Weekday Sessions

Dates	Session	Time
July 29-30	English	9:00 a.m. – 3:30 p.m. *Central Time
July 29-30	Math	8:00 a.m. – 3:30 p.m. *Central Time
July 31-August 1	Reading	9:00 a.m. – 3:30 p.m. *Central Time
July 31-August 1	Science	9:00 a.m. – 3:30 p.m. *Central Time



Learning and Professional Services (Commercial)



ACT Professional Services Workshops

- ACT Content Areas – ACT Basics, English, Math, Reading, Science, Writing
- ACT and PreACT Data Workshops
- Teaching and Learning*
- SEL Workshops

*Teaching and Learning Workshops include:

- Anchoring Your Curriculum
- Rigorous and Relevant Instruction
- Strengthening Formative Assessment and Feedback
- Strengthening Performance Assessment



Logistics

Pre-K-12 Services Catalog

- Request quote
- Approve Quote
- Connect with Implementation Services to schedule
- Cost Virtual: \$1260
- Cost Onsite: \$2100*
- Workshops and courses (50 Capacity)
- Length: 3 hours*

School Board Presentation Thoughts

Wisco High School – Data (ACT – PreACT – PreACT Secure)

Summary View: The ACT State Contract, [REDACTED]

Showing students who are College Reportable

Group	Year	Admin	Composite	Met Four	Math Scor	Math Met	Science Sc	Science M	STEM Scor	STEM Met	English Sc	English Me	Reading Sc	Reading M
[REDACTED]	2022-2023	Spring	18.6	11	20.5	42	18.9	18	20	11	16.7	36	18	22
[REDACTED]	2021-2022	Spring	17.4	8	19.2	31	18.2	23	19	10	14.7	30	17	13
[REDACTED]	2020-2021	Spring	19.1	19	20.7	38	19.8	30	20.5	17	17.2	42	18.3	32
[REDACTED]	2019-2020	Spring	18	10	19	27	18.6	20	19.1	10	16.1	36	17.6	18
[REDACTED]			18.3	12.0	19.9	34.5	18.9	22.8	19.7	12.0	16.2	36.0	17.7	21.3

Wisco High School – Data (ACT – PreACT – PreACT Secure)

	Composite	Math	Math % Met	On Cusp	Science	Science % Met	% On Cusp	STEM	STEM % Met	STEM % on Cusp	English	English % Met	English % On Cusp	Reading	Reading % Met	Reading On Cusp
Fall	16.3	17.7	37	26	15.8	20	20	17	8	14	14.1	57	13	16.8	30	22
9th	15.1	16.1	31	49	14.8	19	19	15.7	6	7	13.1	68	13	15.9	31	38
10th	17	18.7	41	17	16.2	24	21	17.7	13	20	14.6	57	13	17.6	31	21
11th	16.7	18.3	39	12	16.4	17	19	17.6	6	13	14.6	46	12	16.9	29	6

Wisco High School – Data (ACT – PreACT – PreACT Secure)

	Composite	Math	Math % Met	On Cusp	Science	Science % Met	% On Cusp	STEM	STEM % Met	STEM % on Cusp	English	English % Met	English % On Cusp	Reading	Reading % % Met	Reading % On Cusp
Last Spring																
9th	16.1	18.2	44	21	15.5	25	16	17.1	15	11	13.7	49	32	16.6	34	22
10th																
Fall	17	18.7	41	17	16.2	24	21	17.7	13	20	14.6	57	13	17.6	31	21

Wisco High School – Data (ACT – PreACT – PreACT Secure)

	Composite	Math	Math % Met	On Cusp	Science	Science % Met	% On Cusp	STEM	STEM % Met	STEM % on Cusp	English	English % Met	English % On Cusp	Reading	Reading % Met	Reading % On Cusp
Last Spring 10th	15.8	17.8	37	15	15.4	21	14	16.9	9	9	13.5	41	25	16	24	18
11th Fall	16.7	18.3	39	12	16.4	17	19	17.6	6	13	14.6	46	12	16.9	29	6

Wisconsin High School – Data (ACT – PreACT – PreACT Secure)

Math	Score	Prep for Higher Math	Number & Quantity	Algebra	Functions	Geometry	Statistics & Probability	Integrating Essential Skills	Modeling
11th	18.3	41.0	33.3	40.6	43.4	43.1	41.8	52.8	45.7
10th	18.7	42.0	34.6	42.0	41.4	42.6	49.1	58.4	50.9
9th	16.1	31.4	33.2	24.3	36.2	28.4	37.6	43.3	40.1

Science	Score	Interpretation of Data	Scientific Investigation	Evaluation of Models, Inferences & Exp
11th	16.4	47.2	40.1	32.2
10th	16.2	44.2	43.6	30.9
9th	14.8	35.2	37.8	27.7

Wisconsin High School – Data (ACT – PreACT – PreACT Secure)

English	Score	Production of Writing	Knowledge of Language	Conventions of Standard Eng
11th	14.7	46.3	53.5	43.3
10th	14.6	45.7	52.8	43.2
9th	13.1	40.0	42.9	38.9
Reading	Score	Key Ideas & Details	Craft & Structure	Integration of Knowledge
11th	16.9	46.3	43.9	48.6
10th	17.6	45.9	47.2	49.6
9th	15.9	40.5	40.9	43.1

