Welcome to this presentation on the Next-Generation of ACCUPLACER. Remember that you can pause this video using the controls at the bottom of the window.
ACCUPLACER has been used with confidence by higher education institutions for over 30 years to help determine students’ readiness for credit-bearing college courses. In recent years, there has been significant change in the ways that colleges assess and place students into their coursework. ACCUPLACER Next-Generation tests have been designed with those changes in mind:

- In response to feedback from our users
- Based on changes to college’s placement programs

And

- Based on research and evidence of what is most important for students to understand and be able to do in order to be successful in their first year of college.
The specifications for ACCUPLACER’s Next-Generation tests were designed with several important principles in mind.

- Next-Generation tests now share the same content domains as the redesigned SAT Suite of assessment including the PSAT and SAT.
- Content is now aligned to states’ college and career readiness standards.
- Topics assessed are now connected to instruction meaning that students’ work in the classroom provides the background they need to be successful on Next-Generation tests.
- All test questions were developed following College Board’s overall guiding principles.
Here is a comparison of the Classic ACCUPLACER test titles to Next-Generation. The new tests will continue to be computer-adaptive in which the testing algorithm chooses the next appropriate test question based on the test blueprint and on the student’s performance. Both the Classic and new tests use a 100 point scale but the range for Next Generation is from 200-300.

Note that there is no change to WritePlacer which may be used in conjunction with Next-Generation multiple choice tests.
We will begin by reviewing the Next Generation Reading and Writing tests.
Here is a brief summary of the Next-Generation Reading test.

Next-Generation Reading will be composed of 20 multiple-choice questions. New will be the use of set-based questions which include a longer reading passage with 4 questions. The first set will include 4 questions based on a literary passage while the second set will have 4 questions based on a pair of shorter passages. The remaining 12 questions will have individual, brief informational passages for each question or will be a single-sentence vocabulary question.
The 1st set of 4 questions will be based on a literary passage which may be either fiction or literary nonfiction. The passage can range between 250 and 400 words in length.
The 2nd set of 4 questions will be based on a pair of related informational passages which will be from content areas that include science, humanities, or careers/history/social studies. The pair passages can total between 250 and 400 words in length.
After completing the two sets of questions, students will answer 12 discrete questions—
that is, questions based on short passages or single-sentence vocabulary questions. The
shortest of these, used mainly for discrete vocabulary questions, consist simply of one
sentence. The passages for discrete questions range from 75-200 words.
Here are details about the Reading passages on the test.

- Students will read passages that focus on a variety of content areas including:
  - Literary fiction or non-fiction
  - Careers/history/social studies
  - Science
  - And Humanities

- The types of writing a student will encounter will include:
  - Narrative
  - Informative and Explanatory
  - Argumentative

As part of the computer-adaptive nature of the test, the complexity of passages will vary depending on the student’s performance. Texts can range in difficulty from Somewhat Challenging, grade levels 6 through 8, up to Highly Complex which is college-level difficulty. The length of the passage will can range from Very Short with a word count of 75-100 words up through Long with a word count of 350-400 words.

More information on the elements we considered when determining Text Complexity can be found in the Test Specifications document and ACCUPLACER Program Manual.
The Content Domains measured by the Next-Generation Reading test fall into these 4 major areas:

• Information and ideas which includes reading closely, determining central ideas and themes of a passage, summarizing passage content, and understanding relationships between ideas presented.
• Rhetoric which includes analyzing a passage for the author’s word choice, text structure, point of view, purpose, and arguments used.
• Synthesis of ideas across multiple texts.
• And Vocabulary which is measured through fill-in-the-blank and in-context, passage-based questions.

Remember that more detail about the specifics of each area can be found in the Test Specifications document.
Sample Question

**Information & Ideas**

**PASSAGE**

Construction management is ideal for someone who has a general interest in building and design. Working as a construction manager affords the chance to learn a construction project from the planning stage with architects and engineers, to the budgeting stage with cost estimators, to the production stage with laborers. And that’s just a small taste of the job’s duties: Construction managers also obtain work permits, hire contractors, troubleshoot emergencies, schedule walkthroughs and keep clients informed on work timetables and progress.

