Understanding Washington Comprehensive Assessment of Science (WCAS) Scores and Reports

September 20, 2018 Q&A

General

Q: Where is the Online Reporting System (ORS) located?

A: The Online Reporting System (ORS) is on the [Washington Comprehensive Assessment Program (WCAP) Portal](). Use either the Test Administrators or Test Coordinators icon to see ORS and all the testing applications. Access and login information to ORS is provided by your school district.

Q: Where can I find the Achievement level Descriptors?

A: The Achievement Level Descriptors for the WCAS are posted on the [State Testing Achievement Level Descriptor webpage]().

Q: Looking at the OSPI reporting webpage [Report Card shown on slide 21] there is a column that says alternate assessment, what exactly is that? How does it compare with the WCAS?

A: Alternate assessment refer to the Washington Access to Instruction and Measurement (WA-AIM). The WA-AIM is based on alternate achievement standards aligned to the NGSS so that students with the most significant cognitive challenges can meaningfully participate in a science assessment for state and federal accountability.

More information about alternate assessments and the WA-AIM is available on the [WA-AIM webpage]().

Q: This is my very 1st year as an assessment coordinator. Do I have to mail out test results or can I give to the child to send home in a sealed envelope?

A: We strongly suggest state test information be mailed or otherwise given directly to parents— at a back-to-school night, fall conferences, or similar event—and not given to students to take to their parents.

Reporting Areas

Q: Did I understand correctly that the percentage of point from each area of science (physical, life and earth/space) that are on the test changes from year to year? You showed a graphic early in your presentation that listed percentages / points but I wasn't sure if that is consistent each year the test is administered.

A: Yes, the percent of the WCAS in each reporting area varies as shown in the [*Test Design and Item Specifications* documents]() for grades 5, 8, and 11. Specifically, the Test Blueprint section in page 9 of those documents show the percent ranges for each reporting area.

Q: We are missing the total number of questions for each reporting area so we can't calculate the percent successful for each reporting area.
A: The Test Blueprint allows for a range of score points on the WCAS. Because the number of score points will vary from one year to the next, using a percent of points earned allows comparisons from year to year.

The percent of students meeting or exceeding the reporting area target can be found in ORS. Click the magnifying glass icon next to the group you want to find out about (district, school, teacher, or roster), then change the "What" drop down to "Reporting Area" and view the report.

Q: What are the cut scores for the Yes and No for each reporting area?[1]
A: The minimum percent needed to earn a Yes varies by grade, test form, reporting area, and year of test administration. This is because that minimum percent is determined by the percent of points Level 3 students earned on the WCAS during that test administration. If a student earns at least the minimum percent of points in a reporting area as Level 3 students earn, they will receive a Yes for that reporting area.

For the individual student, the minimum percent to earn a Yes is on the printed Individual Student Report (ISR) that will be sent to districts. Slide 25 of the presentation showed a sample ISR. The row labeled "Level 3 Range" displays that minimum percent.

Q: Why is the level 3 range for each reporting area provided on every score report, instead of the actual level the student achieved?
A: The level 3 range for each reporting area is provided to compare an individual student's performance in each area to students who scored a Level 3 on the test as a whole.

Level 3 students have met the achievement standard on the test. Comparing an individual student's performance in each area to Level 3 students shows how well that student is doing in also meeting the achievement standard.

Q: How far will we be able to drill down into the data? For example: will I be able to see if there is a strong area of instruction is around the CCC, but there are challenges with the practices?
A: No, the WCAS does not provide information at the Crosscutting Concepts (CCC) or Science and Engineering Practices levels.

The NGSS are based on _A Framework for K-12 Science Education_. The "framework emphasizes that learning about science and engineering involves integration of the knowledge of scientific explanations (i.e., content knowledge) and the practices needed to engage in scientific inquiry

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[1] The Yes and No for each reporting area is found in ORS in the "Performance on the WCAS…by Student, Reporting Area…" report.

and engineering design. Thus the framework seeks to illustrate how knowledge and practice must be intertwined in designing learning experiences in K–12 science education."[2]

The reporting of results on the WCAS reflects the integrated nature of the standards and the framework.

