

APPENDIX Q
ANALYSIS AND REPORTING BUSINESS REQUIREMENTS

Massachusetts Comprehensive Assessment System (MCAS)

Spring 2021 MCAS Legacy High School ELA and Mathematics

Overview

Due to the COVID-19 pandemic, the Spring 2020 assessments were cancelled. Also cancelled was the November 2020 Retests in ELA and Mathematics. A Special January 2021 administration was scheduled but also cancelled. Due to these cancellations, there is a need for an assessment to test populations including 11th graders, 12th graders and adults to meet the graduation requirements or for scholarship purposes in ELA and Math. To that end, a special administration will be available to these eligible students. The tests are administered on paper and online. The forms are the forms that would have been administered in Special January 2021 administration.

Contract Code	Administration	Subject(s)	Grade(s)	Test Start	Test End
163551	Legacy HS	ELA, MATH	11, 12 and 12+	5/3/2021	6/11/2021

Inputs from the Department of Elementary and Secondary Education (DESE)

The following lists the files that, if applicable, will be used in reporting the assessment results.

File	Timeframe to receive from DESE
SIMS	February
Test Site Updates	January
Breach List	July
DESE Schtype File	January
Single School Districts File	January

Deliverables

The following deliverables will be produced by Cognia. External deliverables will be produced according to the agreed upon specifications from DESE.

1.

Deliverables	Recipient	Medium for Delivery
Student Results Datafile (aka Megafile) Layout provided by DESE	DESE	Posted on ftp site
Printer Data	SQA	Data file on deliverables
Student Results Labels	Schools	Print only
Individual Student Reports	Schools	Print and web (Available in PAN) Web files will also be posted on the ftp site for DESE to put in school drop boxes
Shipping data for printed reports	iCore Distribution	SQL table

2. 1 printed copy of the Individual Student Report will be shipped to Districts. This is the Student Parent version.
3. The Student School version will be available in PAN and provided to DESE for the school drop boxes.
4. The student school version does not include the letter to parents.

School Identification

- 1) Each school is identified by a unique eight (8) digit code
 - a) The schoolcode field in iCore is the unique identifier for each school. The first 4 digits of the schoolcode field may or may not match the districtcode field, depending on school type.
- 2) Organization type is stored in iCore and associated with the appropriate institutions in the state.
- 3) The codes in the DistrictCode field may begin with a letter. This applies to Outplacements.
 - a) District Codes stored in iCore will identify updated School Organization Types provided by DESE.

Form Definition

The tests being administered in the Legacy HS ELA and Math administration are the tests that would have been administered in the Legacy November 2020 retests administration. The Legacy November 2020 retests were cancelled due to the impact of COVID-19.

- 1) The ELA test being administered is Form K.
- 2) The Math test being administered is Form D.

AdminID	Test	Form	Session	Form Source
7	2021 MCAS Legacy HS ELA	K	Composition	E
			Session 1	E
			Session 2	E
				C
Session 3	E			
7	2021 MCAS Legacy HS Math	D	All	D

Item Types

Subject	Item Types
ELA	Composition (WR) Comprehension (MC & OR)
Math	MC, OR, SA

Valid Responses and Score Data

- 1) Multiple Choice items all have valid values
 - a) A, B, C, D, blank

- b) * multiple response (paper tests only)
- 2) Open Response / Short Answer Scores shall all be resolved with a final score
 - a) Final Score 0-max
 - b) Blank response
 - c) Not Scorable

Raw Data Value	Description	Point Value
0-max pts	Open Response / Short Answer	0-max*
B	Blank response	0

*the maximum value for an item is found in the pv max column in the test map

- 3) Writing Composition Scores are scored in two traits: Topic Development and Conventions
 - a) Each trait is double scored

Raw Data Value	Description	Reported Value	Point Value	Response Attempted
1-6 (per scorer)	Writing Composition – Topic Development	2-12	2-12	✓
1-4 (per scorer)	Writing Composition – Conventions	2-8	2-8	✓
A	Insufficient Evidence	IE	0	✓
F	Language Other than English	LO	0	✓
O	Off Topic	OT	0	✓
P	Plot Summary	PS	0	✓
I	Visible but Incomprehensible	VI	0	✓
B	Blank response		0	
N¹	Not Scorable	NS	0	✓
¹ N is not valid for the Retests				

Student Participation and Exclusions

Item and Test Attempt Rules

- 1) An MC item is considered attempted if the MC item has values: A, B, C, D, or *(paper tests only).
- 2) An OR/SA item is considered attempted if the OR/SA has a numerical score.
- 3) A test is considered attempted if the test has at least one item, MC or OR/SA, attempted according to the above item attempt rules.

Not Tested Reasons

- 1) The following Not Tested Reasons are not applicable to the MCAS Legacy HS administration:
 - a. Absent (ABS)

- b. Medically Documented Absence (MED)
 - c. Transfer (TRN)
 - d. First-year EL (LEP)
- 2) If any of these are provided in the PBT or CBT data, they will be ignored and not used to determine participation.

Student Participation Status

Student Participation Status reflects the participation of the student in the assessment.

- 1) A participation status is assigned to all students in the data
- 2) If a student has more than 1 completed test for a subject the test may be reported as DUP-duplicate tests
- 3) If a student submitted a test with no responses the test may be reported as DNT-Did Not Test
- 4) If the only test submitted by the student is a Voided test, the test may be reported as VAB-Void test
- 5) If a student falls into more than one category below within a subject, the Participation Status will be determined by applying the following hierarchy:
 - i) Did Not Test (No valid responses to any items)
 - ii) Invalidated (from Breach List)
 - iii) Incomplete (from Breach List)
 - iv) Void (from Scannable)
 - v) Duplicate Tests
 - vi) Tested, Retake
- 4) The following tables are applied after the student’s participation status is determined from the attemptedness and participation rules above.

Participation Status	Participation status code	Participation Status Abbreviation for Reporting	Test Status	Raw Score Megafile	Item Score Megafile	Item Score ISR	Scaled Score	Achievement Level
Tested, Retake	O	N/A	TR	☐	☐	☐	☐	☐
Duplicate	I	DUP	NTO	☐	☐	☐		
Void	H	VAB	NTO	☐				
Invalidated	N	INV	NTO	Depending on instructions from breach list				
Incomplete	B	INC	NTO	Depending on instructions from breach list				
Did Not Test	J	DNT	NTO					

Breach Participation Requirements

The Breach List is provided by DESE if there are students who have been reported by schools to DESE as testing irregularities or cheating cases. The DESE provides Cognia with specific instructions on the reporting of these students’ tests. All breach reporting supersedes all other reporting rules except DNT.

- 1) A breach can only be applied if the SASID is correct in the Breach list and links to a student record.
- 2) Internal Breach Codes are assigned by Cognia according to the Breach Amend Code List
- 3) All Breach List cases are identified in the megafile with the appropriate amend value for the affected subject. E=ELA, the breach was in ELA only; M=Math, the breach was in Math only; EM=ELA & Math, the breach was in both ELA and Math.
 - a) The Breach List is provided to Quality Assurance for validation of results

Accommodations

Accommodations are reported based on the test accommodations used for each subject.

Accommodations are reported only when a valid score is being reported.

1. Only special-access accommodations are reported for ELA, Composition and Math:
 - a) Read Aloud is reported if used as a special-access accommodation
 - i) Kurzweil Special-access is reported if the student received Kurzweil Special-access Accommodation (denoted by K in the megafile)
 - ii) Text-to-Speech Special-access is reported if the student received the TTS Special access accommodation (denoted by T in the megafile)
 - b) Scribe is reported
 - i) Human Scribe is reported if the student received Human Scribed Special-access Accommodation (denoted by H in the megafile)
 - ii) Speech-to-Text is reported if the student received Speech to Text as a Special-access Accommodation (denoted by S in the megafile)
- 2) If a student used the special access accommodation for the Math test:
 - a) Calculator is reported if the student received the Math Calculation Device accommodation
 - b) If the student used a calculator in the non-calculator session, the student is reported with a special-access accommodation in Math

Calculations

The Megafile includes all calculations of raw scores, item scores, scaled scores and achievement levels where applicable for each individual student test. The Individual Student Reports and Student Results Labels contain the Scaled scores and Achievement levels for each student. Additionally, each item level score is reported on the Individual Student Report. The calculations to generate the scores are defined in this section.

- 1) Total Raw Score is reported for the following participation statuses only:
 - a) Tested, Retake
 - b) Duplicate
 - c) Void
 - d) Or as otherwise stated in the breach list from DESE
- 2) To calculate the Composition score, the scores given by each scorer are added together for each trait. The trait scores are added to create the Composition score. The score range for the Composition score is 4-20.
- 3) The Total Raw Score for a student record is the sum off all scored items for each subject. For ELA, the composition score is added to the sum of all scored MC and OR items.
- 4) The sum of the MC points and the sum of OR and Writing scores are reported separately in the megafile for students with a reported achievement level.

Item Score

- 1) Item Scores are reported for the following Participation Statuses Or as otherwise stated in the breach list from DESE:
 - a) Tested, Retake
 - b) Duplicate

Scaled Score and Achievement Level

- 1) The tests are pre-equated

- 2) Scaled Scores are assigned via a lookup table provided by Psychometrics.
- 3) Scaled Scores are assigned based on the calculated total raw score for the test.
- 4) The ELA and Math Scaled Score ranges from 200 to 280 and are used to determine Achievement Levels
- 5) Achievement Levels are defined using the Scaled Score ranges:
 ELA and Math
 - a) Advanced:
 Scale score range: 260-280
 - b) Proficient:
 Scaled Score range: 240-258
 - c) Needs Improvement:
 Scaled Score range: 220-238
 - d) Failing:
 Scaled Score range: 200-218
- 6) A passing score is a scaled score greater than or equal to 220.

CD Flag

CD is set based on the student’s performance. Its value may be based on previous administrations or based on the current administration. CD is determined for each subject independently.