Adapted from “Best Construction Jobs: Construction Manager.” ©2015 by U.S. News & World Report LP.

Here is a sample question which is measuring the test taker’s understanding of information and ideas. This type of question asks students to identify explicitly stated central ideas and themes in text and determine implicit central ideas and themes from text. Note that the content area of the passage focuses on Careers/History/Social Studies. This question is considered moderately challenging.
The sample question asks students to engage with how an author’s selection of specific words and phrases shapes meaning and tone in text. Note that the passage is a literary example. Based on the text and question complexity, this question is considered to be at the complex level.
Here is an example of a question with 2 paired passages which are both related by the subject discussed. This question measures the test taker’s ability to synthesize across the multiple texts. Based on the text and question complexity, this is a moderately challenging question.
This is an example of a discrete-type vocabulary question. Similar questions test words in the context of even longer passages. This is a moderately complex question.
Now that we have reviewed Next Generation Reading, here is a side-by-side comparison with the Classic Reading Comprehension test. Items listed in bold-face print highlight new features of the test.

Remember that you can pause the video to review this screen in more detail.
Here is a brief overview of the Next-Generation Writing test.

The Writing test has 25 questions composed of 5 passage-based sets made of 5 questions each.
Writing Passages

Passages are commissioned texts written specifically for the test. They are presented to students as “early drafts” in need of revision. Note that the content areas, writing modes, and text complexity ranges, are similar to the Reading test.
There are two broad categories of question types in the Writing placement test: Expression of Ideas and Standard English Conventions. Each of these categories contains three subcategories: The Expression of ideas questions—Development, Organization, and Effective Language Use—make up 60 percent of the test. The Standard English Conventions questions—Sentence Structure, Punctuation, and Usage—make up 40 percent of the test. In the following slides, we’ll look at each of these content domains in more detail.
The first domain assessed is Development. These questions focus on revising text in relation to its rhetorical purpose. Note that the test taker’s prior knowledge of the topic is not assessed, although their understanding of the consistency of material within a passage may be. The three types of development questions that a student may see include:

- Proposition questions which ask the student to add, revise, or retain central ideas, main claims, topic sentences, and the like to structure texts and to convey arguments, information, and ideas clearly and effectively.
- Support questions which ask the student to add, revise, or retain information and ideas (for example: details, facts, statistics) intended to support claims or points in text.
- Focus questions ask the student to add, revise, retain, or delete information and ideas in text for the sake of relevance to topic and purpose.

The next domain on the Writing test is Organization. These questions focus on revision of text to improve the logic and cohesion of text at the sentence, paragraph, and whole-text level. There are two types of organization questions:

- Logical Sequence questions ask the student to revise text as needed to ensure that information and ideas are presented in the most logical order.
- Questions on Introductions, conclusions, and transitions ask the student to revise text as needed to improve the beginning or ending of a text or paragraph or to ensure that transition words, phrases, or sentences are used effectively to connect information and ideas.
The final domain measures the student’s understanding of Effective Language Use. These questions focus on revision of text to improve the use of language to accomplish particular rhetorical purposes. Students will see questions on these 4 different areas:

