## Making Sense of Interim Assessment Results

## 2018-2019 ADMINISTRATIONS

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## Purpose

The purpose of this guide is to help district and campus leaders, educators, and students interpret and understand the interim assessment results provided in the Online Reporting Suite, a dynamic real-time reporting platform in the Texas Assessment Management System. For instructions on navigating to the Online Reporting Suite, refer to the Interim Assessments User's Guide available at https://texasassessment.com/administrators/technology/.

## Overview

In 2018-2019 school year, the Texas Education Agency (TEA) is providing interim assessments in grades 3-8 mathematics and reading, Algebra I, English I, and English II. The interim assessments are also available in grades 3-5 Spanish mathematics and reading.

The interim assessments will provide actionable data for educators to use to inform instruction. Two interim testing opportunities are available for use during the school year.

## Test Design

Interim assessment test forms are comparable to, but not the same as, STAAR summative test forms. The forms contain items that are fully aligned to the Texas Essential Knowledge and Skills (TEKS) and are delivered in the same application (STAAR Online Testing Platform) as the STAAR summative assessments. However, interim test forms begin with a section of questions that is the same for all students taking the form; this section is referred to as "section 1 ". After completing section 1 , students are routed to an appropriate section-2 test based on their performance in section 1 . This design is called multi-section testing (MST).

## Types of Reported Information

Reports and analyses are available at student, campus, and district levels. Reports have a summary view and expanded list views at each level.

## Student Results

After each interim administration, four types of information are reported for each student:

- a scale score,
- the probabilities of achieving each performance level (Approaches Grade Level, Meets Grade Level, and Masters Grade Level) on the corresponding STAAR summative test,
- the performance by reporting category, and
- the performance on each item.

Therefore, the reported interim assessment results are intended to answer the following questions:

1. What is the scale score that a student would most likely achieve if he or she would have taken the STAAR summative assessments at this time?
2. How likely is it that the student is going to achieve Approaches, Meets, and Masters grade level performance on the corresponding STAAR summative assessments in the coming spring 2019 primary administration?
3. Is the student relatively stronger or weaker in one reporting category?
4. How did the student do on each item?

## Student Results View




Student's Mathematics Reporting Category Performance


Probability


Student's Item Responses: 10 of 14 Correct

Category 1: Numerical Relationships: 3 of 4 Correct

| Question Number | Student Expectation | Type | Student Result | View ltem \& Response |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 5.1.A | Multiple Choice | $\checkmark$ | Q |
| 5 | 5.1.A | Muttiple Choice | $\checkmark$ | Q |
| 8 | 5.1.C | Mutiple Choice | $\times$ | $Q$ |
| 11 | 5.1.F | Multiple Choice | $\checkmark$ | Q |

Category 2: Algebraic Relationships: 3 of 4 Correct

| Question Number | Student Expectation | Type | Student Result | View Item \& Response |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 5.2.A | Muttiple Choice | $\checkmark$ | Q |
| 4 | 5.2.B | Multiple Choice | A | Q |
| 9 | 5.2. ${ }^{\text {D }}$ | Mutiple Choice | $\checkmark$ | Q |
| 13 | 5.2.E | Multiple Choice | $\checkmark$ | Q |

Category 3: Geometry \& Measurement: $\mathbf{3}$ of 3 Correct

| Question Number | Student Expectation | Type | Student Result | View Item \& Response |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 5.3.B | Multiple Choice | $\checkmark$ | Q |
| 7 | 5.3.C | Muttiple Choice | $\checkmark$ | $Q$ |
| 14 | 5.3.D | Multiple Choice | $\checkmark$ | Q |
| Category 4: Data Analysis: 1 of 3 Correct |  |  |  |  |
| Question Number | Student Expectation | Type | Student Result | View Item \& Response |
| 6 | 5.4.A | Multiple Choice | $\times$ | Q |
| 10 | 5.4.B | Multiple Choice | $\times$ | 9 |
| 12 | 5.4.C | Multiple Choice | $\checkmark$ | 9 |
| i |  | Scale Score |  |  |

1. A Student's Scale Score


One scale score will be reported for each student in each interim assessment opportunity based on the primary attempt for each test that a student completes. The most important use of an interim scale score is to help the teacher and student understand the student's progress towards mastering the Texas Essential Knowledge and Skills (TEKS), which are measured by the STAAR summative assessment.