Wisconsin High School – Data (ACT – PreACT – PreACT Secure)

			Item	Key	A / F	B / G	C / H	D / J	E / K	Omit
Science	9th	Evaluation of Models, Inferences & Experimental Results	3	D/J	9	28	31	*32	0	0
Science	9th	Evaluation of Models, Inferences & Experimental Results	4	C/H	26	22	*40	10	0	1
Science	9th	Evaluation of Models, Inferences & Experimental Results	11	D/J	28	25	18	*29	0	0
Science	9th	Evaluation of Models, Inferences & Experimental Results	19	C/H	22	26	*43	7	0	1
Science	9th	Evaluation of Models, Inferences & Experimental Results	25	C/H	35	21	*28	12	0	4
Science	9th	Evaluation of Models, Inferences & Experimental Results	26	A/F	*22	24	34	16	0	4
Science	9th	Evaluation of Models, Inferences & Experimental Results	27	A/F	*24	29	31	12	0	4
Science	9th	Evaluation of Models, Inferences & Experimental Results	28	C/H	21	32	*18	25	0	4
Science	9th	Evaluation of Models, Inferences & Experimental Results	29	D/J	24	15	34	*22	0	6
Science	9th	Evaluation of Models, Inferences & Experimental Results	30	A/F	*19	21	19	34	0	7

				Item	Key	A / F	B / G	C / H	D / J	E / K	Omit
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	3	D/J	7	26	28	*39	0	0
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	4	C/H	22	26	*30	22	0	0
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	11	D/J	17	29	22	*32	0	0
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	19	C/H	16	29	*48	6	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	25	C/H	29	28	*30	12	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	26	A/F	*28	26	28	17	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	27	A/F	*36	23	25	14	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	28	C/H	19	26	*30	23	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	29	D/J	22	23	30	*23	0	1
Science	11th	Evaluation of Models, Inferences & Experimental Results	69	30	A/F	*25	22	20	32	0	1

ACT Fall District Testing

A “New” Opportunity in Wisconsin?



ACT[®]

District Testing Fall 2024 Overview

[DetailsPage](#)

- Initial Test Dates (10/15/24 or 10/29/24)
- Paper/Pencil or Online
- ACT With Writing or ACT No Writing
- Taken at school with your own proctors (No reimbursement for Test Coordinators, Proctors, etc.)
- Fee Waivers not allowed

District Testing Fall 2024 Pricing

- The ACT: \$53.25 (Online) \$55.50 (Paper/Pencil)
- The ACT with writing: \$53 (Online or Paper/Pencil)
- '24-'25 National Test Dates: \$69 and \$95
- 2019 = 3 schools
- 2020 = 15 schools
- 2021 = 34 schools
- 2022 = (41 schools)
- 2023 = (46 schools)



ACT[®]

District Testing Fall 2024 Timeline*

- Enrollment open now!
- Org File Due (8/30)
- Manage Participation/Student Data Upload (8/1 to 9/8)
- Accommodations Requests (5/15-9/1)
- Note: * Students who already have approved accommodations still need to go into TAA and select Fall District Testing Date

District Testing Fall 2024 Resources

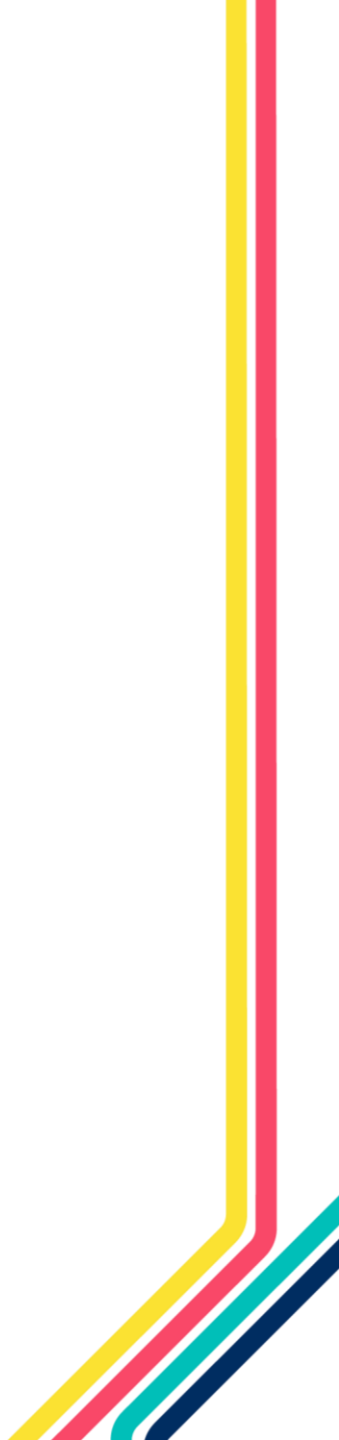
[District Testing Communications
Toolkit](#)

[Key Dates](#)

[Student Success Recognition Club
Toolkit](#)

Workshop Survey Link

Please use this QR code to complete the survey. Thanks!!



THANK YOU!!!!