- 1) The valid CD values for ELA are: 1=the student has met the graduation requirement in ELA, but the student still needs to complete an Educational Proficiency Plan, 2=the student has met the graduation requirement in ELA, 0=the student has not met the graduation requirement in ELA
- 2) The valid CD values for Math are: 1=the student has met the graduation requirement for Math, but needs to complete an Educational Proficiency Plan, 2=the student has met the graduation requirement in Math, 0=the student has not met the graduation requirement in Math.
- 3) SIMS variables ELA_CD and MTH_CD are the starting point for determining the value of CD which will be reported for the current administration.
- 4) The specific wording on a student’s report is based on the earned achievement level or not tested reason and their CD value. See table below in the Student Report section for scenarios
- 5) If a student has a not tested reason for a subject, their note will be based on the CD value from SIMS, ELA_CD or MTH_CD as appropriate.
- 6) If the student has a Tested, Retake or Tested status, the CD value reported is based on both previous performance and current performance on the retest taken.
- 7) CD values assigned per the table below if SIMS CD=0:
- 8) If the SIMS CD=1 for the subject and student is assigned an achievement level in the current administration, and:
 - (1) The student’s achievement level=1 (Failing) then the reported CD value is 1
 - (2) The student’s achievement level=2 (Needs Improvement) then the reported CD value is 1
 - (3) The student’s achievement level=3 or 4 (Proficient or Advanced) then the reported CD value is 2.

Subject	Failing	Needs Improvement	Proficient or Advanced
ELA	0	1	2
Math	0	1	2

Released Items

There are no released items in the MCAS Legacy HS administration

Specific Reporting Rules

Linking IDs that do not begin with '10' are blanked out for reporting. A blank will be reported as the student ID (SASID) in all reporting deliverables. Linking IDs are used to link a student's ELA and Math tests. Dummy linking IDs are created by DESE when a valid SASID does not exist for a student.

Student Results Label(s)

Student Results Label packages are printed and shipped to the Districts to distribute to individual schools. Each package to a District contains individual School packages and printed simplex.

- 1) Student Results labels are grouped by District and School with the first page of each school or district is a Slip Sheet
 - a) The following is reported on the Slip Sheet
 - i) District Name (truncated to 30 chars)
 - ii) School Name (truncated to 30 chars)
 - iii) School Code (formatted as 4-digit districtcode-8-digit schoolcode)
 - iv) Grade/Content=**Legacy HS ELA/Math**
 - v) Report Type=**Label Report**
- 2) Each Student Results Label contain both subjects per student
 - a) The Student Results Label contain the following student information:
 - i) Student Full Name formatted as **Firstname MI. Lastname**
 - ii) State Assigned Student ID (SASID)
 - iii) Grade= **Legacy HS ELA/Math**
 - iv) School Name (truncated to 30 chars)
 - v) 8-digit School Code
 - vi) District Name (truncated to 30 chars)
 - vii) Date of Birth formatted as mm/dd/yyyy
 - viii) Test Date=Spring 2021
 - ix) Subject earned Scaled Score
 - x) Subject earned Achievement Level
- 3) If a First Name and Last Name are both blank, the name will appear as "**BLANK NAME**"
 - a) If First Name is blank, the first name will be "**BLANK**" followed by the student's Last Name.
Example, BLANK S. Smith
 - b) If Last Name is blank, the last name will be the Student's First Name followed by **BLANK**.
Example, John S. BLANK
- 4) Student Results Labels are created for all students with a Scaled Score and Achievement level for at least one subject
 - a) If a student only has a Scaled Score and Achievement level in one subject, they will have '---' reported for both their Scaled Score and Achievement Level for the other subject.
- 5) Each Student Results Label page will have up to ten (10) student result labels to a sheet
 - a) Each sheet shall be 8 ½ x 11 standard
 - b) Grouped by School, ordered alphabetically by Student Last Name, Student First Name
- 6) Each package shall not contain more than 500 pages (up to 499 Student Labels, 10 each page)

Student Report(s)

Report Packages are printed and shipped to the districts to distribute to individual schools. Each package to a District contains individual School packages and printed duplex.

- 1) One copy of the Individual Student Report is printed, for the Parent/Guardian or Adult tester.
- 2) Each Individual Student Report combines the results for both subjects for each student
- 3) Individual Student Reports are grouped by District, School and Student Name, with a Slip Sheet for each package
- 4) On the front page of the report the name is formatted as LASTNAME, FIRSTNAME MI.
 - a) If both the FirstName and LastName are missing, the name is reported as **"BLANK NAME"**
 - b) If only the FirstName is missing, then the name is reported as LASTNAME, BLANK MI. Example, SMITH, BLANK K.
 - c) If only the LastName is missing, then the name is reported as BLANK, FIRSTNAME MI. Example, BLANK, JOHN K.
- 5) On the back of the report on the bottom of the page, the name is formatted as FIRSTNAME MI. LASTNAME
 - a) If a First Name and Last Name are both blank, the name shall appear **"BLANK NAME"**
 - b) If First Name is blank, the first name will be **"BLANK"** followed by the student's Last Name. Example, BLANK S. SMITH
 - c) If Last Name is blank, the name will be the Student's First Name followed by **"BLANK"**. Example, JOHN S. BLANK
- 6) On the Scaled Score display on the front page of the report, the student's first name appears formatted as Firstname
- 7) Grouped by School, the packages contain a slip sheet displays the following as the first page of the district or school package:
 - i) District Name (truncated to 30 chars)
 - ii) School Name (truncated to 30 chars)
 - iii) School Code (formatted as 4-digit district code-8-digit school code)
 - iv) Grade/Content= **Legacy HS ELA/Math**
 - v) Report Type=**Student Report-Parent Copy**
- 8) The Student Parent version of the report is accompanied by a Letter to the Parent/Guardian or Adult Examinee.
 - a) The Letter is one page with a blank back page (printed duplex).
- 9) Each Individual Student Report has the following student information, when available:
 - i) Student Full Name (formatted as LASTNAME, FIRSTNAME MI.)
 - ii) State Assigned Student ID (SASID)
 - iii) Birth Date (mm/dd/yyyy)
 - iv) School Name (truncated to 30 chars)
 - v) District Name (truncated to 30 chars)
- 10) Individual Student Reports contain the Scaled Score, Achievement Level and whether a student has met or still has not met the graduation requirements for each subject reported. Additionally, the item scores for each subject is reported, including the Topic Development and Conventions trait scores. Topic Development (CT) is reported out of 12 points and Conventions (CC) is reported out of 8 points.
 - a) Each correct multiple-choice response is displayed as a check mark
 - b) For the writing prompt, short-answer questions, and open-response questions, the number of points earned by the student's response is shown
- 11) Student Reports are created for all students where a Scaled Score and Achievement level is reported for at least one subject. The ParentLetter flag in tblStudemo is set to 1 if the student record meets this requirement. Otherwise, it is set to 0.

- 12) At the bottom of the back page, students who have a Scaled Score and Achievement Level to report in only one subject have ‘---’ for both the Scaled Score and Achievement Level where there is no Scaled Score or Achievement Level to report
- 13) If Scaled Score and Achievement Level is not reported, the appropriate Not Tested text is displayed on the front page of the report.
- 14) If a student utilized a special-access accommodation as described above, the appropriate text is displayed on the students’ Student Report. The text is documented in daNSATextLookup.xlsx
- 15) Note text for student’s based on their achievement level and CD values are as follows:

Achievement Level	Subject	Parent/Guardian Report text
Failing	ELA	IF SIMS_ELA_CD=0, This student has performed at the <i>Failing</i> level and has not met the MCAS graduation requirement in English Language Arts, but they may be eligible for the modified CD. See above for details about MCAS graduation requirements.
		IF SIMS_ELA_CD=1, This student performed at the <i>Failing</i> level, but has already met the MCAS testing requirement in English Language Arts for graduation and requires an Educational Proficiency Plan.
		IF SIMS_ELA_CD=2, This student performed at the <i>Failing</i> level, but has already met the MCAS testing requirement in English Language Arts for graduation.
	Math	IF SIMS_MTH_CD=0 This student has performed at the <i>Failing</i> level and has not met the MCAS graduation requirement for Mathematics, but they may be eligible for the modified CD. See above for details about MCAS graduation requirements.
		IF SIMS_MTH_CD=1, This student performed at the <i>Failing</i> level, but has already met the MCAS testing requirement in Mathematics for graduation and requires an Educational Proficiency Plan.
		IF SIMS_MTH_CD=2, This student performed at the <i>Failing</i> level, but has already met the MCAS testing requirement in Mathematics for graduation.
Needs Improvement	Math	IF SIMS_CD=0 or 1 This student has performed at the <i>Needs Improvement</i> level and has met the MCAS testing requirement in Mathematics for graduation but requires an Educational Proficiency Plan.
	ELA	IF SIMS_CD=0 or 1 This student has performed at the <i>Needs Improvement</i> level and has met the MCAS testing requirement in English Language Arts for graduation but requires an Educational Proficiency Plan.
	Math	IF SIMS_CD=2 This student has performed at the <i>Needs Improvement</i> level and has already met the MCAS graduation requirement for Mathematics.
	ELA	IF SIMS_CD=2 This student has performed at the <i>Needs Improvement</i> level and has already met the MCAS graduation requirement for English Language Arts.
Proficient	Math	This student has performed at the <i>Proficient</i> level and has met the MCAS graduation requirement for Mathematics.
	ELA	This student has performed at the <i>Proficient</i> level and has met the MCAS graduation requirement for English Language Arts.
Advanced	ELA	This student has performed at the <i>Advanced</i> level and has met the MCAS graduation requirement for English Language Arts.
	Math	This student has performed at the <i>Advanced</i> level and has met the MCAS graduation requirement for Mathematics.
Incomplete (INC)	ELA	This student’s work was not complete, and no scaled score is reported. This student has not met the MCAS graduation requirement for English Language Arts, but they may be eligible for the modified CD.