The scale score for the interim assessment is reported on the same scale as the STAAR assessment, so the scales scores can be compared; however, score ranges will be unique for each administration.

- Learning progress or growth interpretations from interim data should be done within a grade, using score changes from the first and second interim opportunities.


## Purpose of Scale Score

## Predict Potential Performance

- If the interim administration shows student performance now and the corresponding STAAR summative assessment shows student performance in the future, the question that an interim scale score is answering is how well a student would have performed on the STAAR summative assessment had he or she taken it now.
- This is useful for teachers and students to understand each student's readiness towards STAAR in a direct way: one can compare the student's interim scale score to the STAAR assessment performance standards, which are available on the TEA website.


## Make Comparisons

- Although student-level data can provide information for evaluating, modifying, and creating individual student teaching and learning, there will inevitably be comparisons amongst students in one way or another.
- Therefore, another reason for providing the scale score is to reduce the risk of teachers and/or students comparing raw scores.
- Because the interim assessments are delivered using an adaptive method, one must understand the following important concepts before interpreting scores.

1) Students' interim raw scores (items correct out of total number of items) are not comparable because students may have taken different items.
2) When comparing two students' scale scores, it is meaningful if the two students took the same interim assessment at the same time.
3) When comparing two groups of student scale scores, it is meaningful if every student in both groups took the interim assessment at the same time.

- A student with a higher interim scale score is "more ready" for the corresponding STAAR summative test than a student with a lower interim scale score.
- Any comparison of students' scale scores that were obtained at different times should consider the learning opportunities some students had if they took the interim assessments at a later time than others.

2. A Student's Probability of Achieving Each Performance Level on the Corresponding STAAR Summative Assessment


Using a student's interim scale score, the STAAR summative assessment performance standards, and some additional information, a statistical prediction is provided on how likely the student is to achieve Approaches, Meets, and Masters grade level performance on the corresponding STAAR assessments in the coming spring 2019 primary administration.

## Purpose of Probability

- The intent of these probability scores is to provide an overall gauge on the student readiness for the upcoming spring STAAR administration.
- The readiness is represented by three probabilities, ranging from $1 \%$ to $99 \%$, with a lower value being unlikely and a higher value being more likely.
- Each student with a completed interim assessment for his or her enrolled grade will receive three probabilities:
- Probability of Achieving Approaches Grade Level
- Probability of Achieving Meets Grade Level
- Probability of Achieving Masters Grade Level
- If the student took an interim assessment at different times than the two recommended testing windows, one must take into consideration whether a student had more or less time to learn.


## Report Information

This report displays score performance of the student. The student's scores are listed, along with category strengths and probability scores.

Scale Score Range
14902057

Icon Descriptions

Score
Score Marker

Strengths


Strength
$\approx$
Neither Strength or Needs
Improvement
. Needs Improvement

## Probabilities

Probability of Masters
75-99\% Probability
50-74\% Probability
25-49\% Probability
1-24\% Probability
Probability of Meets
75-99\% Probability
50-74\% Probability 25-49\% Probability
1-24\% Probability
Probability of Approaches
75-99\% Probability
50-74\% Probability
25-49\% Probability
1-24\% Probability

## 3. A Student's Reporting Category Results



In addition to the scale score and probabilities, a student's performance in each reporting category is also provided. The reporting category results are presented in two ways: the raw score for each reporting category and the relative strength and/or weakness indicator for each reporting category.

Purpose of Reporting Category Result

- The raw score for each reporting category is shown as the number correct out of the total number of items measuring that reporting category.
- The intent of the reporting category raw score is to provide teachers with more detail about a student's performance by reporting category and should be considered with students' responses to the items (see next section).
- The intent of the strength/weakness indication is to identify if there is a reporting category that a student might be excelling at or might need more help with.
- To understand it better, a student's reporting category relative strength and/or weakness is identified by his or her performance in a reporting category relative to the performance on the entire test. For example, relative strength is reported for a reporting category if a student did not do so well on the entire test but did extremely well on the reporting category.
- Relative weakness is reported for a reporting category if a student did very well on the entire test but did poorly on the reporting category.
- Depending on when the student takes an interim assessment, it is possible that a reporting category that is identified as the student's relative weakness is one that has not been taught. It is important for teachers to use the strength/weakness indication with this in mind.