- Precision questions ask the student to revise text as needed to improve the exactness or content appropriateness of word choice.
- Concision questions ask the student to revise text as needed to improve the economy of word choice (i.e., to eliminate wordiness and redundancy).
- Style and tone questions ask the student to revise text as needed to ensure the consistency of style and tone within a text or to improve the match of style and tone to purpose.
- Syntax questions ask the student to use various sentence structures to accomplish needed rhetorical purposes.
This is sample of a question on Development addressing the Focus of the passage. This type of question asks the student to add, revise, retain, or delete information and ideas in text for the sake of relevance to topic and purpose. This is an example of an informative passage on Science content. Both the text and question complexity are considered moderately challenging.
This sample question measures the student’s understanding of Organization and the use of Introductions, conclusions, and transitions in writing. Questions of this type ask the student to revise text as needed to improve the beginning or ending of a text or paragraph or to ensure that transition words, phrases, or sentences are used effectively to connect information and ideas. The text in this example is Informative/Explanatory. The text and question complexity are considered to be moderately challenging.
This sample question measures the student’s understanding of Effective Language Use with a focus on Precision. This type of question asks the student to revise text as needed to improve the exactness or content appropriateness of word choice. This is an example of an Informative/Explanatory passage. The text and question complexity are both considered to be highly complex.
The final domain on the Writing test measures understanding of Standard English Conventions. The 3 major areas assessed include Sentence Structure, Conventions of Usage, and Conventions of Punctuation.
This sample question measures the student’s understanding of Conventions of Usage, specifically Subject-Verb agreement. The passage type here is Informative/Explanatory. The text and question complexity are both considered to be moderately challenging.
Here is the side-by-side comparison with the Classic Sentence Skills test. Items listed in bold-face print highlight new features of the test.

Remember that you can pause the video to review this screen in more detail.
Here are the titles of the 3 new Math tests in Next-Generation: Arithmetic, Quantitative Reasoning, Algebra, and Statistics, known as QAS, and Advanced Algebra and Functions, known as AAF.
When creating the Next-Generation Math tests, careful consideration was given to the changing landscape of what’s happening in higher ed math sequences. By responding to the increasing surge of Quantitative Reasoning and Statistics math pathways, the QAS test was designed to include content that is prerequisite to successful enrollment in these areas, and to focus on the math that matters most for success in careers that do not require a “traditional” college algebra sequence. Likewise, the AAF test was designed to focus on math that matters most for success in STEM careers, but we recognize that higher level math is not limited to only STEM, as students with majors in economics, finance, architecture and medicine will also require rigorous math sequences. So, QAS vs. AAF is not intended to be a split between non-STEM and STEM, but not surprisingly, one will find that will QAS can place many students in math sequences for non-STEM majors, and AAF can place many students in math sequences for STEM majors.

We also wanted to be responsive to college and career readiness standards across the country, in that the number of students who have been taught math in K-12 via Common Core (or CCSS-alike standards, whether the state acknowledges it or repudiates it) will continue to grow year after year, so the makeup of the ACCUPLACER question bank should reflect some of those keystones. These include making use of structure in traditional algorithm solution methods, as well as focusing on conceptual understanding question-types in addition to fluency (rote solving) and application (word problem) question-types. More on this later in the deck.
Next-Generation Math tests provide students with access to online calculators during the test. If students progress to more difficult tests, depending on your institution’s decisions about test branching, they will encounter a drawer giving them a choice of calculators. Note that a calculator will not be available if it would compromise the integrity of the construct being measured.

Note that use of calculators as specified in each test question is critical to its reliability and validity as the test measures each student’s abilities.
Here is a brief overview of the Next-Generation Arithmetic test.

The Next Generation Arithmetic test consists of 20 multiple-choice questions.

The skills assessed on the Arithmetic tests, along with the higher level tests, include:

- Computational fluency
- Applications
- And Conceptual Understanding

Next-Generation Math tests provide students with access to online calculators for some of the questions of the math tests. A calculator is made available to students if the use of it does not compromise the integrity of the construct being measured, and will only aids in performing calculations. Up to three online calculators can be made available to a student on a question: 4-function, 4-function with square root, and graphing.

Note that use of calculators as specified in each test question is critical to its reliability and validity as the test measures each student’s abilities.
The skills assessed on the Arithmetic tests, along with the higher level tests, include:
- Applications
- Computational fluency
- And Conceptual understanding

Applications are often referred to as "word problems," and require students to apply math concepts to a particular scenario. Computational fluency is the skill in carrying out procedures efficiently and accurately. Conceptual understanding, which is complementary to fluency, is the ability to recognize structure in mathematical relationships in order to apply and extend in multiple useful ways.
Here is a sample question on Decimal Operations. Note that a calculator is not provided.
Here is a sample question on calculating with percents. Note that a calculator is available.