Achievement Level	Subject	Parent/Guardian Report text
	Math	This student's work was not complete and no scaled score is reported. This student has not met the MCAS graduation requirement for Mathematics , but they may be eligible for the modified CD.
Invalidated (INV)	ELA	This student's English Language Arts test was invalidated.
		If SIMS ELA_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject, but they may be eligible for the modified CD.
		If SIMS ELA_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.
		If SIMS ELA_CD = 2, This student has already met the MCAS graduation requirement in this subject.
	Math	This student's Mathematics test was invalidated.
		If SIMS MTH_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject , but they may be eligible for the modified CD.
		If SIMS MTH_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.
		If SIMS MTH_CD = 2, This student has already met the MCAS graduation requirement in this subject.
Did Not Test (DNT)	Math	If SIMS MTH_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject , but they may be eligible for the modified CD.
		If SIMS MTH_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.
		If SIMS MTH_CD = 2, This student has already met the MCAS graduation requirement in this subject.
	ELA	If SIMS ELA_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject , but they may be eligible for the modified CD.
		If SIMS ELA_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.
		If SIMS ELA_CD = 2, This student has already met the MCAS graduation requirement in this subject.
Duplicate AnswerBooklets (DUP)	ELA	This student's English Language Arts test was invalidated.
		If SIMS ELA_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject, but they may be eligible for the modified CD.
		If SIMS ELA_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.
		If SIMS ELA_CD = 2, This student has already met the MCAS graduation requirement in this subject.
	Math	This student's Mathematics test was invalidated.
		If SIMS MTH_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject, but they may be eligible for the modified CD.
		If SIMS MTH_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation, but requires an Educational Proficiency Plan.

Achievement Level	Subject	Parent/Guardian Report text
		If SIMS MTH_CD = 2, This student has already met the MCAS graduation requirement in this subject.
Void Answer Booklet (VAB)	ELA	If SIMS ELA_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject, but they may be eligible for the modified CD.
		If SIMS ELA_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation but requires an Educational Proficiency Plan.
		If SIMS ELA_CD = 2, This student has already met the MCAS graduation requirement in this subject.
	Math	If SIMS MTH_CD = 0 or blank, This student has not met the MCAS graduation requirement in this subject, but they may be eligible for the modified CD.
		If SIMS MTH_CD = 1, This student has already met the MCAS testing requirement in this subject for graduation but requires an Educational Proficiency Plan.
		If SIMS MTH_CD = 2, This student has already met the MCAS graduation requirement in this subject.

16) The following text will be printed on the student report when appropriate based on participation status:

Partstatus	Not Tested Reason	Subject	Student Report Text
J	Did Not Test	ELA	[Firstname] did not test.
N	Invalidated	ELA	Test was invalidated.
B	Incomplete	ELA	Test was incomplete.
H	Void Answer Booklet	ELA	Test was voided.
I	Duplicate Answer Booklet	ELA	Test was invalidated.
J	Did Not Test	Math	[Firstname] did not test.
N	Invalidated	Math	Test was invalidated.
B	Incomplete	Math	Test was incomplete.
H	Void Answer Booklet	Math	Test was voided.
I	Duplicate Answer Booklet	Math	Test was invalidated.

I. Web Reports

In addition to being printed and shipped, Student reports will be available in Pearson Access Next (PAN) and will be posted to the ftp site for DESE to distribute to school dropboxes. The formatting rules for the web reports is the same as the printed reports.

A. PDF Structure

There will be 2 types of PDFs created.

- A school level pdf. Contains all student report pdfs for that school.
- A district level pdf. Contains all student report pdfs for that district.

B. Naming convention of the pdfs

- School Web: MALegacyELA_Math_20_21Student Parent_<sprp_sch>.pdf
- District Web: MALegacyELA_Math_20_21Student Parent_<sprp_dis>.pdf

C. Sort Order

- The school pdfs will be sorted by grade, Lastname, Firstname
- The district pdfs will be sorted by sprp_sch, grade, Lastname, Firstname

D. ProductID 4=school level pdfs and ProductID5=District level pdfs

- E. Web reports are only of the student parent version of the student report.
- F. For Cognia use:
- Recalculate group order using the above sort order rules.
 - In the rptstudent_web table recorddescriptor1 is populated with sprp_sch for the school pdfs and sprp_dis for the district pdfs
 - Relevel=dis for the district pdfs
 - School PDFs:
Pathname will be \\measuredprogress.org\deliverables\Massachusetts 20-21 Legacy HS ELA and Math\Release1\web\StudentReport\School
 - District PDFs:
Pathname will be \\measuredprogress.org\deliverables\Massachusetts 20-21 Legacy HS ELA and Math\Release1\web\StudentReport\District

Datafile Reporting

The Megafile is a data file containing all demographic and test results for each subject for each student. The student's ELA and Math records are linked and reported as one row in the file. The Megafile contains item scores, raw scores, scaled scores and achievement level and accommodations used. The datafile is a comma separated variable format with a .dat extension.

- 1) The demographic fields are either sourced from SIMS if there is a valid SASID or from the test data (online or paper)
- 2) The file is named MCAS2021_LegacyHS.dat. It is posted on the ftp site for DESE.
- 3) The writing trait scores for Topic Development and Conventions are formatted as a 2-digit char. If the score is less than 10, concatenate with a preceding 0. Example, 08.
- 4) MCASRowID
The mcasrowid is a 15-digit alpha-numeric field created in the following manner:
 - a) 2 digits = year (21)
 - b) 1 digit = test (1 = combined subjects)
 - c) 2 characters = time ("LE" for Legacy HS ELA and Math Administration)
 - d) 10 digits = bookletnumber (derived by DP)
- 5) Student Reporting Organization
 - a) Official District (sprp_dis)
 - i) If the student's testing discode+schcode is on the Exceptions List (System+School) then the official district is the sprp_dis from the Exceptions List.
 - ii) If the student's testing orgtype is 6, 13 or 22 then the official district is set to the discode concatenated with four zeroes.
 - iii) Otherwise, the official district is the sending district from SIMS (senddiscode) if it exists, concatenated with four zeroes at the end. If senddiscode is blank the official district is set to '99999999'.
 - b) Official School (sprp_sch)
 - i) If the student's testing school (discode+schcode) is on the Exceptions List (System+School) then the official school is the sprp_sch from the Exceptions List.
 - ii) If a student is from a collaborative school (testing OrgType = 3 or 4) then the official school is = 05XX0000 where XX is the 3rd and 4th digit of the testing district code.

- iii) If the student's testing orgtype is 25,31, or 50 then the official school is the official school code from SIMS (simsDiscode + SimsSchcode). If the simsDiscode and simsSchcode are blank the official school is set to the testing school code (discode+schcode). If the official school from SIMS turns out to be orgtype 22, then use the Exceptions list for official school.
- iv) Otherwise, the official school is the testing school (discode+schcode).
- c) Setting of Orgtype
 - i) Orgtype is based on the official school code
 - ii) Using the official school code link to the MCAS org data file (DA use: icore) and pull the org type (DA use: Reportcode2).
 - iii) In the event that an orgtype is not assigned, default orgtype to 'X'. This is expected due to some SPRP schools not being in the Org data file

Organization Types

Valid Organization types (Orgtypes) found in iCore

Orgtype Code	Description	
2	Special Education School	
3	Collaborative	
4	Collaborative Program	
6	Public School	
10	MA State Agency	
11	Private School	
13	Charter School	
22	Charter School Program	
25	Public ALT Ed Program	
29	Out-of-State School	
30	Adult Diploma Site	
31	MCAS Test Site	
34	SEIS Program	
37	Adult Basic Education	
50	Public School Program	
95	Special Education Program	

Using the orgtype the following table describes the rules for assigning sprp_dis and sprp_sch:

Testing School OrgType in DA	Testing School OrgType description	sprp_dis rule (no change)	sprp_sch rule (no change)
6	public school	first 4 digits + 0000	self
13	charter school	first 4 digits + 0000	self
22	charter school program	first 4 digits + 0000	test site exceptions
25	Public alternative education program	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
31	MCAS test site	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
37	Adult Basic Education - Community Services	SIMS or 99999999 if no match in SIMS	self

Testing School OrgType in DA	Testing School OrgType description	sprp_dis rule (no change)	sprp_sch rule (no change)
30	Adult Diploma Site	SIMS or 99999999 if no match in SIMS	self
4	collaborative program	SIMS or 99999999 if no match in SIMS	05xx0000
anything not above (2, 10, 11, 29, 34 in current shipping list, but may contain new types in the future)	any other types of non-public entities: 2=Approved Private Special Ed. School; 10=MA State Agency Unit; 11=Private (Non-Public/Non-Special Ed.) School; 29=School located outside of MA; 34=SEIS Program	SIMS or 99999999 if no match in SIMS	self
50	Public School Program	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
95	Special Education Program	SIMS or 99999999 if no match in SIMS	self
3	Collaborative	For registration/testing purpose only	
9	MA State Agency	For registration/testing purpose only	
5	Public School District		
12	Charter District		

A. Shipping Product Code Summary

Reporting Products

1) daStageReportShipment is populated based on the table below:

Contract Code: [163551] Description MCAS Legacy HS Admin ID 7	Report Type	Report For	Grade(s)	Report Subtype	Content Code	Qty
Student Report Parent Copy	07	1	00	02	00	1
Student Label	07	1	00	03	00	1

Analysis and Reporting Decision Rules (2020-2021) Massachusetts Comprehensive Assessment System (MCAS) February Biology

This document details rules for analysis and reporting. The final student level data used for analysis and reporting is described in the “Data Processing Specifications.” This document is considered a draft until the Massachusetts Department of Elementary and Secondary Education (DESE) signs off. If there are rules that need to be added or modified after said sign-off, ESE sign-off will be obtained for each such rule.

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Year to Year Change Highlights:

1. All students will be reported on the “Retester” template for the Student Report. This template does not include the achievement level summary display.
2. Eligibility for the February Biology test has changed to include only 9th graders and 12+ students.
3. “Orphan Schools” will be reported with generic district names in all deliverables.
4. February Biology reports will ship by themselves back to districts. In previous years they were shipped with the March Retest reports.
5. The process to find students at the border of Proficient for the reporting category comparison has been updated.
6. First time testers in grade 9 are reported as Testers (T) if they meet attemptedness. Students not at grade 9 with no prior results who meet attemptedness are reported as Tested, Retake (TR)
7. Students who are Previously Passed, will have their 2021 results reported if they pass the test. If they do not pass their results will be suppressed and reported with Performance Level “Previously Passed”.