4. A Student's Performance on Each Item


- In addition to the scale score, predicted probabilities, and the reporting category relative strength and/or weakness, the student's performance on individual items are also provided, including how a student responded to each item and if that response is correct or incorrect.
- Teachers can inspect a student's response to an item to evaluate if the student is having difficulty with a certain concept, then use that information to consider the possible need for additional learning opportunities or remediation.
- Teachers can also evaluate the performance of a group of students on a collection of items that are relevant to a part of their instruction.
- By evaluating students' responses and performances on those items, teachers are able to consider the need to adjust their instruction.
- The state of Texas does not dictate scope and sequence for teaching a particular grade or subject; therefore, teachers are encouraged to consider their unique lesson plans and the sequence of instruction they use in their classroom when evaluating the items students answered correctly and incorrectly.
- It is possible that a student has not yet received instruction in a concept that is tested by one of the test items. This should be considered when reviewing performance on each item.


## Potential Remediation Strategies for Students

- Review the item-level data for students who took the same test form.
- Analyze the incorrect answers given to identify student misconceptions about a concept.
- Group students who have similar misconceptions together to teach a lesson that addresses those misconceptions.
- Go to the released forms or the formative item bank to find additional items covering that same Student Expectation and/or concept and give them a few items as an exit ticket after the lesson.
- After the spring interim testing opportunity, review the results of the students at the Approaches level.
- How close are they to Meets?
- What kind of targeted interventions could be put into practice as students get ready for the STAAR assessments?
- Have study groups before or after school that are organized by student's weakness areas.
- Explore peer tutoring and pair a student who is strong in a reporting category area with one who is weak.
- Have the students go through an activity where they review items.
- Have them summarize their learning of the expectation through an artifact (visual, written, or oral).
- Compare the spring interim test results with fall interim test results to determine effectiveness of remediation strategies.

|  |  |  |  |  | cosent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Interim Reports District: Pleasant Valley ISD Longitudinal View | ht: Paulson, Alicia | $\checkmark$ |  |  |  |
| Alicia Paulson Report <br> 2018-19 Interim G5 Mathematics - Opp 1 | Viewing: | 2018-19 Interim G5 Mathematics - Opp 1 | Grade 5 | Mather |  |

## 1. Scale Score

Student's Mathematics Reporting Category Performance


Student's Item Responses: 10 of 14 Correct

Category 1: Numerical Relationships: 3 of 4 Correct
3. Strength and Weakness


| Question Number | Student Expectation | Type | Student Result | View Item |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 5.1.A | Multiple Choice | $\checkmark$ |  |
| 5 | 5.1.A | Multiple Choice | 4. Student Responses | 0 |
| 8 | 5.1.C | Multiple Choice | $\times$ | 0 |
| 11 | 5.1.F | Multiple Choice | $\checkmark$ | Q |

Category 2: Algebraic Relationships: 3 of 4 Correct

| Question Number | Student Expectation | Type | Student Result | View Item |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 5.2.A | Multiple Choice | $\checkmark$ | Q |
| 4 | 5.2.B | Multiple Choice | X | Q |
| 9 | 5.2.D | Multiple Choice | $\checkmark$ | Q |
| 13 | 5.2.E | Multiple Choice | $\checkmark$ | 8 |

Example: A teacher can make the following interpretation of the above student report for the grade 5 mathematics interim test:

1. The student received a scale score of 1650 .
2. The student has a $90 \%$ probability of receiving Approaches grade level, $70 \%$ probability of receiving Meets, and a $50 \%$ probability of receiving Masters on the spring 2019 STAAR grade 5 mathematics test.
3. Reporting Category 3 (Geometry and Measurement) appears to be a strength for this student, whereas the student has room for improvement with Reporting Category 4 (Data Analysis), while reporting categories 1 (Numerical Relationships) and 2 (Algebraic Relationships) are neither strengths nor weaknesses.
4. In Reporting Category 1, the student responded correctly to questions 3, 5, and 11 and responded incorrectly to question 8 . The teacher can view the item to see how the student responded to question 8.

