Summative Scoring of ELA and Math

Introduction

The Division of Assessment and Student Information is receiving questions about how the Smarter Balanced English Language Arts (ELA) and math assessments are being scored in spring 2022. The questions are focused on the fact that the tests given in spring 2022 are shorter than the tests given in spring 2019 and earlier, and that **Claim Level** results are not being reported in spring 2022 as they were in spring 2019 and earlier.

The ELA and math tests given in spring 2019 and earlier used the full-form Smarter Balanced test blueprint. The tests given in spring 2022 are using the adjusted-form blueprint. A comparison of the two different blueprints is available here: Summative-Assessment-Full-and-Adjusted-Form-Blueprints. The rest of this document explains the scoring of these tests—starting with the full-form blueprint then describing the adjusted-form blueprint—and includes images educators may see within the Smarter Reporting System (SRS) which is the educator-facing system for viewing student test results. The images are from the WA Sandbox version of the system which is a publicly available system that contains realistic data for fake students, which can be used for training and informational resources.

Scoring when using the full-form blueprint

All the questions from both the Computer Adaptive Test (CAT) and Performance Task (PT) portions of the student test contribute to both the overall scores and the **Claim Level** results. In the first step student responses to individual questions are scored. Questions worth 1 point are either correct (earning 1 point), or incorrect (earning 0 points). Questions worth more than 1 point can earn 0, 1, 2, 3, or 4 points.

Overall scores

The second step is the calculation of the overall test score, known as the **Scale Score**. The calculation takes all the questions the student saw across both the CAT and the PT and uses a the difficulty level of the questions the students responded to, combined with how many points the student earned for their responses to those questions, to determine the **Scale Score** for the student. The **Scale Score** is a 4-digit number between 2000 and 3000 that displays in the far-left column of the SRS results table. Next to the **Scale Score** is an **Error Band** for the score, which is also known as the Standard Error of Measure (SEM) for that student's score.





Achievement Level

The **Scale Scores** are broken into four **Achievement Levels** using cut-scores developed by educators and approved by the State Board of Education. These cut scores vary by grade and content area. Tables containing the **Scale Score Ranges** of each level can be found on the <u>Scale Scores State Assessments</u> webpage.

Claim Levels

The last step is the calculation of **Claim Levels** for each student. All the questions a student answered are broken into their claim areas, and a **Scale Score** for each claim area is determined. The claim areas are as follows.

ELA: Reading, Writing, Listening, and Research/Inquiry

Math: Concepts and Procedures, Problem Solving and Modeling & Data Analysis, and Communicating Reasoning

The scale scores for these claim areas are not visible in the SRS. Instead, some calculations are made, which include the **Error Band** from the student's overall **Scale Score**, to determine the **Claim Level** label (either Below, At/Near, or Above) for the student in that claim area.



A deeper explanation of the calculations is available in the <u>smarter-reporting-system-training-module</u> (see slides 42 through 53, including the Notes section) and in a recording of the training smarter-reporting-system-audio-training (you tube video) (watch minute 54:06 through 1:08:09).

Scoring when using the adjusted-form blueprint

The only difference with the adjusted-form blueprint is there are fewer questions from the CAT contributing to the scores than with the full-form blueprint. Student responses to individual questions are scored the same way as with the full-form blueprint.

Overall scores

Nothing has changed in the way overall scores are determined. The overall scores are calculated using all the questions in the CAT and PT and the same combination of question difficulty level and how many points the student earned for their response. The same calculations are used for the **Scale Score** and **Error Band** for each student. The scores are displayed in the SRS the same way as they would for the full-form blueprint.

Achievement Level

The **Scale Scores** for adjusted-form tests are broken into the same **Achievement Levels** using the same cut-scores as used for the full-form tests as detailed on the <u>Scale Scores State</u> <u>Assessments</u> webpage.

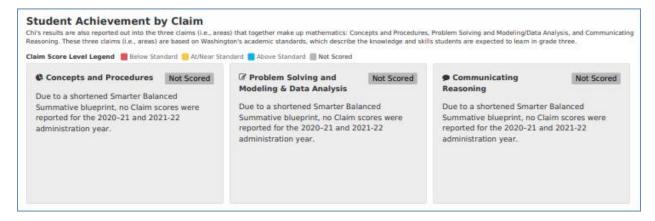
Claim Level results

When the questions a student answered on an adjusted-blueprint test are broken into their claim areas, the number of questions in each claim is too small for the resulting claim labels to be reliable. This lack of reliability is why claim scores are not calculated or reported and show as a "-" in SRS when adjusted-blueprint tests are given.



Claim Level results on Individual Student Reports (ISRs)

The dashes shown in the previous screenshots were turned into the words "Not Scored" in the Claim area section of the ISRs that come from the SRS, and a statement that, due to the shortened test blueprint, Claim scores are not reported.



Questions?

If you have any questions about this information, please contact asi@k12.wa.us.