Decision Rules

I. Contract Overview

A. Test Administration(s)

This section lists all administrations covered by these decision rules.

Admin ID		Eligible student Grade(s)	Testing medium	Items Included in Raw Score	Total Possible Raw Score	Reporting Categories (Test Map)
2	Biology	09, 12+	Paper only	Common	60	Legacy Reporting Category

B. Contract Code is 163550.

C. Deliverables List

Client and internal deliverables for the standard assessment are listed. Specifications for each deliverable are detailed in the Deliverable Specifications section provided.

Deliverable	Type	Delivery	Notes	Naming Convention
Student Labels	.pdf	FTP for Print Vendor	Printed	MCASBiologyXXXXLabelSchool_[i].pdf
Student Report – School Copy	.pdf	FTP for Pearson, DESE and Print Vendor	1. One printed copy per student 2. Available in PAN 3. Released electronically to DESE	MCASBiologyXXXXStudentSchool_[i].pdf
Student Report – Parent Copy	.pdf	FTP for Print Vendor	One printed copy per student	MCASBiologyXXXXStudentParent_[i].pdf
State Level File (Mega File Layout)	.dat	FTP for State	Consists of results for all participating students in the state	MCAS[yyyy]_FebBio.dat

Where XXXX=academic year,

yyyy=calendar year,

i=file number

II. Internal Data Sources

The following section provides details on how data are managed internally within Cognia. This information is provided for informational purposes only.

A. Test Information and Item Banking

i. Test Design

Tested Grade	Subject	Form(s)	Items included in Raw Score	Legacy Item Types
10	bio	01 = common + Matrix items	Common	MC, OR

ii. Test Map to dalref Translations (Cognia)

- i. Legacy Reporting Category is used to populate Cat2 in dairef

- iii. **Item Reporting Categories**(*daReportingCategoriesLookup, daSciRepCatCodes, tblIref*)
 - i. *Reporting Categories (2 character abbreviated code and corresponding text) are stored in daReportingCategoriesLookup (see Appendix A). Not all categories are tested at each grade and may vary by year. The sort order listed is a generic order the categories will appear in when they exist.*
 - ii. *For sciences, the reporting category is derived for each item from dalref.Cat2. The translation to the reporting category code is listed in Appendix A and stored in daSciRepCatCodes.*
- iv. **Released Items:**
 - i. *No items are released.*

B. Scoring

i. Multiple Choice Scores – Scanning

Valid multiple-choice responses are A, B, C, D, blank, and * = multiple responses. All responses except “blank” are considered a response attempt.

ii. Open Response Scores – Scoring

Raw Data Value	Reported Value	Description	Point Value	Response Attempted
0-max pts	Final score	Open Response	0-max	ü
N	0	Not Scorable	0	ü
B		Blank response	0	

C. Data Processing (DP)

i. Amend Flag

- i. The Amend flag is set by DP based on test booklet reconciliation, the DESE Breach List, and discrepancy resolution data on an individual student basis. The default Amend flag value for all students is ‘0’.
- ii. See the Amend Code Definition Lookup (Cognia Document) for valid Amend Flag values and their impact on reporting.

ii. Test Booklet Reconciliation

- i. If a student submits an answer booklet with no work and does not identify a reason for not participating in the test, the answer document is suppressed, and the student is not reported.
- ii. If a student has multiple answer booklets for the same subject from the same school with the same sessions attempted the student is considered a possible security breach until resolved:
 - a. Only one record for the student is included for reporting for the subject, as determined in the Data Processing Specifications.
 - b. The Amend flag for the subject is set to ‘1’ for the reported record.
 - c. The DESE may resolve the students and provide new instructions for reporting during subsequent reporting.

- iii. If a student's only answer booklet for a subject is Void the data are reported as stated in the Student Participation Summary and Reporting Guidelines tables.

- iii. **SciTry**

- i. SciTry is set to 1, as the only test administered is biology

III. External Data Sources

A. Breach List

- i. Students who are considered a security breach are provided by the DESE in the Breach List. These students are identified as Security Breach: Cheating and instructions for processing and reporting the tests on an individual case basis are provided.
- ii. Data Analysis adds necessary Amend flag values (> '1') and instructions to the Amend Code Definition Lookup for each distinct scenario on the Breach List.
- iii. Data Processing applies any necessary changes to the raw student record based on the DESE instructions and applies the corresponding Amend Flag value from the lookup to the student for Data Analysis processing.

B. SIMS

- i. Student demographic data is provided by the DESE for reporting use. Please see the Data Processing Specifications for internal validations and requirements of the data.
- ii. **Banked Prior Achievement Level**
 - i. *High_sPerf* in SIMS contains the prior high achievement level to be considered during participation status assignment.
 - ii. *SciNTL='1'* indicates a student has previously participated in Science as a first-year LEP student. These students are considered to have prior results in Science during the participation status assignment hierarchy. Corresponding fields for Math and ELA do not exist currently in SIMS.
 - iii. All other fields with historical score or performance information, including the CD fields, are ignored during the participation status determination for students.
 - iv. Data are stored in DPRaw for DA in *sciPerfLevelHigh*.
- iii. **Additional Historical Results**
 - i. *SciTry_Prev* contains the HS STE Science subject previously taken by a student when applicable.
 - ii. The highest earned scaled score is provided for students in High School, as available, in SIMS as *high_sScaledS*. Data are stored in DPRaw for DA as *sciScaledScore*.
 - iii. Data Processing translates all historical achievement levels that are no longer reported (e.g., Mastery) into currently reported achievement levels (this applies to all incoming historical achievement levels). See *Appendix B*

C. Student Growth Data – Not provided for Biology reporting.

D. Grade Span Lookup – Not provided for Biology reporting.

- E. **Discrepancy Site** – *Does not apply to Biology reporting.*
- F. **Alternate Assessment Override** – *Does not apply to Biology reporting.*

IV. Data Reconciliation Audits

The following cleanup will be performed on student level data prior to analysis once demographic data and reconciled test information are compiled to ensure consistency. Calculations are performed in the order listed below, and audited values are used in each subsequent check and for all analysis, reporting, and deliverables as applicable:

A. **Summarize (Blank in SIMS, this will be set by Cognia)**

Cognia will set the Summarize variable so we can produce results consistent with the Operational reporting in the summer. Summarize will be set to '0' or '1' using the following rules:

- i. If High_sPerf is blank and sciNTL = '0' then Summarize is set to '1'.
- ii. Otherwise, if High_sPerf is not blank or sciNTL = '1' then do the following:
 - i. If High_sPerf in ('A', 'P', 'NI') and StuGrade not in ('11','12','SP', ' ') then set Summarize = '1'. Note: These students are considered previously passed.
 - ii. Otherwise set Summarize = '0'

B. **LEPFirst**

- i. The LEPFirst is provided by the ESE via an additional file.
- ii. if LEPFirst = '1' then update YrsInMass = '1'.

C. **LEP**

- i. If LEPFirst = '1' then update existing LEP to '1'.

D. **LEPFLEP**

- i. If LEPFirst = '1' or LEP = '1' then update existing LEPFLEP to '1'.

E. **Official School and Official District Code**

- i. **Terminology:**
 - i. Discode = Cognia Testing Discode from DPRaw (See DP Specifications)
 - ii. SchCode = Cognia Testing SchCode from DPRaw (See DP Specifications)
 - iii. SendDiscode = Sending District from SIMS
 - iv. SimsDisCode = Official Discode from SIMS
 - v. SimsSchCode = Official SchCode from SIMS
 - vi. Testing Orgtype = Testing school (discode+schcode) Org type
 - vii. OrgType = SPRP school org type
 - viii. Exceptions List is provided to Cognia by the ESE.
 - ix. (DA Use): The exceptions list is stored in daTestSitelookup

- ii. Official District (sprp_dis)
 - i. If the student’s testing discode+schcode is on the Exceptions List (System+School) then the official district is the sprp_dis from the Exceptions List.
 - ii. If the student’s testing orgtype is 6, 13 or 22 then the official district is set to the discode concatenated with four zeroes.
 - iii. Otherwise, the official district is the sending district from SIMS (senddiscode) if it exists, concatenated with four zeroes at the end. If senddiscode is blank the official district is set to ‘99999999’.
- iii. Official School (sprp_sch)
 - i. If the student’s testing school (discode+schcode) is on the Exceptions List (System+School) then the official school is the sprp_sch from the Exceptions List.
 - ii. If a student is from a collaborative school (testing OrgType = 3 or 4) then the official school is = 05XX0000 where XX is the 3rd and 4th digit of the testing district code.
 - iii. If the student’s testing orgtype is 25 or 31 then the official school is the official school code from SIMS (simsDiscode + SimsSchcode). If the simsDiscode and simsSchcode are blank the official school is set to the testing school code (discode+schcode). If the official school from SIMS turns out to be orgtype 22, then use the Exceptions list for official school.
 - iv. Otherwise the official school is the testing school (discode+schcode).