## 5. Longitudinal View -A Student's Performance Across Time

The Across Years view shows student test performance for a single subject across school years.*


* Composite image from multiple views.
- View student scale score results between opportunities to show improvement.
- Note where the student may have taken a below grade test.
- Note how the student performed when he or she re-attempted the test.
- Follow the student's progression of primary scores across years.

The School Year view shows student test performance for a single subject during the current school year.*


* Composite image from multiple views.
- Use the School Year tab to see and focus on grade and subject results for just one year at a time.

The interim assessments allow for students to be tested above or below their enrolled grade levels. For example, testing below a student's enrolled grade may be appropriate for a student who is consistently performing below grade-level expectations on classroom assignments and assessments.

The interim assessment can be used as a resource to show academic improvement within the school year. Allowing a student to test below grade level during both Opportunity 1 (fall) and Opportunity 2 (spring) may provide the student a chance to show academic improvement that may not be apparent in the student's grade-level STAAR results.

Potential Strategies for Tracking Improvement in Below-Grade Data

- In the Online Reporting Suite, review the data for students who were tested during Opportunities 1 and 2 below their enrolled grade level. Review the scale scores to see if they improved from Opportunity 1 to Opportunity 2. For example, look for an improved scale score for a grade 5 student who took a grade 3 interim assessment for Opportunities 1 and 2.
- Test a student below grade level during Opportunity 1 (for example, a grade 5 student takes a grade 3 interim assessment). If classroom assessments and assignments show student progress, test the student at the next grade level up during Opportunity 2 (for example, the grade 5 student now takes a grade 4 interim assessment). If the student performs well during Opportunity 2 , the student is progressing toward his/her enrolled grade level.

For students testing below their enrolled grade level, predictive scores (a statistical prediction of how likely the student is to achieve Approaches, Meets, and Masters) will pertain to the grade level in which the student tested, not the grade level in which the student is enrolled. Predictive scores for below grade-level tests are NOT an indication of how the student will perform on the STAAR tests.

For students tested below grade level, it is possible to then also test at the student's enrolled grade to receive probability percentages for the STAAR assessment.

## Campus Results

In the Campus Overview Report, districts or campuses can view the mean score for the campus and results by student.

- A bar chart displays student results from lowest to highest mean score.
- A pie chart displays results grouped into sections for students in the top quarter, bottom quarter, and middle of the score range.
- Districts or campuses can select a bar or pie segment to view student result information in more detail.


## Campus Overview Report*



NOTE: Reporting category 4 data does not appear in Reading, English I, and English II reports.

- Review the results within the campus.
- Look at the bottom quarter of the score range within the pie chart.
- Focus on similarities and/or differences between the students.
- Identifying results by levels (top quarter, bottom quarter, and middle half) allows you to quickly identify students who are struggling with the content and students who are excelling with the content. This will allow you to develop strategies at each of the different levels.
- Look at students that have a greater than 75\% probability of obtaining Approaches.
- How are they doing at the reporting category level?
- Are there students who are performing well (have a high raw score) in a particular reporting category?
- Are there students who have a scale score in the bottom quarter of the score range and have a reporting category flagged as a strength?
- What is different or unique for these students in comparison to the other students in the bottom quarter of the score range?
- Review the student data.
- There are opportunities for pairing struggling students with peers who are mastering a particular reporting category.
- This can be extended to planning study groups or homeroom activities where students are learning from each other.
- Bring teachers together and provide a data presentation.
- Allow them to dig into the reporting category data.
- This allows them to see that there are areas where students are doing well and where the instruction is making a difference as well as areas that need work.
- Develop critical consumers of the data so they can use it efficiently and target instruction.

In the Students Tested View, the total number of students tested in the campus is displayed.

