Analysis and Reporting Decision Rules (Approved 7/10/2015, DataFile Rules Modified 10/1)
National Center and State Collaborative AA-AAS Spring 2015 Administration

This document details rules for analysis and reporting of the National Center and State Collaborative (NCSC) Alternate Assessment based on Alternate Achievement Standards (AA-AAS) results. This document is considered a draft until sign off has been granted. If there are rules that need to be added or modified after said sign-off, subsequent sign off will be obtained for each rule.

I. Contract Overview

A. Test Administration(s)

1. Eligible students are expected to test in Math and ELA in grades 03-08 and 11.
2. ELA includes reading and writing; in 14-15 scores for the Tier 2 Writing Prompt do not contribute to the overall ELA score. Raw writing prompt scores may be reported for instructional purposes.

B. Deliverables

1. Student Report
2. Roster Report (School)
3. Summary Report (School, District, State)
4. Student Results Data File (School, District, State)
5. Duplicate/Void Test Data (State)

II. Data Sources

A. Student Demographic Cleanup

1. States are provided the complete list of all students registered in TAO for the NCSC assessment, regardless of test status or completion, for the purposes of performing demographic cleanup, including identification of the final complete set of students expected to be tested and reported via the NCSC assessment for their state.
2. The Demographic Clean Up process enables states to:
    a. Identify and resolve instances of duplicate or erroneous registration records. States may indicate records to “merge”, “remove”, or add, as necessary.
    b. Update and add up-to-date demographic data, including the school at which a student should be reported to, for each demographic row of record.
    c. Provide state-supplied test status information, such as exemptions and invalidations to be used for reporting.
    d. Confirm or update the grade level expected for testing for each student. The grade level returned by states for testing is the grade level the student expected to be reported in.
3. See the Demographic Clean up Instructions document for additional details.

B. Student Test Cleanup

1. All tests associated with a final demographic row of record, including tests from records identified as duplicates for merging, will be compiled for the test cleanup process.
2. The test cleanup process will independently determine the final Math test and the final ELA test to be used for analysis and reporting for each student. These tests are considered the *Analysis and Reporting Dataset*. All other tests are considered *Duplicate/Void* tests and are provided to states separately for informational purposes only.
3. Off-Grade Tests:
    a. If a student's expected grade level for testing from the demographic file does not match the test grade the test is "off-grade".
    b. Off-grade tests are classified as *Duplicate/Void* and are excluded from the *Analysis and Reporting Dataset* prior to completion of additional test cleanup steps.
    c. Measured Progress will create a discrepancy alert for states of any case(s) where the **only** tests associated with a student are off-grade. For these cases, the state may:
        i. Leave the data as-is.
            - The off-grade test will be considered *Duplicate/Void*.
            - The student will be included in the *Analysis and Reporting dataset* without a test, see *C. Student Build Outs*.
        ii. Update the student's expected grade level for testing to match the test grade, if appropriate.
            - The test will be considered on-grade and processed per normal rules at the test grade level.
        iii. In either case above the state may also provide Measured Progress with an updated state-supplied status code for the student if they determine one is applicable for reporting while reviewing the scenario.
4. Multiple Test Reconciliation
    a. After off-grade tests have been resolved, if a student still has more than one associated test for the same subject, the final test for *Analysis and Reporting* is determined using the following hierarchy:
        i. Submitted/Completed Test
        ii. Closed – Early Stopping Rule Applied
        iii. In Progress
        iv. Closed – Withdrew
        v. Closed – No Longer Eligible
    b. If two or more tests have the same status above the test associated with the last (latest) date-time stamp will be used.
5. States should provide Measured Progress with all unique test-clean up scenarios that need to be handled outside of the process defined above. This "Bull Pen" file will be handled manually to ensure the correct test, as identified by the state, is used for analysis and reporting.

C. Student Build Outs

a. Student demographic rows of record from the state that do not have an on-grade test for one or both subjects are included in the *Analysis and Reporting dataset* with no test data.

D. Organization Cleanup

1. The schools and districts returned by states for each demographic row of record in the demographic cleanup file are considered the final school and district codes to be used for analysis and reporting, regardless of where a student's test was taken.
2. Measured Progress will work with states to identify the complete set of these school and district organizations, along with organization names for reporting, during the demographic file acceptance process with each state.
3. The complete set of organizations in the *Analysis and Reporting dataset* will be loaded in Breakthrough's reporting platform to enable access to the reports. States may restrict access through control of the user-accounts associated with each organization.

E. Scoring

1. Measured Progress scoring will provide the final writing prompt scores or score-condition code for each of the three individual writing prompt traits:
   a. Traits:
      i. Organization
      ii. Idea Development
      iii. Conventions
   b. Valid Scores for each trait:

Score / Code	**Description**	**Score Value** (Not Applicable in 14-15)	**Reported Value**
0, 1-3	Final Score	0, 1-3	0 = Unrelated Evidence 1 = Limited Evidence 2 = Partial Evidence 3 = Full Evidence
B	Blank Prompt	0	B = No Evidence Submitted
U	Unreadable	0	U = Unreadable
F	Foreign Language	0	F = Foreign Language
P	Copy of Prompt	0	P = Copy of Prompt
N	No Score	0	N = No Score

2. All other item scores are taken from the Breakthrough testing system. Non-responses (blank responses) to any item are scored as 0 points.