V. Using the orgtype the following table describes the rules for assigning sprp_dis and sprp_sch:

Testing School OrgType in DA	Testing School OrgType description	sprp_dis rule (no change)	sprp_sch rule (no change)
6	public school	first 4 digits + 0000	self
13	charter school	first 4 digits + 0000	self
22	charter school program	first 4 digits + 0000	test site exceptions
25	Public alternative education program	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
31	MCAS test site	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
37	Adult Basic Education - Community Services	SIMS or 99999999 if no match in SIMS	self
30	Adult Diploma Site	SIMS or 99999999 if no match in SIMS	self
4	collaborative program	SIMS or 99999999 if no match in SIMS	05xx0000
anything not above (2, 10, 11, 29, 34 in current shipping list, but may contain new types in the future)	any other types of non-public entities: 2=Approved Private Special Ed. School; 10=MA State Agency Unit; 11=Private (Non-Public/Non-Special Ed.) School; 29=School located outside of MA; 34=SEIS Program	SIMS or 99999999 if no match in SIMS	self

Testing School OrgType in DA	Testing School OrgType description	sprp_dis rule (no change)	sprp_sch rule (no change)
50	Public School Program	SIMS or 99999999 if no match in SIMS	test site exceptions, SIMS, or testing school if no match in SIMS
95	Special Education Program	SIMS or 99999999 if no match in SIMS	self
3	Collaborative	For registration/testing purpose only	
9	MA State Agency	For registration/testing purpose only	
5	Public School District		
12	Charter District		

i. Setting of Orgtype

- i. Orgtype is based on the official school code
- ii. Using the official school code link to the MCAS org data file (DA use: icore) and pull the org type (DA use: Reportcode2).
- iii. In the event that an orgtype is not assigned, default orgtype to 'X'. This is expected due to some SPRP schools not being in the Org data file.

ii. The table below displays possible values for a school's Orgtype:

Orgtype Code	Description
2	Special Education School
3	Collaborative
4	Collaborative Program
6	Public School
10	MA State Agency
11	Private School
13	Charter School
22	Charter School Program
25	Public ALT Ed Program
29	Out-of-State School
30	Adult Diploma Site
31	MCAS Test Site
34	SEIS Program
37	Adult Basic Education
50	Public School Program
95	Special Education Program

B. YrsInSch and YrsInDis – Not provided in October SIMS for Biology reporting.
Set both of these variables to blank in the MegaFile deliverable.

C. OctEnrol (enrolled in same location since October)

- i. If sprp_sch or testing school (discode+schcode) = the official SIMS school code from October SIMS (simsDiscode + simsSchcode) then OctEnrol = Oct_off from SIMS. Otherwise set OctEnrol= '0'.

D. **ConEnrol** (*continuously enrolled for 2 years*) – Not provided in October SIMS for Biology Reporting.

E. **Historical Scores and Growth for Reporting** (Yr1, Yr2, Yr3) – Not provided in October SIMS for Biology reporting.

F. **SciTry_Prev** (*previous science subject tested*) – Not used as part of the Biology reporting.

G. **YrsInMass and YrsInMass_Num**

- i. YrsInMass and YrsInMass_Num are now reported for all students. These are no longer blanked out for non-LEP students.

V. Student Participation and Reporting Status

A. Basic Definitions

The following criteria are defined for use during the participation status assignment hierarchy. Students may meet the criteria for multiple definitions, but during the hierarchy are assigned a single final participation status.

i. **Standard Test Attemptedness**

- i. A student is considered to have **met attemptedness** if they have a response attempt for at least one common item in each test session.
- ii. A student is considered to have **partially attempted** if they have a response attempt to at least one common item, but they do not have a common item attempted in every session (has at least 1 session with no common items attempted).
- iii. All other students are considered to have **not attempted**.

ii. **Not Tested Indicators**

The following Not Tested reasons may be bubbled on the student's answer booklet.

- i. Absent (ignored)
- ii. Medically Excused Absent (MED)

iii. **Transfer**

- i. If either the Added or Removed bubble from the SRB is set to '1' then the student is considered to have transferred during the test administration.

iv. **Tested Alternate Assessment**- Does not apply to Biology reporting.

v. **Void**

- i. Students whose only answer booklet has been voided (*VoidSci* = '1') are considered Void and reported as stated in the Student Participation Summary and Reporting Guidelines tables.

vi. **Prior Results**

i. **No Prior Results**

Students with a blank High_sPerf and sciNTL ≠ '1' from SIMS are considered to not have prior results.

ii. **Previously Passed**

Students with a High_sPerf from SIMS in ('A', 'P', 'NI') are considered to have previously passed the subject, regardless of sciNTL value.

iii. **Previously Failed**

Students with a High_sPerf from SIMS in ('F', 'PRG', 'EMG', 'AWR', and 'INP') are considered to have previously failed the subject.

iv. **Previously First Year LEP**

- a. Students with SciNTL = '1' from SIMS are considered to have previously participated in science as a First Year LEP student.
 - If High_sPerf is not a Previously Passed status and SciNTL = '1', the student is considered Previously Failed.

B. Participation Status Assignment Hierarchy

- i. **Breach List** (*Amend Flag > '1' assign participation status per standard hierarchy, all rules are then trumped by specific breach instructions*)
- ii. **Void**
 - i. (Partstatus = 'H')
- iii. **Multiple Answer Booklets** (*Amend='1'*)
 - i. (PartStatus='I').
- iv. **Summarize = '1'**:
 - i. Without prior results:
 - a. If the student *meets attemptedness and Stugrade='09'* then: **Tested** (PartStatus = 'Z').
 - b. If the student *meets attemptedness and Stugrade not equal to '09'* then: **Tested Not Accountable (Retest)** (PartStatus = 'Q').
 - c. If the student *partially attempted or did not attempt*:
 - If the student is a Transfer student then: **Not Tested Transfer** (PartStatus='D').
 - Otherwise if MED then: **Not Tested Medically Excused** (PartStatus='G').
 - Otherwise: **Did Not Test** (PartStatus='S').
 - ii. Previously Failed:
 - a. If the student *meets attemptedness* then: **Tested Accountable Retest** (PartStatus='Y').
 - b. If the student *partially attempted or did not attempt* then: **Not Tested Accountable Retest** (PartStatus='L').
 - iii. Previously Passed:
 - a. If the student *did not attempt, partially attempted or meets attemptedness* then: **Previously Passed** (PartStatus = 'K').
- v. **Summarize = '0'** (regardless of any prior test results):
 - i. If the student *meets attemptedness* then: **Tested Not Accountable (Retest)** (PartStatus = 'R').

- ii. Otherwise, if the student *partially attempted* then: **Partially Tested Not Accountable (Retest)** (PartStatus = 'B').
- iii. Otherwise, if the student *did not attempt* then: **Not Tested Not Accountable (Retest)** (PartStatus = 'J').

C. Participation Status Summary

Summarize	Prior Results	Description**	Part Status	Test Stat*
n/a	n/a	Breach	<i>Breach Instructions are applied at the student level regardless of participation status and are identified by Amend > '1'</i>	
		Void (Preliminary Only)	H	NTO
		Multiple Answer Documents (Security Breach)	I	NTO
		Invalidated (Only assigned via Breach List)	N	NTO
1	n/a	Tested	Z	T*
		Tested Not Accountable (Retest)	Q	TR*
		Not Tested (/Partially Tested) - Transfer	D	NTO
		Not Tested (/Partially Tested) – Medically Excused Absent	G	NTM
		Not Tested (/Partially Tested) – Absent**	E	NTA
		Not Tested (/Partially Tested) – Did not test	S	NTO
	Prev. Failed	Tested Accountable Retest**	Y	TR*
	Prev. Failed	Previously Failed (Not Tested /Partially Tested Accountable Retest)**	L	NTO*
	Prev. Passed	Previously Passed	K	NTO*
	0	Any	Tested Not Accountable (Retest)	R
Partially Tested Not Accountable (Retest)			B	NTO*
Not Tested Not Accountable (Retest)			J	NTO*
* Student results achieved while First-year LEP, or students currently First-year LEP (see rptLEPFirst calculation) are reported with TestStat = "NTL" in place of listed TestStat (all subjects). See Calculations by Participation Status Summary Table for more details.				
** These statuses are not achievable during the biology test. All students with prior test scores are included in the summarize = '0' statuses, and students who return a blank answer document are suppressed and not reported.				

VI. Calculations

A. Rounding Rules

Calculation	Rounded (to the nearest)
Student Counts	Whole Number
Percents	Whole Number

B. Psychometric Input

i. Item Analysis Interactions Specific for MCAS

- i.* Below are MCAS-specific conditions programmed within the standard Item Analysis System (DAMS). Any changes to the handling of these cases need to be vetted against this system to ensure accurate scoring and item calculations.

ii. Item Analysis Student Inclusion/Exclusion (ExSci)

- i.* Only first-time test takers that are not first-year LEP (Partstatus = 'Z' and rptLEPsci='0') are included for item analysis
- ii.* All other students are excluded (ExSci = '1').
- iii.* If an included student does not attempt at least one of the first 10 items (common or matrix/field-test) they are excluded (ExSci = '1').

C. Scaling, Equating, and Item Statistics

- i.* **Item statistics will not be calculated as the matrix items included in the legacy tests have previously been administered.**

ii. Scaling

- **Psychometrics will apply a pre-equated solution for scaling**
- i.* Scaling is done using a lookup table provided by psychometrics and the student's overall raw score.
- ii.* The scaled score lookup achievable scaled scores are always even numbers and are between 200 and 280 every year.

D. Reporting Category Comparison

- i.* Students are compared to students at the border of Proficient for each reporting category
- ii.* The goal is to use at least 50 students at the border of Proficient for the comparison
- iii.* Only students with partstatus='Z' are included
- iv.* In order to reach at least 50 students around the 240 (Proficient) cut, we will start with scaled scores in the following order with 240, 242, 238, 244, 236

E. Achievement Level Coding

- i.* The MCAS Standard Assessment has four possible achievement levels, assigned to students using the raw to scale score lookup provided by psychometrics.
- ii.* Needs Improvement (PerfLevel = '2') or higher is considered "Passing".

