# Appendix Q <br> Spring 2022 MCAS \& MCAS-ALT <br> AnAlysis and Reporting Business Requirements 

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## MCAS NextGen Overview

The Massachusetts Department of Elementary and Secondary Education (DESE) administers the MCAS tests in grades 3-8 and in high school. ELA and math tests are administered in grades 3-8 and 10. Science and Technology/Engineering (STE) tests are administered in grades 5 and 8, and high school science tests are administered starting in grade 9 .

In Spring 2022, next-generation introductory physics and biology tests were administered for the first time. Legacy chemistry and technology/engineering tests were also administered. Standard setting will occur in the summer for next-generation introductory physics and biology. The following tests were also administered:

1. An online-only pilot administration of Grade 8 civics, broken into the Performance Task test and the End of Course Test.
2. Grades 5 \& 8 STE short form (mini) tests were administered to students participating in the Innovative Science Pilot; both the short form and the pilot were administered in Pearson TestNav. The mini form was created by using only a subset of the operational items in the grade/subject.
3. Operational Grades and subjects are:

| NextGen |  |  | Legacy |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Subject | Mode of test | Grade | Subject | Mode of Test |
| 3-8 | ELA | Online Paper | 9/10 | Legacy Technology/Engineering Legacy Chemistry | Legacy is paper only |
| 3-8 | Math | Online Paper |  |  |  |
| 5 \& 8 | Science and | Online |  |  |  |
| 10 | Technology/Engineering (ST ELA | Paper <br> Online <br> Paper |  |  |  |
| 10 | Math | Online Paper |  |  |  |
| 9/10 | Introductory Physics Biology | Online Paper |  |  |  |

## Contract Code

163652

## Reporting Deliverables

| Preliminary Reporting |  | Final Reporting |  |
| :---: | :---: | :---: | :---: |
| External | Internal | External | Internal |
| - Megafiles-All grades and subjects <br> - Questionnaire Data files <br> - Accommodations-by subject <br> - Accommodations-by subject and item <br> - Students with both Alt and General results | - Letter counts <br> - Language counts <br> - Discrepancy table | - Megafiles-All grades and subjects <br> - 1 student report-print copy <br> - Web student report <br> - Student label-print copy <br> - State File | - Printer data <br> - iCore data |

## Delivery of Reports

- 1 copy of the Student Report is printed and shipped to districts.
- 1 Student Results Label is printed and shipped to districts, for each student.
- Online reports are available to the student's official school.
- Online reports are available in Pearson Access Next (PAN).
- Student Reports are sent to their tested school.


## Test Design

Item metadata data is stored in the ABBI item banking system. Pearson provides a test map, which is an extract from ABBI that provides the item metadata for each operational and field test being administered.

| Grade | Subject | Form(s) | Items included in Raw Score | Item Types |
| :---: | :---: | :---: | :---: | :---: |
| HS | Chemistry Technology/Engineering | Paper Accommodated Paper | Common | MC, OR |
| 3-8 | ELA | Online, Paper, Online Accommodated, Paper Accommodated | Common (OP) | $\begin{aligned} & \text { SR= } 1 \mathrm{pt} \text {. or } 2 \mathrm{pt} . \\ & \mathrm{CR}=3 \mathrm{pt} . \\ & \mathrm{ES}=7 \mathrm{pt.} \text { or } 8 \mathrm{pt} . \end{aligned}$ |
| 3-8 | Math | Online, Paper, Online Accommodated, Paper Accommodated | Common (OP) | SA and SR= 1 pt. or 2 pt . $C R=3 \mathrm{pt}$. or 4 pt . |
| 5 \& 8 | Science | Online, Paper, Online Accommodated, Paper Accommodated | Common (OP) | $\begin{aligned} & \mathrm{SR}=1 \mathrm{pt} \text {. or } 2 \mathrm{pt} \\ & \mathrm{CR}=2 \mathrm{pt} \text {. or } 3 \mathrm{pt} . \end{aligned}$ |
| HS | Bio and Physics | Online, Paper, Online Accommodated, Paper Accommodated, Online Spanish, Paper Spanish | Common (OP) | $\begin{aligned} & \mathrm{SR}=1 \mathrm{pt} \text {. or } 2 \mathrm{pt} \\ & \mathrm{CR}=3 \mathrm{pt} \text {. or } 4 \mathrm{pt} . \end{aligned}$ |
| 10 | ELA | Online, Paper, Online Accommodated, Paper Accommodated | Common (OP) | $\begin{aligned} & \hline \mathrm{SR}=1 \text { pt. or } 2 \mathrm{pt.} \\ & \mathrm{ES}=8 \mathrm{pt} . \end{aligned}$ |
| 10 | Math | Online, Paper, Online Accommodated, Paper Accommodated, Online Spanish, Paper Spanish | Common (OP) | SA and SR=1 pt. or 2 pt. $C R=4 \mathrm{pt}$. |