III. Student Participation and Reporting Status

A. Overview

1. Participation statuses are assigned independently for Math and ELA for each student in the final *Analysis and Reporting dataset* using state-supplied test status information in conjunction with test submission and closure data, per the hierarchy below *(Section B)*.
2. The Tier 2 Writing Prompt is considered a part of the ELA test and is reported based on the *Raw Score* reporting rules associated with the student's ELA participation status.
    a. Exception is made if the state provided a writing-prompt specific Invalidation (INV) or Administration Irregularity (IRR) code during the demographic cleanup. In this case, the ELA results are reported per the ELA participation status and the writing prompt results are reported per the Raw Score reporting rules for a participation status of INV or IRR, respectively.
    b. The writing prompt specific status code has no impact on the student's ELA participation status determination.

B. Participation Status Assignment Hierarchy (by subject: Math, ELA)

1. If the state has supplied a test status code for the subject then the Participation Status is the state provided code:
    a. **Administration Irregularity**
    b. **Invalidated**
    c. **Parental Refusal**
    d. **ELL Exempt (ELA tests only)**
    e. **Exempt**
    f. **Withdrew**
    g. **No Longer Eligible**
2. Otherwise, if the test is *Submitted* then the Participation Status is **Tested**, regardless of the number of item responses.
3. Otherwise, if the test is *Closed – No Observable Communication Mode*:
    a. And no item responses are recorded then the Participation Status is **Early Stopping Rule Applied**.
    b. And has one or more item responses recorded then the Participation Status is **Early Stopping Rule Misadministration**.
4. Otherwise, if the test is *In Progress*:
    a. And has no item responses recorded then the Participation Status is **Did Not Test**.
    b. And has one or more item responses recorded then the Participation Status is **Tested – Incomplete**.
5. Otherwise, if the test is *Closed – Withdrew* then the Participation Status is **Withdrew**.
6. Otherwise if the test is *Closed – No Longer Eligible* then the Participation Status is **No Longer Eligible**.
7. Otherwise the Participation Status is **Did Not Test**.
8. Duplicate/Void tests, including off-grade tests, are not assigned participation statuses and are excluded from the *Analysis and Reporting dataset*.

C. Participation Status Summary

Participation Status	Description	Abbrev.	MP Code	State Student Results: Item Scores[1], RS, SS, PL	School, District Data Files:		In Agg. Calcs
					Scaled Score	Perf. Level	
Tested	Tested	TES	A	Yes	Yes	Yes	Yes
Early Stopping Rule	Closed – No Observable Communication Mode, no responses.	ESR	B	Yes	Yes	Yes	Yes
Early Stopping Rule Misadministration	Closed – No Observable Communication Mode with at least 1 response.	ESM	C	Yes	Yes	No	No
Incomplete	In Progress with at least 1 response.	INC	D	Yes	Yes	No	No
* Administration Irregularity	Administration Irregularity was reported but the does not necessitate an invalidation. Scores should be interpreted with caution.	IRR	E	Yes	Yes	Yes	Yes
* Invalidated	Student-based *or* administration-based irregularity that may alter the construct of the test being measured or otherwise alter the score(s) so they are not an accurate measure of the student's skills at the time of testing.	INV	F	Yes	Yes	No	No
* Parental Refusal	Parental Refusal	PRF	G	No	No	No	No
* ELL Exempt (ELA Only)	Student meets the requirements for ELL 1st Year in the U.S. exemption from ELA.	ELL	H	No	No	No	No
* Exempt (Emergency, Medical, Other)	Student meets the requirements for exemption from the test.	EXE	I	No	No	No	No
Did Not Test	No test or an In Progress test with no responses.	DNT	J	No	No	No	No
** Withdrew	Student withdrew	WDR	K	No	No	No	No
** No Longer Eligible	Student is no longer eligible for testing via NCSC.	NLE	L	No	No	No	No
Void/Duplicate	Test is a Duplicate or Void; excluded from Analysis and Reporting Dataset.	N/A	M	Separate File from Student Results; raw (unscored) data only.			
REMOVE	Student demographic record marked by state as REMOVE	These students and all associated tests are excluded from the analysis and reporting dataset entirely and are not provided to the state.					

* Only available through a state-supplied status code.
** State-Supplied or identified by MP using the Test Closure Reason.
[1] Item Scores: Item Responses (including Writing Trait Scores if applicable) and Raw Scores are only provided in the State level Student Results data file.

IV. Calculations

A. Raw Score

1. Overall raw scores are calculated based on scores to items that are classified as "core" items for the test form. All other item response scores are excluded.
2. The "core" item list will be determined by psychometrics in collaboration with NCSC.
    a. For 14-15 the Tier 2 writing prompt is not eligible to be included as a "core" item.