MCAS Achievement Level	MCAS Description
1	Failing (F)
2	Needs Improvement (NI)
3	Proficient (P)
4	Advanced (A)

F. Student Level Calculations

i. Calculations by Participation Status Summary

Summarize	Prior Results	Description ²	Part Stat	rptLEPsci ¹	Test Stat	Current Year Reporting Results ('---' indicates data are blank)					Aggregation Results		
						Raw Scores	Item Scores	rScaled Score (Cognia Reports)	Achievement Level (rPerfLevel, mfPerfLev)	mfScaledScore	Achievement Level (Perf2/mfPerf2)	CPI / Numin	Assess
n/a		Breach	<i>Breach Instructions are applied at the student level regardless of participation status and are identified by Amend > '1'</i>										
		Void	H	any	NTO	earned	earned	---	VAB	---	---	---	---
		Multiple Answer Documents Invalidated	I	any	NTO	earned	earned	---	DUP	---	---	---	---
1		Tested	Z	0	T	earned	earned	earned	earned	earned	earned	---	---
	1			NTL	Pass: earned Else: ---			Pass: earned Else: LEP	Pass: earned Else: ---	---	---		
		Not Tested - Transfer	D	any	NTO	earned		Pass: earned Else: ---	Pass: earned Else: TRN	Pass: earned Else: ---	---	---	---
		Not Tested – Medically Excused Absent	G	any	NTM				Pass: earned Else: MED		---	---	
		Not Tested – Absent ²	E	any	NTA				Pass: earned Else: ABS		---	---	
		Not Tested – Did not Test	S	any	NTO				Pass: earned Else: INC		---	---	
		Tested Not Accountable (Retest)	Q	0	TR	earned	earned	earned	earned	earned	earned	---	---
	1			NTL	Pass: earned Else: ---			Pass: earned Else: LEP	Pass: earned Else: ---	---	---		
		Tested Accountable Retest ²	Y	0	TR	earned	earned	Earned	earned	highest	highest	---	---
	1			NTL	Pass: earned Else: ---			Pass: earned Else: LEP	Pass: highest Else: ---	---	---		
	Previously Failed ²	L	0	NTO	Pass: earned Else: ---	Pass: earned Else: ---	Pass: earned Else: ---	Pass: earned Else: PRF	highest	highest	---	---	
1			NTL	Pass: earned Else: ---	Pass: earned Else: LEP	Pass: highest Else: ---	---	---					
	Previously Passed	K	0	NTO			Pass: earned		---	---	---	---	

Summarize	Prior Results	Description ²	Part Stat	rptLEPsci ¹	Test Stat	Current Year Reporting Results ('---' indicates data are blank)				Aggregation Results			
						Raw Scores	Item Scores	rScaled Score (Cognia Reports)	Achievement Level (rPerfLevel, mfPerfLev)	mfScaledScore	Achievement Level (Perf2/mfPerf2)	CPI / Numin	Assess
				1	NTL	Pass: earned Else: ---	Pass: earned Else: ---	Else: ---	Pass: earned Else: PAS Pass: earned Else: LEP	---	---	---	---
0	Tested Not Accountable (Retest)	R	0	TR	earned	earned	earned	earned	earned	---	---	---	---
			1	NTL			Pass: earned Else: ---	Pass: earned Else: LEP	Pass: earned Else: ---	---	---	---	
	Partially Tested Not Accountable (Retest)	B	Any	NTO	earned	earned	Pass: earned Else: ---	Pass: earned Else: INC	Pass: earned Else: ---	---	---	---	
	Not Tested Not Accountable (Retest)	J	Any	NTO	---	---	---	DNT	---	---	---	---	

¹ rptLEP is LEPFirst for all grades/subjects/participation statuses that do not have prior results. It is set to the audited version of LEPFirst. See calculations section for details.
² These statuses are not achievable during the biology test.

- ii. **StudentID** (tblStudemo)
 - i. StudentID = rptStudentID from DPRaw (verified SASID).
- iii. **Accommodations and Accommodation Footnotes** (tblStudemo)
 - i. Standard Accommodations:
 - a. Accom_s = '1' if the student receives any accommodations in Science, otherwise set it to blank.
- iv. **Attempt Status** (tblStudemo)
 - i. AttemptSci indicates if a student fully meets attemptedness, or did not attempt the subject, based on the definition of attemptedness in *section VI.A.i*
 - ii. Calculated for all participation statuses, values:
 - a. 'F' = Fully Meets Attemptedness
 - b. 'P' = Partial Attempt
 - c. 'N' = No Attempt
- v. **ParentLetter** (tblStudemo)
 - i. The Parent Letter flag is set to '0' to indicate that a student should not receive a Parent/Guardian Report or Student Results Label in the following cases:
 - a. Void (PartStatus='H')
 - b. Duplicate (PartStatus='I')
 - ii. Class Pack Identifiers (Cognia) for printing the School and Parent version of the Parent/Guardian Report as well as the Student Results Labels are produced for all students with ParentLetter = '1'.

vi. **Reporting First Year LEP Status (rptLEPsci) (tblStudemo)**

- i. RptLEP is determined for each subject based on current year partstatus, test attemptedness, First Year LEP status, and Prior First Year LEP Status (where applicable) in order to determine if a student's results should be considered achieved while under First-Year LEP status or as currently First-year LEP. This takes into consideration the prior status of the student when prior results are eligible for accountability (currently only allowed in Science).
- ii. For all participation statuses that are considered Not Accountable rptLEPsci = LEPFirst.
- iii. Otherwise, if the student is considered Accountable then:
 - a. If the student has prior results:
 - If the student meets attemptedness this year (Attempt= 'F') then: rptLEPsci = LEPFirst.
 - If the student partially attempts or does not attempt this year (Attempts_{sci} = 'P' or 'N') then:
 - rptLEPsci = '1' if either LEPFirst = '1' or sciNTL = '1'.
 - Otherwise rptLEPsci = '0'.
 - b. If the student does not have prior results then rptLEPsci = LEPFirst.

vii. **Alt**

- i. sAlt is set to blank for all students as the Alt is not available during the Biology reporting.

viii. **TestStat (TeststatusSci in tblStudemo)**

- i. sTestStat is assigned based on the student's participation status, rptLEP, and possible breach codes for the subject. It is not dependent on scores. See the Participation Status Summary table on page 16.

ix. **SpecialEd (tblStudemo)**

- i. SpecialEd is taken from Sped_off in SIMS. If it is blank it is defaulted to '0'.

x. **Sims CD (tblStudemo)**

- i. The latest CD value from SIMS for Science is stored for each student as-is, without any additional formatting as sci_CD.

xi. **rptSciTry (tblStudemo, updated during tblScoredItem)**

- i. SciTry is provided by Data Processing. For students that Previously Failed the SciTry will reflect the current-year science subject submitted and any submitted items will be scored.
- ii. rptSciTry is then set to SciTry for tblStudemo and item analysis.
- iii. During tblScoredItem processing if it is determined that a student's prior science results should be reported (instead of the current test), rptSciTry will be updated to reflect the prior science subject and any item responses from the current test will be blanked.

- xii. **tblIref** (*ItemOrder, RepCatCode, Released*)
 - i. The released item order is the order in which items appear in the Released Item Document, stored in tblIref.ItemOrder.
 - a. Includes common, non-flawed items only.
 - b. Items are ordered in order of test position.
 - c. Item responses in tblScoredItem are stored according to ItemOrder, not position.
 - ii. Released = '0' (all items are unreleased)
 - iii. RepCatCode is the 2-character reporting category code for each item:
 - a. Assigned by dalref.Cat2 for Science using daSciRepCatCodes.

- xiii. **tblPointsPossible** (*Reporting Category Points Possible, RepOrder*)
 - i. Common, non-flawed items (from tblIref) are summarized by reporting category and at the total test level in tblPointsPossible by grade, subject, and reporder.
 - a. Points = the total points possible in each reporting category by grade and subject and reporting category.
 - b. RepOrder = the reporting category order.
 - The unique list of existing reporting categories in a grade and subject are ordered by the generic sort order from daReportCategoryLookup and re-numbered from 1-max number of reporting categories.
 - The total test is set as RepOrder = 0.
 - c. RepCatCode is the 2-character reporting category code, and RepCatText is the associated text. For RepOrder = '0' RepCatCode = '00', and RepCatText = 'Total'.

- xiv. **Raw Scores** (*tblScoredItem*)
 - i. Overall Raw Score
 - a. The student's overall raw score is the sum of scores for all common items.
 - b. If a student has a partstatus that does not receive reported raw scores or if the student did not attempt any items (AttemptSci='N') then the raw score is set to blank after all subsequent calculations are complete.

- xv. **Points Earned** (*tblScoredItem*)
 - i. MCpts = number of common multiple-choice points earned in the test for the given subject.
 - ii. ORpts = number of common open response, short answer, and short response points earned in the test for the given subject.
 - iii. If a student does not receive reported raw scores these calculations are set to blank.

- xvi. **Reporting Category Points Earned** (*tblScoredItem*)
 - i. The total points earned, and the percent of possible points earned by the student are calculated by reporting category and stored in nRepCatx and pRepCatx where x is the RepOrder from tblPointsPossible.
 - ii. Calculations include all common items.
 - iii. If a student does not receive reported raw scores the number of points earned, and the percent of possible points earned are set to blank.

- xvii. **Item Responses** (*tblScoredItem*)
- i. If a student has a participation status that does not receive reported item scores, or does not receive item scores because of attempt status, pass requirements or rptLEP conditions, all item responses will be blanked out (NULL) after raw score calculations are complete.
 - ii. Otherwise, re-formatted and re-ordered (by released item order) responses to all common items are reported and stored in tblScoredItem to support the student report and megafire deliverables :
 - a. Released OR items: the item score or not scorable code is reported. Responses of 'B' (blank) are set to NULL.
 - b. Released MC items: the plus-data from daPlusData is stored, where a "+" indicates a correct response and an alpha character (A, B, C, D, *) indicates an incorrect response choice.
- xviii. **Current-Year Reporting Results** (*tblScoredItem*)
- i. Information stored in ScaledScore, Perflevel, rScaledScore, and rPerflevel are based on current year test results only. See the **Calculations by Participation Status Summary** table for details.
 - ii. **ScaledScore**
 - a. Current-year scaled score results that are eligible to earn a current year scaled score. Conditions based on pass/fail, rptLEP or breach codes are not applied. This is an internal Cognia field that is not directly reported.
 - b. Blank for students not eligible to receive a scaled score based solely on participation status.
 - iii. **PerfLevel**
 - a. Earned current-year achievement level based on scaledscore (1-4). Conditions based on pass/fail, rptLEP, or breach codes are not applied.
 - b. If the student does not receive an achievement level based solely on partstatus PerfLevel is blank.
 - c. Valid Values: numeric achievement levels (1-4) or blank. Internal Cognia field that is not directly reported.
 - iv. **rScaledScore** (*Cognia reporting – labels and student report*)
 - a. rScaledScore is the current year earned scaled score for Cognia reporting purposes.
 - b. rScaledScore = ScaledScore, with suppression based on pass/fail status, rptEP, or breach codes applied from the participation status summary table.
 - v. **rPerfLevel** (*Cognia reporting – labels and student report, mfPerfLev*)
 - a. rPerfLevel is the current year achievement level or partstatus code for Cognia reporting purposes.
 - b. rPerfLevel = Perflevel, modified based on pass/fail status, rptLEP, or breach codes for reporting as follows:
 - If perflevel = '1' and rptLEPsci = '1' and the student has a partstatus that receives the text "LEP" in place of a non-passing achievement level then rPerfLevel = 'F'.
 - Otherwise, if perflevel is blank then rPerflevel = partstatus.