Sample Question 2

If Gabriel deposits 25% of $130 into a savings account, what is the amount of his deposit?

**Arithmetic**

(A) $5.20  
(B) $25.00  
(C) $32.50*  
(D) $97.50

Alignment: Percent  
Calculator available: 4-function
Here is a sample question on Number Comparisons and Equivalents. Note that a calculator is not available.
Here is the side-by-side comparison with the Classic Arithmetic test. Items listed in bold-face print highlight either features of the test or content topics which are common to both tests.

Remember that you can pause the video to review this screen in more detail.
Here is a brief overview of the Next-Generation Quantitative Reasoning, Algebra, and Statistics test known as QAS.

The Next Generation QAS test consists 20 multiple-choice questions.

The skills assessed include:

- Computational fluency
- Applications
- And Conceptual Understanding

An on-screen calculator is available to the student only on selected questions. For QAS, the student can select either a square root calculator or the 4-function option if the question allows a choice.
Here are the content strands tested on QAS. Beside each strand, you will see the range of questions given based by the testing algorithm based on the student’s performance. The list of strands continues on the next screen.
Content Strands

Continued

Probability and sets (1-3 questions)
• Calculating probability (simple, compound, and conditional), and defining sample spaces and events using set notation

Descriptive statistics (1-3 questions)
• Interpreting graphical displays of data (histograms, box plots, and scatterplots), describing shape and spread of a sample set, and calculating measures of center

Geometry concepts for HS Pre-Algebra (1-2 questions)
• Determining area and perimeter, circle area and circumference, and volume of prisms

Geometry concepts for HS Algebra 1 (1-2 questions)
• Creating expressions for area, perimeter, and volume, using distance formula and Pythagorean theorem, and evaluating basic geometric transformations
Here is a sample question on Ratio and Proportional Reasoning. Note that a calculator is available.

**Sample Question 1**

Water runs from a pump at a rate of 1.5 gallons per minute. At this rate, how long would it take to fill a tub with a 150-gallon capacity?

**QAS**

(A) 10 minutes
(B) 100 minutes*
(C) 225 minutes
(D) 2,250 minutes

Alignment: Ratio and proportional reasoning
Calculator available: 4-function
Sample Question 2

Here is a sample question on Descriptive Statistics. A calculator is available.

<table>
<thead>
<tr>
<th>Country</th>
<th>Approximate population (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>65.9</td>
</tr>
<tr>
<td>Germany</td>
<td>80.8</td>
</tr>
<tr>
<td>Italy</td>
<td>60.8</td>
</tr>
<tr>
<td>Spain</td>
<td>46.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>64.3</td>
</tr>
</tbody>
</table>

The table above gives the population of the 5 largest countries in the European Union in the year 2014. Which of the following is the closest to the mean population of these countries?

(A) 80.8 million
(B) 64.3 million
(C) 63.7 million*
(D) 60.8 million

Alignment: Descriptive statistics
Calculator available: 4-function
Sample Question 3

Which of the following is an equation of the line that passes through the point (0, 0) and is perpendicular to the line shown to the right?

(A) $y = \frac{5}{4}x$ *  
(B) $y = \frac{5}{4}x + 3$  
(C) $y = -\frac{4}{5}x$  
(D) $y = -\frac{4}{5}x + 3$

Alignment: Linear applications and graphs

Calculator available: 4-function

This question is on Linear Applications and Graphs. A calculator is available.
Here is another question on Linear Applications and Graphs. A calculator is available.
Here is the side-by-side comparison with the Classic Elementary Algebra test. Items listed in bold-face print highlight either features of the test or content topics which are common to both tests.

Remember that you can pause the video to review this screen in more detail.
Here is a brief overview of the Next-Generation Advanced Algebra and Functions test.

The Next Generation AAF test consists 20 multiple-choice questions.