B. Writing Trait Raw Scores

1. For 14-15 an overall writing score is not calculated. The individual raw writing trait scores are being reported as provided by scoring for instructional purposes.
2. For each student with an ELA participation status receiving reported raw scores the raw analytic trait scores are reported with the following exceptions:
    a. If the state provided a state-supplied writing prompt invalidation (INV) the student will not receive writing prompt scores.
    b. If the state provided a state-supplied writing prompt Administration Irregularity (IRR) the writing prompt scores will be reported and noted per the reporting rules for an Administration Irregularity (IRR).

C. Scaling and Equating

1. Psychometrics will provide the raw score to scaled score lookup for each grade and subject.

D. Performance Levels and Cut Scores

1. The following performance levels are used for NCSC Reporting:

Level	Title
1 (lowest)	Level 1
2	Level 2
3 ("Proficient")	Level 3
4 (highest)	Level 4

2. Consortia-wide NCSC cut score recommendations for each performance level are generated during standard setting for use in all NCSC reporting by grade and subject.
3. For the purpose of standard setting and guidance Level 3 is considered the "Proficient" level. NCSC *reporting* will only reference Level 1-4 and will not identify this proficient/not proficient classification. The criterion and terminology for this classification is left to the individual states to determine as appropriate.

E. Aggregate Calculations

1. Eligible Students:
    a. For school, district, and state level aggregate calculations all students are eligible to be included based on their participation status.
    b. For NCSC level aggregate calculations (technical report, item statistics) all students are eligible to be included based on their participation status, except for the following:
        i. New Mexico students identified as receiving a Spanish test translation.
    c. Note: Grade 11 Indiana students testing in Grade 10 are approved to be included.
2. Participation Counts:
    a. All eligible students are included in participation summaries based on participation status for the subject if their participation status is reported.
    b. Classification of participation statuses into reported groupings (i.e.: "the number of *Tested* students") will be documented for each individual report deliverable as necessary.
3. Results Aggregations:
    a. Results-based aggregations include, but are not limited to:
        i. Min, Max, Average Raw Score and SEM
        ii. Min, Max, Average Scaled Score and SEM
        iii. Number and percent of students by performance level
    b. Eligible students with the following participation statuses are included in results-based aggregate calculations for reporting:
        i. Tested
        ii. Early Stopping Rule
        iii. Administration Irregularity
    c. Only eligible students with a participation status of Tested (A) are included in item statistic calculations for the technical report.

F. Student Results Data File Specifics

1. All students in the *Analysis and Reporting Dataset* are included in the Student Results data files for their school, district, and state, per the Student Results Data File Layout. One file is created containing all grades for each entity with reporting results.
2. Refer to the file layout for specific data elements and valid values, as well as identification of which fields are included in the school and district files. All fields are included in the state file.
3. Student Results Data Files are comma delimited (CSV).
    a. Measured Progress will remove embedded commas from character fields in the data prior to exporting.
4. There will be one (1) record per student containing the final Math and ELA test results used for reporting.

5. School, District Files – Additional Notes:
    a. All fields marked as "No" for the school or district data files in the Student Results Data File layout are excluded entirely from school and district data files.
    b. Raw scores, scaled scores, and performance levels are set to blank for students with a participation status showing "No" for these scores in the Participation Status summary table (See Decision Rules Page 5).
6. Item responses to core items (items that contribute to a student's raw score for reporting) are included in the state file for Math and ELA., following MP's "+-data" format. See the layout for specific value details.
7. The field-test writing prompt scores for each analytic trait are provided in the state file. They are also included in school and district files for states opting to report writing. See the layout for specific value details.
8. The Test_Proctor_ID associated with each test is included in the state file. This ID corresponds to an additional lookup file that will be delivered to states (via MP FTP) with Test Proctor information.

G. State Duplicate / Void Data File

1. One file is created per state containing all non-reported tests classified as Duplicate / Void, including off-grade tests.
2. The Duplicate/Void data file will follow the same layout as the State Student Results data file layout, however, there may be several records per student depending on the number of Duplicate/Void tests. Each record may contain results for only one or both subjects.
3. The grade will reflect the grade level of the test. For off-grade tests this will differ from the grade level the student is reported under, and may differ for a single student within this file if they took tests at multiple grades.
4. Scores and performance levels are not calculated for these tests and may be blank. All available data will be provided as-is, and is provided to states for informational purposes only and should be interpreted with caution as it has not been through the full cleanup process that is applied to reported data.

Addenda:

10/1/2015: State Level Student Results File Edits:

For students with a reporting status of: PRF, ELL, EXE, DNT, WDR, or NLE item scores, raw score, scaled scores, and performance levels will be set to blank in the state student results data file. See the Participation Status Summary Table (Pg. 5) for the updated summary by status.

Note: these are already set to blank in school and district files for these statuses.