The reporting areas combine information about a student's understanding of the Science and Engineering Practices (SEP), the Disciplinary Core Ideas (DCI), and the Crosscutting Concepts (CCC) in each of the areas of Physical Sciences, Life Sciences, and Earth & Space Sciences. The reporting areas do not reflect only the SEP, DCI, or CCC as those should be integrated in instruction and are reported in an integrated way for the WCAS.

As one of multiple measures, the WCAS can be combined with classroom information about student performance on the SEP, DCI, and CCC to determine areas of improvement for instruction. Instruction, though, should focus on the 3-dimensional nature of the standards. It is likely this step is the most critical in achieving the vision of science instruction and learning described in the standards.

Q: In the past there has been trend data. I understand that the NGSS and WCAS are 3D. Will there be a further breakdown of the data so we can evaluate [trend data] if there are issues in SEP vs CCC, vs DCI? For example, as a cohort, this class is not identifying patterns or they are really strong on argumentation?
A: Yes, there will be trend data in subsequent years. Both the [Washington State Report Card](#) and the Online Reporting System will provide trend data that schools and districts can use to inform instruction.

As noted in the question above, the data will not be provided to compare SEP vs CCC vs DCI as these should be integrated in instruction and are reported in an integrated way for the WCAS.

Q: How can we use the reporting area percent to inform instructional practices?
A: One way to consider using the reporting area percent is to look at performance at the classroom, school or district level. If you see that, for a particular classroom, there is a large amount of success in that reporting area, you might explore what good things are happening in that classroom.

Another way to use the reporting area percent is over time. For a school, if you notice that performance in an area is below the Level 3 range for multiple years, you might consider evaluating the materials used to deliver instruction to that area for improvements.

In either way, improvements could focus on better alignment to the standards including the intent of the standards to deliver instruction in a 3-dimensional, integrated way.

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[2] *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* (2012), Part I: A Vision for K–12 Science Education, accessed online at https://www.nap.edu/read/13165/chapter/4, September 2018.

Spring 2018 Testing

Q: Were there two versions of the test at each grade level in Spring 2018? If so, did they have different questions...different range setting?

A: Yes, there were two forms at each grade level in Spring 2018. We used two forms to:

- increase the number of questions used during the Achievement Level Setting process;
- create a strong WCAS question bank for testing in subsequent years.

There was a common set of questions across these two forms so student performance could be compared. There were also some unique questions on each form.

There were not different cut scores set for the different forms. At the Achievement Level Setting, educators considered the performance of students on all questions on both forms to make their cut score recommendations.

Q: What are plans for dealing with the high numbers of students not taking the 11th grade WCAS in Spring 2018?

A: We are continuing to reach out to district and school staff to work with them to encourage students to participate in testing and to help them understand and communicate the importance of testing all students. We want to ensure staff understand that students who don't test are counted among the number of students who don't meet standard. This is reflected in the Accountability Index and the Washington School Improvement Framework (WSIF). Schools and districts that fall below a 95 percent participation rate on state tests are not eligible for any state or federal awards or recognitions.

Here are some thoughts on encouraging parents to have their child participate in state testing:

- Test results help families know if their child's learning is on track or if extra help is needed.
- Test results help educators know if their instruction is aligned with the intent of the standards, especially the 3-dimensional nature of the standards that interconnects Disciplinary Core Ideas, Crosscutting Concepts, and Science and Engineering Practices.
- Some school districts use state test results to determine a student's eligibility for special programs, such as accelerated learning opportunities.
- High school students must pass certain state assessments, or their approved alternatives, to be eligible to graduate. For the WCAS, it is the class of 2021 who must pass a science test to graduate.
- As noted in the webinar, Ready WA has a program called Opt In for Student Success. And while tailored primarily to encouraging parents and students to participate in Smarter Balanced assessments, the same ideas expressed for why a student should participate in those assessments apply to the WCAS.

Testing in High School

Q: Are there communication guidelines for districts on how to message especially why 11th grade scores are so low right now?