The skills assessed include:

- Computational fluency
- Applications
- And Conceptual Understanding

An on-screen calculator is available to the student only on selected questions. For AAF, the question may provide access to a graphing calculator if appropriate.
Here are the content strands tested on AAF. Beside each strand, you will see the range of questions given by the testing algorithm based on the student’s performance. The list of strands continues on the next screen.
Radical and rational equations (1-3 questions)
- Creating radical and rational equations and functions in one variable, determining domain and range for radical and rational functions, graphing radical and rational functions, and simplifying radical and rational expressions and equations

Exponential and logarithmic equations (1-3 questions)
- Creating exponential and logarithmic equations in one and two variables, solving exponential and logarithmic equations, graphing exponential and logarithmic functions, and interpreting exponential and logarithmic functions

Geometry concepts for HS Algebra 1 (1-2 questions)
- Creating expressions for area, perimeter, and volume, using distance formula and Pythagorean theorem, and evaluating basic geometric transformations

Geometry concepts for HS Algebra 2 (1-2 questions)
- Determining volume of nonprism objects, using intersecting line theorems, using triangle similarity and congruency theorems, and using circle equations in the coordinate plane

Trigonometry (1-3 questions)
- Solving trigonometric equations, using right triangle trigonometry including special triangles, evaluating equivalent trigonometric functions, graphing trigonometric relationships, determining arc length and radian measures, and using the law of sines and the law of cosines
Sample Question 1

Function $g$ is defined by $g(x) = 3(x + 8)$. What is the value of $g(12)$?

(A) –4
(B) 20
(C) 44
(D) 60*

Alignment: Functions
Calculator available: 4-function

Here is a sample test question on Functions which has a calculator available.
Sample Question 2

A biologist puts an initial population of 500 bacteria into a growth plate. The population is expected to double every 4 hours. Which of the following equations gives the expected number of bacteria, \( n \), after \( x \) days? (24 hours = 1 day)

(A) \( n = 500(2)^x \)
(B) \( n = 500(2)^{6x} \)
(C) \( n = 500(6)^x \)
(D) \( n = 500(6)^{2x} \)

Alignment: Exponential and logarithmic equations

Calculator available: 4-function

This sample test question is on Exponential and Logarithmic Equations which has a calculator available.
This question is on Quadratics and has a square root calculator available.
Triangle EFG has right angle F, EG =10, and EF = 6. Which of the following is closest to the measure of angle E?

(A) 31°
(B) 37°
(C) 53°
(D) 64°

Note: Figure not to scale.

Alignment: Trigonometry
Calculator available: Graphing

This question focuses on Trigonometry and has a Graphing Calculator available.
Here is the side-by-side comparison with the Classic College Level Math test. Items listed in bold-face print highlight either features of the test or content topics which are common to both tests.

Remember that you can pause the video to review this screen in more detail.
Next we will review resources available to support your institution’s adoption of Next-Generation.
The ACCUPLACER Program has created a robust set of resources designed to help faculty and leadership with the process of adopting Next-Generation tests. All of these are published at the web address you see on the screen.

First is the Test Specifications document which provides detailed information for faculty including:
• The rational and process we employed when designing our new tests.
• Detailed descriptions of the contact areas tested.
• Specifics of the blueprint for each test.

Next is the Sample Questions for Students which are available for each test. They documents include sample questions with an answer key; but more importantly contain a rationale for determining correct and incorrect answers for each question.

Finally, the Program Manual, available inside ACCUPLACER under the Resources section, provides a concise listing of the blueprint for each test. In addition, Skills Insight Statement describe the skills a student likely has when their score falls in 5 different score bands. These 5 bands are divided by scores at the 25th, 50th, 75th, and 90th%iles. Note that these documents are available to the student as they review their Individual Score Report after testing.
Free Student Practice

ACCUPLACER also offers rich resources for students which can also be useful as faculty and leadership consider adoption of Next-Generation tests.