- c. If a student has a breach code then rPerfLevel is assigned per the breach instructions to override any other standard rules. Valid values: numeric achievement levels (1-4) and partstatus codes.
- vi. **mfPerfLev** (megafile: sPerfLev)
 - a. Formatted rPerfLevel (current year reporting results) to contain either the student's achievement level abbreviated text, or 3-character participation status code for all students (e.g. 'P' or 'TRN').
- xix. **Aggregation Results** (tblScoredItem)
 - i. *Aggregation and Accountability Results combine prior and current results, where applicable. See the **Error! Reference source not found.** table for details.*
 - ii. **mfScaledScore** (megafile: sscaleds)
 - a. For Accountable students mfScaledScore is populated with the current year scaled score.
For Not-Accountable students mfScaledScore is populated with current year results as applicable.
 - b. mfScaledScore is populated as follows for Accountable students:
 - mfScaledScore = rScaledScore for First Time Testers and First Time Testers that did not meet attemptedness (ABS, MED, TRN).
 - mfScaledScore = Highest between rScaledScore and the prior highest ScaledScore (sciScaledScore from DPRaw) for Accountable Retest Students.
 - mfScaledScore = Prior highest scaled score for Previously Passed students (sciScaledScore] from DPRaw).
 - Note: if sciScaledScore is blank for the above scenario, the student passed via appeals and an accurate scaled score may not be available. mfScaledScore is left blank.
 - Otherwise mfScaledScore is blank.
 - c. If rptLEP = '1' and the student's mfScaledScore (as determined above) is considered Failing, then mfScaledScore is set to blank.
 - d. mfScaledScore = rScaledScore for Not-Accountable students.
 - iii. **Perf2** (Cognia aggregate calculations)
 - a. Populated with the achievement level for Cognia aggregate calculations and to support the megafile Perf2 using current year results.
 - b. Perf2 is blank for all students with rptLEPsci = '1'.
 - c. Otherwise Perf2 is populated as follows for Accountable or Grade 09 students:
 - Perf2 = rPerfLevel for First Time Testers (1-4, '6' is translated to '1').
 - Perf2 is blank for First Time Testers that did not meet attemptedness (ABS, MED, TRN).
 - d. Otherwise perf2 is blank. Perf2 is blank for all Not-Accountable students.
 - iv. **mfPerf2** (megafile: sPerf2)

- a. Perf2 formatted to contain the student’s achievement level abbreviated text (using Standard Assessment text only, e.g. ‘P’ or ‘A’). Blank if Perf2 is blank.

- xx. **Competency: Updating Sci_CD (mfCD in tblScoredItem)**
 - i. These variables represent whether or not a student has met the testing graduation requirement for the subject, combining prior CD information from SIMS with the current test results.
 - ii. The updated mfCD fields begin with the prior CD value from SIMS (studemo SIMS_sciCD) for all students, regardless of participation status on this year’s test. The prior value may be blank for students that have not previously tested in a subject.
 - iii. The mfCD fields are then updated using current year scaled score results (rscaledscore) if and only if the CD value increases, otherwise the prior value is retained:
 - iv. For Science:
 - a. If scaled score \geq 220 then CD = ‘1’.
 - b. Otherwise CD is ‘0’.

- xxi. **Graduation Requirement Footnote (CDFootnote) (tblScoredItem)**
 - i. The graduation requirement footnote is for High School students and indicates if a student has met, previously met, or still needs to meet the testing requirements for graduation.
 - ii. Using the previous CD value from SIMS (tblstudemo.SIMS_sciCD) and the updated CD value incorporating current test results (tblScoredItem.mfCD):
 - a. If SIMS_[sub]CD is ‘1’ or ‘2’ then CDFootnote = ‘4’ (*Already Met*).
 - b. Otherwise:
 - If mfCD = ‘0’ then CDFootnote = ‘1’ (*Not Met*).
 - If mfCD = ‘1’ then CDFootnote = ‘3’ (*Met*).
 - iii. For Student Report text see *Appendix C*.
- xxii. **Composite Performance Index (CPI) Points** – *Not calculated for Biology reporting.*
- xxiii. **NumIn** – *Not calculated for Biology reporting.*
- xxiv. **Assess** – *Not calculated for Biology reporting.*
- xxv. **Student Growth Percentile (GP) (tblScoredItem)** – *Not calculated for Biology reporting.*
- xxvi. **Complexity (tblScoredItem)** – *Not calculated for Biology reporting.*

G. Aggregate Calculations

i. Aggregation Summary

These rules are applied to all aggregate calculations. Any additional rules specific to a particular calculation will be listed under the rules for the calculation.

- i. Single School District List is provided by ESE to Cognia.
- ii. (DA Use): The Single School District List is stored in daSingleSchDisLookup.
- iii. Only first-time testers (Summarize = ‘1’) are included in aggregate calculations.
- iv. Students are aggregated to their official school (sprp_sch) and official district (sprp_dis), unless their sprp_dis is a one-school district, in which case they

are aggregated to the school associated with their sprp_dis and inclusion rules are dictated by the district (school and district calculations must match).

- v. Exclusions based on OctEnrol are not applied to one-school district school or district level calculations.
- ii. **Number and Percent of Students by Achievement Level (tblSummary)-In 2021 this data will not be reported**
- i. All student grades are aggregated together at the school, district, and state level.
 - ii. Calculations are performed using tblScoreItem.Perf2. All students with a non-blank Perf2 are eligible to be included in the calculations.
 - iii. The following exclusions are applied to the pool of eligible students:
 - a. Students with OctEnrol ≠ '1' are excluded at the school level, unless they are in a one-school district.
 - iv. N = the total number of students included in the calculation of the number of students at each achievement level (n1-n4) and is the denominator for the calculation of the percent of students at each achievement level (p1-p4).
 - v. **Minimum N-Requirement:** if $N < 10$ for a school or district results are calculated but suppressed from reports.
 - vi. Only schools with orgtype=6 or 13 will have achievement level summary data on the report if $N \geq 10$.
- iii. **P34 (tblSummary) In 2021 this data will not be reported**
- i. This is the sum of the percent of students in the Proficient Achievement Level (p3) and the students in the Advanced Achievement Level (p4) in each school, district, or state as calculated above in *Number and Percent of Students by Achievement Level*.
 - ii. **Minimum N-Requirement:** if $N < 10$ for a school or district results are calculated but suppressed from reports.
- iv. **Median Student Growth Percentile (tblSummary) – Not calculated for Biology reporting.**
- v. **State Reporting Category Performance Comparison (tblRepCatSummary)**
- i. The average number of points earned (nPoints) and the percent of total possible points earned (pPoints) by students at the “low end of the Proficient level” is calculated for each reporting category at the state level, stacked by subject and reporder.
 - ii.

Data Deliverables Specifications

I. Data file

A. Generic Details

- i. Data file is posted by grade to the FTP site for the state and contain data for all processed students.
- ii. Students with Amend>1 are reported as Amend='1' in the data file.
- iii. The datachanged value is incremented with each rerun. The current data is compared to the previous version and datachanged is assigned to records that have changed. Datachanged is initially set to 0.
- iv. DataChanged
 - DataChanged indicates if a student's record has changed since a prior release of the file. It is defaulted to '0' for all students, and then incrementally updated for each data revision to the latest revision number in which a change occurred. Prior values are maintained through each revision.
 - Reruns will have changes flagged incrementally.
 - The file *DataChangedVariables.xlsx* indicates which fields are included in determining datachanged.
- v. Commas are suppressed from school and district names, and student names.
- vi. ELLfirstyear in the data file is populated with the audited version of the LEPfirst variable, provided by the ESE
- vii. MCASRowID: The MCASRowID is a 15 digit alpha-numeric field created in the following manner:
 - 2 digits = administration year (ie: 21 for the 2021 test)
 - 1 digit = test (4 = Feb. Biology)
 - 2 characters="bi" for Biology
 - 10 digits = bookletnumber (derived by DP from the student's SASID or submitted answer document)
- viii. All deliverables follow the most recent layout: MCAS 2020-2021 File Layout.xlsx.
- ix. ELLfirstyear = tblStudemo.LEPFirst. If LEPFirst = '0' then set to blank.
- x. sTestStat = tblStudemo. sTestStat
- xi. sScaledS = tblScoredItem.mfscaledscore. This is the current year official scaled score results for students included in aggregations.
- xii. sPerflev = tblScoredItem.mfPerfLev. This is the formatted current year achievement level or code.
- xiii. sPerf2 = tblscoredItem.mfPerf2. This is the formatted current year achievement level results for aggregations.
- xiv. s_CD = tblScoredItem.mfCD. This is updated with current-year results.
- xv. Item scores and raw scores are printed as they are stored in tblScoredItem in their respective fields without any additional formatting.
- xvi. The following fields are set to blank:
 - sCPI
 - sNumin

- sAssess
- xvii. Schtype is provided by DESE and stored in daESESchtypelookup data file.

Report Deliverables Specifications

I. Shipping Product Code Summary

A. School (ReportFor='1')

Grade	Report Name	ReportType	Subject	ContentCode	ReportSubType	Quantity
10	Student Label	07	Biology	19	03	1
10	Parent/Guardian Report (School Copy)	07	Biology	19	01	1
10	Parent/Guardian Report (Parent Copy)	07	Biology	19	02	1

B. Reports are shrink-wrapped at the Printer. Each packet contains:

- i) Parent/Guardian Report for the school
- ii) Parent/Guardian Report for the parent
- iii) Student results labels for the school

II. Student Labels

A. Definitions

The following terms will be used to describe certain formats/behavior:

- ii. Data listed as being taken “from SIMS” are taken from tblStudememo, after any necessary audits are complete. If the student does not link to SIMS the data are blank.