A: No, there are no communication guidelines specific to results, specifically the percent of student meeting standard, that may be felt to be low. There are some things to consider when thinking about WCAS results from spring 2018:

- The Spring 2018 WCAS represents a new baseline for assessing the NGSS. As a result, we really don't have a standard against to measure whether the percent of students meeting standard is "low" or even "high." Comparisons of Spring 2018 WCAS results to previous science assessment results are not recommended.
- What was the district's student participation rate for testing? As noted above, low participation rates at 11th grade negatively impact the percent of student meeting standard as shown in the Report Card. That percent includes all students expected to test.
- How are students doing who did test? Are there areas of improvement identified in district, school, or classroom reports shown in the Online Reporting System (ORS)? Note that ORS does show results only for those students who tested.

Q: Since meeting the WCAS standard is required for current 10th graders, will this year's 10th graders be able to take the WCAS in spring 2019 ... which would allow them more opportunities to pass the test before graduation?

A: For the WCAS, students should test in 11th grade. As stated above, one purpose of the test is to help families know if their child's learning is on track or if extra help is needed. The WCAS was designed to assess 3 years of high school science coursework and content, so testing after students have had that opportunity to learn is important to the value of the information provided by the test.

Information about 11th grade student performance in Spring 2018 and 2019 can help inform improvements to instruction and opportunity to learn that can better prepare current 10th graders for testing as 11th graders in the 2019–20 school year.

Q: Can potential running start students take the WCAS at the end of their sophomore year?

A: For the WCAS, students should test in 11th grade. We appreciate that the schedules of students taking Running Start classes will need to be considered to facilitate this testing. Please consider planning for that necessity early in the school year and communicate expectations and schedules well in advance of district-determined schedules for WCAS testing.

Information about timelines for when districts can administer the WCAS is posted on the [State Testing Timelines/Calendar for 2018–19 webpage.](#)

Q: Can 9th and 10th grade students take the WCAS in Spring of 2019? And if so, will it be scored?
A: For the WCAS, students should test in 11th grade. OSPI is developing a policy and communication about student testing prior to 11th grade, including whether or not the tests will be scored.

Resources and Professional Development

Q: What opportunities to participate in developing questions for the WCAS assessment are there in the 2018–19 or 2019–20 school years?
A: Professional development opportunities for the WCAS include four annual work groups: Item Cluster Writing, Content Review, Field Test Rangefinding, and Content Review with Data. Descriptions for each of these work groups (Learn more), as well as a calendar of events, can be accessed from the Science Assessment Professional Development Opportunities page.

Invitations to apply for work groups are emailed via the Science Assessment Listserv. To sign up, visit the OSPI Email Updates webpage.
1. Choose a subscription type.
2. Enter your email address/wireless phone number.
3. On the Subscriptions page, select Content Areas > Science
4. Then select the grade band(s) for which you would like to receive information.
5. If you are interested in receiving updates from other OSPI departments, you can select those areas as well.
6. Follow the directions until you have completed registration.

Q: Will there be Interim Assessments?
A: No, currently there is no plan or funds to develop interim assessments for science.

Q: Will there be release questions with student example responses at each performance level 1–4 included in this year's iteration of the Test Design and Item Specifications?
A: No, there are too few questions available for testing after one year to release any operational test questions with student responses. We will look into providing sample questions during this school year to support increased understanding of the WCAS and how it assesses the NGSS.

Q: Can we expect a 'lessons learned' document this winter?
A: Yes, we are in process of developing a "lessons learned" document. This document will provide general information gathered during item development, rangefinding, achievement level setting, and content review with data about student performance on content assessed on the WCAS in Spring 2018. Educators can use this document to help inform instruction toward the standards.

Q: Are the scoring rubrics for the different test questions going to be released to help teachers inform their own assessments or teaching strategies to better help students? Or should we just be using the achievement level descriptors as a guideline as well as the NGSS standard document?
A: The Achievement Level Descriptors (ALDs) are a good starting point to understand the expectations of performance on the WCAS. They describe the performance exhibited by students at Level 2, Level 3, or Level 4 on the WCAS. ALDs can enhance understanding of a student's academic strengths and weaknesses and guide educators in planning.

One resource that educators can use to better understand scoring on the WCAS is the Training Test. There is scoring information included in the [Online Training Test Supports document](#) for the Training Test questions.

As above, as we look into providing sample questions during this school year to support increased understanding of the WCAS and how it assesses the NGSS, we can consider including sample rubrics for those questions.