- A list of students with data is available.
- Data shows each student's score, probabilities, and number of items correct out of the total for each reporting category.


## Campus's Student Scores Report ${ }^{*}$



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## District Results

Districts can view district and campus performance through the District Overview and Students Tested View.

- In the District Overview Report, districts can view the mean score for their district and results by campus as two reports; one report displaying graphs and the other displaying an alphabetical list of campuses.
- On the graph report, campus results are displayed in a bar chart with lowest to highest mean score.
- This report also includes a pie chart that displays results grouped into sections for campuses in the top quarter, bottom quarter, and middle of the mean score range.
- This report allows a user to quickly identify excelling and struggling campuses.
- Districts can select a bar or pie segment to view campus result information in more detail.


## District Overview Report*



## Potential Strategies for Employing these Data

- Review the campuses at the top and bottom quarter.
- Are there similarities among the campuses? Differences?
- Are there bright spots at certain campuses that should be further investigated to determine best practices that could be shared with other campuses?
- NOTE - As you are answering these questions pay close attention to the number of students taking the test at each campus. Comparisons may not be as strong with small student counts.
- Reach out to counterparts in other districts and put together working groups.
- Review the similarities and differences you see among districts.
- This could lead to exchanges of intervention or instructional strategies that are working for students in other districts that could be implemented in yours.

In the Students Tested View, the total number of students tested is displayed.

- A list of campuses with data is also available, showing the number of students who completed a test by campus and the mean score by campus.
- Users can also sort any column of the report, campus name, students completed, and mean score.


## District-Level Report, Students Tested View



## Information from Interim Data File

The interim data file is a fixed-width data file that includes all responses and results collected during interim testing. Permissioned users can download the file and paste the data into a spreadsheet with numbered columns or convert it to more readable data using spreadsheet software. The data file does not contain ready-made reports, charts, and graphs like the Online Reporting Suite. The Interim Assessment User Manual at https://www.texasassessment.com/administrators/technology/ contains information about how to download the file.

## Student Expectation Designations in the Data File

- The interim data file has been updated to include the TEKS Student Expectation designations for each item on the interim assessment. Note that because the interim is a multi-section adaptive test, Student Expectations in the data file will vary slightly by student according to which test version the student received.
- Once the data file is converted into reports using a district's local student information system, the designations can be used to identify how students performed on certain Student Expectations.

For example, a student taking a grade 5 mathematics interim assessment might answer three test questions that correspond to Student Expectation 5.2 (B). If the student missed all three items for that Student Expectation, an educator might want to analyze the student's incorrect answers and do further assessment to determine the student's understanding for that particular Student Expectation.

## Interpreting Student Expectation Performance

- To be able to compare Student Expectation performance among a group of students, you will need to reference reports from your district's data management software or from your local student information system.
- A comparison of student performance among students who took the same form (Section 1 and the same Section 2) can be used as a supplementary piece of information. Different forms can have different test items (even for the same Student Expectation); therefore, it is recommended that you only compare students who took the same form.
- When comparing students, compare only students who took the same form at relatively the same time during the school year. This ensures that the students being compared had access to relatively the same amount of instruction.
- To review a group of students' performances on each item using the data file, follow these steps and refer to the illustration below:
- First identify the students who took the same test form - those who have the same values in fields ADMINISTRATION DATE (Opportunity 1 or Opportunity 2), INTERIM TEST CODE (for the subject), and GRADE LEVEL TESTED, and same data in the same section 2 (high, medium, or low) columns;
- For grades 3-5, INTERIM TEST CODE will also include the language (English or Spanish). For example, "I3R" indicates English reading, and "IR3" indicates Spanish reading. "I3M" indicates English mathematics, and "IM3" indicates Spanish mathematics, and so on.
- For grades 3-5, students who took English mathematics can be grouped with students who took Spanish mathematics. However, students who took English reading should not be grouped with students who took Spanish reading.
- Then review the group's performance on an item or a group of items.



## Additional Resources

To learn more about the state-developed interim assessments, visit https://tea.texas.gov/student.assessment/IA/.


[^0]:    * Composite image from multiple views.
    † RC4 data does not appear in Reading, English I, and English II reports.