B. Templates

- iii. There is only one template – one subject.

C. Label Displays

- iv. Student Name –
 - Presented as: *FName MI. LName* (with a period after the middle initial when the middle initial is not blank). Examples: John T. Smith or Jenny Jones
 - Names are propercased
 - This section requires special formatting when one or more of the names are missing:
 - a. If Lname is blank and FName is blank, then section = “BLANK NAME”
 - b. If Lname is blank and FName is not blank, then section = “Fname BLANK ”
 - c. If Lname is not blank and FName is blank then section = “BLANK Lname”
- v. Grade: Student’s grade from SIMS (stugrade)
- vi. Date of Birth: DOB from SIMS, formatted mm/dd/yyyy. Stored in tblStudememo.DOB.
- vii. SASID – Student ID from SIMS, no special formatting applied.

- viii. School Name, School Code, and District Name – School and District names and School Code from iCore based on testing school (discode,schcode). School and district names are title cased.
- ix. School ID# is the 8 digit school code
- x. Sorting
 - Labels should be sorted by grade, lname, fname.
 - Blank names are sorted to the top within school and student grade.
- xi. Test Date: “FEBRUARY 20YY” where 20YY = test year, e.g. 2015.
- xii. Subject Title – ‘Biology’:
- xiii. Scaled Score – student earned scaled score stored as rScaledScore in tblScoredItem. If a student did not earn a scaled score for a tested subject (rScaledScore is NULL) the display is formatted as “---”.
- xiv. Achievement level – contains either the achievement level text or the not-tested statement stored in tblPerfLevelLookup (see *Appendix C - Description*). This is set using the student’s rPerfLevel from tblScoredItem. This is always populated if the subject existed at the tested grade.

III. Student Report (Parent/Guardian)

- A. The following sections discuss the formatting of the various displays presented on the student report. All calculations and aggregation rules can be found in earlier sections of this document. **Definitions**

The following terms will be used to describe certain formats/behavior:

- xv. The Summarize value is used to identify which report template to use when reporting the student. The students who are not included in the achievement level aggregations have the Achievement Level Comparison table suppressed from the report.
- xvi. Data listed as being taken “from SIMS” are taken from tblStudemo, after any necessary audits are complete. If the student does not link to SIMS the data are blank.
- xvii. The following students do not receive Parent/Guardian Reports:
 - The student’s booklet is voided.
 - The student is classified as a Duplicate.
- xviii. School/District/State summary includes only students who are taking a High school STE test for the first time. For single-school districts, school results will be the same as district results.
- xix. The Parent/Guardian Report text corresponding to the student’s earned performance level is listed in Appendix C.
- xx. Sorting: Parent/Guardian reports are sorted by grade, lname, fname.
- xxi. Percentages in the sub-content table are formatted with a % sign after the number.

B. Cover Page

- xxii. Title – “MCAS February 20YY Biology Test” where 20YY = test year, e.g. 2015.
- xxiii. Student Name – Uppercased and presented as: *LName, FName MI*. (with a period after the middle initial when the middle initial is not blank). Examples: SMITH, JOHN T. or JONES, JENNY

This section requires special formatting when one or more of the names is missing:

- If Lname is blank and Fname is blank, then section = “BLANK NAME”
- If Lname is blank and Fname is not blank, then section = “BLANK, Fname”
- If Lname is not blank and Fname is blank then section = “Lname, BLANK”

- xxiv. SASID – Student ID from SIMS, no special formatting applied.
- xxv. School Name and District Name – School and District names from iCore based on testing school. No special formatting applied.
- xxvi. Grade: student’s grade from SIMS (stugrade)
- xxvii. DOB – DOB from SIMS, formatted mm/dd/yyyy.

C. Reporting Category Display

- xxviii. Subject – ‘Biology’
- xxix. Reporting category text and two-character codes – refer to daReportingCategoriesLookup for the approved text and codes (see *Appendix I.A*).
- xxx. Points earned by your child – nRepCatX variables from tblScoredItem, no special formatting where X= the Reporting category RepOrder in tblPointsPossible.
- xxxi. Percent of points earned by your child – pRepCatX variables from tblScoredItem. If the pRepCat variable is not blank, then place % symbol immediately after the number. Example: 15%.
- xxxii. Percent of points earned by minimally proficient kids – pPoints variable from tblRepCatSummary. Place % symbol immediately after the number. Example: 15%.
 - This data is always displayed when the grid is displayed, regardless of whether or not the individual student has earned reporting category points.
- xxxiii. If the items for a student are blanked out, the reporting category data is blank as well.

D. Released Item Display

- xxxiv. *Subject Title* – ‘Biology’
- xxxv. *Order of rows within each grid*

The following definitions are used to both describe what appears and also what is printed in Section 7b.

- 1 = “Question Number” – this is the released item order number.
- 2 = “Reporting Category” – this is the two-character reporting category code.
- 3 = “Your Child’s Score” – this is the response provided by the student.

- xxxvi. *Order of items*
 - The items are ordered from left to right in released item order
 - Item responses in tblScoredItem are already ordered by released item order.
- xxxvii. *Formatting of Student Responses*
 - Formatting of the items for the Student Report is mostly completed in tblScoredItem, with the following additions:
 - a. If the student correctly responded a ‘+’ is stored in tblScoredItem for all MC items. This is translated to a ‘P’ in the reporting data so that a check mark is displayed on the student report.

- b. Incorrect MC are already formatted to display a ‘-‘
- c. Open response items are formatted as earned score/pointspossible.
Example: 2/4. The earned score is stored in tblScoreditem.

xxxviii. Item responses are blanked out in tblScoredItem for students that should not receive reported item responses in the display.

E. Student Achievement Level and Scaled Score Statements (inside, section2)

xxxix. Achievement level – contains either the achievement level text or the not-tested statement stored in tblPerfLevelLookup (see *Appendix C- Description*). This is set using the rPerfLevel variable from tblScoredItem.

xl. Score – contains the reported scaled score, the rScaledScore variable from tblScoredItem.

xli. Graduation requirement footnotes – contains the text from tblCDFootnoteLookup (see *Appendix B*) associated with the CDFootnote variable in tblScoredItem.

F. Scaled Score / Achievement Level Bar Graph Display

xlii. Current year scaled scores

- Use rScaledScore from tblScoredItem
- Contains standard error bar (lowScaledScore and highScaledScore from tblScoredItem)

G. Achievement Level Comparison Table -*Not included on Retester template*

xliii. Your child column – a check mark is placed in the row associated with the earned achievement level based on the data stored in the rPerfLevel column in tblScoredItem.

- Students who did not earn an achievement level on this year’s test do not receive a checkmark.

xliv. School/District columns – the school and district achievement level percentages from tblSummary based on the student’s official school and district (sprp_sch and sprp_dis respectively).

xlv. State column – the state achievement level percentages from tblSummary.

xlvi. Percentages are formatted with a % directly after the number. Example: 15%

xlvii. Display is not shown on reports for students identified as Summarize = ‘0’.

xlviii. If the display is shown, the school, district, and state data are displayed regardless of whether or not the student earned an achievement level.

IV. Web Reports

In addition to being printed and shipped, Student reports will be available in Pearson Access Next (PAN) and will be posted to the ftp site for DESE to distribute to school dropboxes.

A. PDF Structure

There will be 2 types of PDFs created.

- A school level pdf. Contains all student report pdfs for that school.
- A district level pdf. Contains all student report pdfs for that district.

- B. Naming convention of the pdfs
- The school pdfs will be named MCASBiology2021StudentParent_<sprp_sch>.pdf
 - The district pdfs will be named MCASBiology2021StudentParent_<sprp_dis>.pdf
- C. Sort Order
- The school pdfs will be sorted by grade, Lastname, Firstname
 - The district pdfs will be sorted by sprp_sch, grade, Lastname, Firstname
- D. ProductID 4=school level pdfs and ProductID5=District level pdfs
- E. Web reports are only of the student parent version of the student report.
- F. For Cognia use:
- Recalculate group order using the above sort order rules.
 - In the rptstudent_web table recorddescriptor1 is populated with sprp_sch for the school pdfs and sprp_dis for the district pdfs
 - Replevel=dis for the district pdfs
 - School PDFs:
Pathname will be \\measuredprogress.org\deliverables\Massachusetts 20-21 February Biology\Release1\web\StudentReport\School
 - District PDFs:
Pathname will be \\measuredprogress.org\deliverables\Massachusetts 20-21 February Biology\Release1\web\StudentReport\District

Appendix

A. daReportingCategoriesLookup

This table lists the possible item reporting categories by subject. The actual reporting categories that exist may vary by grade and year. The provided sort order is the generic hierarchy of appearance when a reporting category exists for a grade:

Subject	Generic Sort Order	dalref. Cat2	Item Display Code: (RepCatCode)	Student Report Text: (RepCatText)
bio	1	1	BC	Biochemistry and Cell Biology
	2	2	GE	Genetics
	3	3	AP	Anatomy and Physiology
	4	4	EV	Evolution and Biodiversity
	5	5	EC	Ecology

B. Graduation Requirement Performance Level Text (Student Report)

tblScoredItem. CDFootnote	Text
1	Your child has not met the graduation requirement in Science and Technology/Engineering.
3	Your child has met the graduation requirement in Science and Technology/Engineering.
4	Your child has already met the graduation requirement in Science and Technology/Engineering.

C. rPerfLevel Lookup for MegaFile codes (PerfLev, Perf2)

For reformatting tblScoredItem rPerfLevel to mfPerfLevel and Perf2 to mfPerf2.

Achievement Level or Part Flag	Mega File Code	Description
1	F	Failing
2	NI	Needs Improvement
3	P	Proficient
4	A	Advanced
D	TRN	Transferred
E	ABS	Absent
F	LEP	First-year LEP
G	MED	Absent—Medically Documented
H	VAB	Void
I	DUP	Invalidated
J	DNT	Did Not Test
K	PAS	Previously Passed
P	PPR	Previously Passed & Retested
L	PRF	Previously Failed
N	INV	Invalidated
S	DNT	Did Not Test

Addenda

(Post-Approval Edits)

Date	Description	Location