Introduction to the Alaska System of Academic Readiness (AK STAR)

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The 2021–2022 academic year will be the first year that students participate in Alaska's new connected interim and summative assessment system known as the Alaska System of Academic Readiness (AK STAR) for English language arts (ELA) and mathematics in Grades 3–9. This solution administers MAP® Growth™ in the fall and winter and an end-of-year summative test in the spring, offering coherence across the interim and summative assessments and reducing the number of yearly test events. This document provides an overview of AK STAR, explains the adaptive testing approach for both assessments, and summarizes the reporting outcomes.

AK STAR Overview

A primary purpose of a connected interim and summative assessment system is to reduce the students' burden of taking too many tests in an academic year and to give educators more instructional utility. Summative score reporting is required by the Every Student Succeeds Act (ESSA) federal regulation, but it does not provide a student's learning progress information within an academic year as an interim assessment such as MAP Growth does.

Table 1 provides an overview of the MAP Growth and summative assessments. In Year 1 (2021–2022), students will take MAP Growth ELA and Mathematics in the fall, winter, and spring, along with the summative assessment in the spring to link the two test scales. A linking study between MAP Growth and the summative assessment using Year 1 data will connect the two test scales and allow the summative assessment to produce a linked Rasch Unit (RIT) score in addition to summative test scores. As a result, Alaska districts can forgo MAP Growth spring testing beginning in Year 2 (2022-23), which will reduce testing time while providing student growth information from winter to spring. A linking study will also enable MAP Growth scores from fall and winter to project proficiency on the new summative assessment.

Beginning in Year 2 (2022–2023), students will take MAP Growth in the fall and winter only and the summative test in the spring. MAP Growth will report a RIT score along with a projected proficiency score, which will help inform instruction throughout the year. The summative assessment will prioritize information about student performance relative to grade-level standards, producing both proficiency information for federal accountability as well as linked MAP Growth RIT scores for measuring within-year growth. This will allow districts and schools to access information about student progress over the school year and national norms comparisons for achievement and growth without having to administer separate interim and summative assessments in the spring.

Table 1. AK STAR Assessments in Year 1 (2021-22)

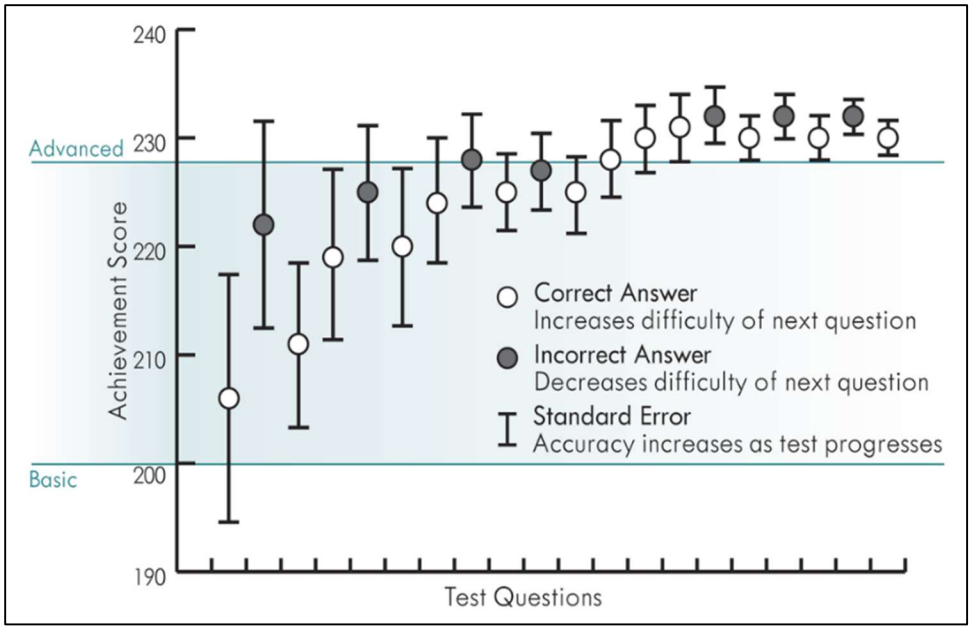
	MAP Growth	Summative
Purpose	Interim assessment administered throughout the school year to monitor student progress toward achieving a state's learning expectations	Summative assessment administered at the end of the school year to measure student proficiency and place students into achievement levels
Test Frequency	Fall, winter, and spring in Year 1; fall and winter only starting in Year 2	Spring (one time per year)
Item Pool	On- and off-grade items	On-grade items only
Adaptive Testing	Item-level adaptive (adapts item-by-item)	Y1 linear (fixed form) Y2 adaptive design
Test Length	Either when the student meets the termination criteria or reaches the maximum number of items for a test	A fixed number of items for every student
Reporting	RIT scores, growth norms, and projected proficiency on the summative assessment	Y1-Proficiency scores and achievement level distributions Y2-RIT scores will also be reported

Adaptive Testing

In general, a computerized adaptive test (CAT) provides accurate measurement of student performance by delivering a unique set of items to each individual student based on their ability level. Students with lower achievement levels (based on their answers to previous items) receive less difficult items compared to students with higher achievement levels who receive more difficult items as the test progresses. A CAT differs from a traditional fixed-form test in which all students receive the same set of items in the same order depending on the form. Overall, a CAT has several advantages over fixed-form testing, including more consideration of each individual students' ability levels, higher measurement precision using fewer items, a shorter test that requires less time to administer, and immediate score reporting. Students receive items that are more aligned to their ability levels, which reduces the frustration of getting items that are either too easy or too difficult.

As an example of a CAT, Figure 1 illustrates how a student progresses during an item-level CAT administration such as MAP Growth. The first item for a student is selected based on prior information, such as the average student ability level of their peers. If the student correctly answers the first item, a more difficult item is delivered next. If the student answers the first item incorrectly, the next item will be easier. This process continues until the standard error of measurement (SEM) termination criteria is met or the maximum number of items defined for the test has been reached.

Figure 1. Item-Level Adaptive Testing



Score Reports and Uses

Beginning in 2022–2023, students will take MAP Growth in the fall and winter and the summative test in the spring, as shown in Figure 2. As shown in Figure 3, MAP Growth will produce RIT scores that show estimates of student achievement and projected proficiency scores that predict students' likely achievement level on the spring summative assessment. Educators can use these results to identify students at risk of not meeting state proficiency standards by the end of the year. The summative assessment will produce a linked RIT score along with the summative proficiency score. The linked RIT score will provide a student's growth measure from winter to spring, whereas the summative proficiency score will be used for federal accountability to determine students' achievement levels at the end of the school year.

Figure 2. AK STAR Test Administrations

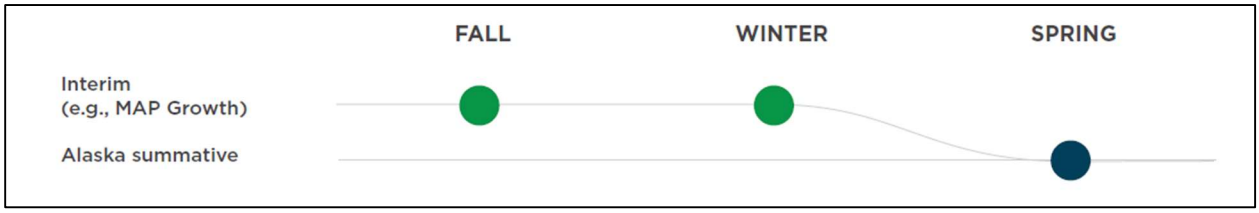


Figure 3. AK STAR Score Reporting