Published at the web address shown, there are many different aspects of testing discussed:

- Inside the Test gives a student-facing description of test content.
- Taking the Test provides information and suggestions on the testing process itself including:
  - Reminding students that ACCUPLACER is untimed
  - Suggestions on how to make an appointment and request disability accommodations
  - What is and what is not allowed on testing day
  - And how to request remote testing

- Information for students is posted at https://accuplacer.collegeboard.org
  - Inside the Test provides brief information on test content
  - Taking the Test provides tips on the testing process itself:
    - No Time Limit
    - Making an Appointment
    - Disability Accommodations
    - What to Bring on Test Day
    - What to Do If Your School is Located in Another State

- Information and access to the free Web Study App
  - https://accuplacerpractice.collegeboard.org
  - Runs on computer, tablet, or smartphone with Internet access
  - Practice questions with scoring and rationale for correct/incorrect answers
  - Access to both classic and next-generation versions of the test
  - Inform your students about the proper version to use
  - Great for faculty review of test content

- Also posted is information on the free Web Study App which is available at the address shown. The app, which requires Internet access, runs on any device including a computer, tablet, or smartphone. It provides practice questions which are scored and also provides rationale for both correct and incorrect answers. The app allows students to practice for the Classic or Next-Generation versions of ACCUPLACER tests so be sure to inform students about which version to use. The Study App is also a great tool for faculty to use when reviewing test questions.
Reviewing Next-Generation test content is just part of the process of setting or updating your institution’s placement policy. Your institution may choose to maintain your current policy by determining Next-Generation test scores that approximate your existing cut scores or you may wish to take this opportunity to incorporate additional measures such as High School GPA to your policy. Either way, we have resources available to help you with the process.

Posted at the address shown are several recordings on topics including:

- Methods for Setting Cut Scores
- Policy Development
- Using Multiple Measures with ACCUPLACER

And

- Details on the Reliability and Validity of ACCUPLACER
The ACCUPLACER Program offers a wide range of resources to support our users. Many of these are available on-demand 24/7.

Inside ACCUPLACER is the Resources option which contains a variety of tools including:

- Getting Started with ACCUPLACER includes a Quick Start Guide to account setup.
- The ACCUPLACER Program Manual includes information about the tests within the platform as well as information on testing policies and practices.
The ACCUPLACER Outreach Team provides professional development in many different formats. A listing of all the resources available is at the address shown.

- Some topics are presented through a live webcast. The Professional Development page provides a list of sessions available along with a link to register. Once registered, you will receive an email with instructions on joining the session.
- Many topics are available as on-demand videos and are available 24/7.
- The ACCUPLACER Account Setup presentation contains details of the process of setting up an ACCUPLACER account along with detailed step-by-step instructions. Also included are video demonstrations of each step in the process.
The ACCUPLACER Program has teams of staff members dedicated to providing support and service to our users.

The Outreach Team of Sr. Assessment Managers provides service to institutions at the campus, system, and state levels which can include consultation, training, professional development, and advocacy for student college readiness. Services can be provided through on campus, face-to-face events or virtually.

ACCUPLACER Support provides a staff of trained service agents ready to answer questions and resolve issues. Support is available 12 hours/day and can be contacted using a toll-free number, through email, and also live chat.

<table>
<thead>
<tr>
<th>The Outreach Team</th>
<th>ACCUPLACER Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Assessment Managers</td>
<td>Staff dedicated to troubleshooting, problem solving, Q/A</td>
</tr>
<tr>
<td>Provide service to institutions at the campus, system, and state levels</td>
<td>Available 12 hours/day – 6 days/week</td>
</tr>
<tr>
<td>Consultation, training, professional development, and advocacy</td>
<td>Phone: 866-607-5223</td>
</tr>
<tr>
<td>On campus, face-to-face service</td>
<td>Email: <a href="mailto:info@accuplacer.org">info@accuplacer.org</a></td>
</tr>
<tr>
<td>Virtual service via webcast and phone</td>
<td>Live chat</td>
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