## Forms

## Form 01 is used for the accommodated forms.

Form conventions:
Form_Code=Year||subject||grade||Admin||Accommodation/Mode||Language||Form Number||Unit
Number||Special
Where year=22;
Subject=EL, MA, SC, CV=Civics;
Grade $=03,04,05,06,07,08,10$, BI-Biology, PH-Introductory Physics, EC=Civics EOC,
PT=Civics Performance Task
Spanish testers have Language=ES
Paper testers have accommodation/mode=PA
See MCAS Scoring Form ID Key_1-11-22.xlsx for more information Mini STE:

1. We will receive a separate lookup table for these students from Psychometrics.
2. The full scale should be used for reporting.
3. The short form consists of a subset of the OP items on the long form. It contains no FT, or matrix equating items.
4. There is 1 form per grade

## Scoring

Machine scored items are scored according to the scoring rules and QTI in ABBI. The following table is applicable to hand scored items.

| Raw Data Value | Reported Value | Description | Point Value | Response Attempted |
| :--- | :--- | :--- | :--- | :--- |
| 0-max pts | Final score | Open Response / Short Answer | $0-\mathrm{max}$ | ü |
| N | 0 | Not Scorable | 0 | ü |
| BL |  | Blank response | 0 |  |
| DC | 0 | Direct Copy | 0 | ü |
| UN | 0 | UnreadablelUnintelligible | 0 | ü |
| OT | 0 | Off Topic | 0 | ü |
| NE | 0 | Non-English | 0 | ü |

## Test Attemptedness

Grades 3-8 and HS, ELA, Mathematics and STE: On the operational tests, a test meets attemptedness if there is at least one operational item that is attempted per session.
Grade 8 Civics Pilot: The test meets attemptedness if there is at least one item attempted per session. If the student meets attemptedness then Attempt[sub]='F' (Fully Attempted). If the student has attempted operational items but not in each session, then Attempt[sub]='P' (Partially Attempted). If the student does not meet attemptedness Attempt[sub]='N' (Not Attempted).

## Not Tested Reasons

The following not tested reasons apply to the Spring tests:

1. Medically Excused (MED)
2. Transfer (TRN)
3. First-year EL (LEP)
4. Void (VAB)
5. Previously Passed (High School STE only) (PAS)
6. Previously Failed (High School STE only) (PRF)
7. Multiple Answer Booklet (DUP)
8. Invalidated (INV)
9. Absent (ABS)
10. Student took the Alternate Assessment (ALT)

If a student has more than one Not Tested Reason, the following hierarchy is applied:

## Participation Status Assignment Hierarchy (by subject)

a. Breach List (Amend Flag > '1')
b. Void
c. Multiple Answer Booklets (Amend='1')
d. Summarize = ' 1 ' or TestGrade = ' 09 ':
i. If the student is in the Alternate Assessment data, the student's participation status is taken from the Alternate Assessment data
ii. If ELFirstyear='1' then: Not Tested LEP (PartStatus='F').
iii. (Applicable for 3-8 and 10; HS STE without prior results):

1. If the student meets attemptedness then: Tested (PartStatus = ' $Z$ ').
2. If the student partially attempted or did not attempt:
a. if Active_Test $=$ ' 1 ' then: Not Tested Transfer (PartStatus='D').
b. Otherwise if MED then: Not Tested Medically Excused (PartStatus=‘G’).
c. Otherwise: Did Not Test (Partstatus='J') (Not assigned in grades 3-8 unless specified in Breach list)
d. Otherwise: Not Tested Absent (PartStatus='E').
iv. (Applicable for HS with prior results): Previously Failed (High_sPerf from SIMS in ('F','PRG','EMG','AWR','INP')):
3. If the student meets attemptedness then: Tested Accountable Retest (PartStatus=' $Y$ ').
4. If the student partially attempted or did not attempt then: Not Tested Accountable Retest (PartStatus='L').
v. (Applicable for HS with prior results Previously Passed (High_sPerf from SIMS in ('A','P','NI','A_A','P_A','NIA'):
5. (Pre-Discrepancy only; only grade 9 and Grade $\mathbf{1 0}$ students with summarize='1') If the student meets attemptedness or partially attempted then: Ineligible Accountable Retest, Previously Passed (PartStatus=‘P').
6. If the student did not attempt (or during final processing: if the student did not attempt, partially attempted, or meets attemptedness) then: Previously Passed (PartStatus = ' K ')
e. Summarize = ' 0 ’ (regardless of any prior test results):
i. Student is found in the Alternate Assessment data the student's participation status is taken from the Alternate Assessment data
ii. Otherwise, if the student meets attemptedness then: Tested Not Accountable (Retest) (PartStatus = 'R').
iii. Otherwise, if the student partially attempted then: Partially Tested Not Accountable (Retest) (PartStatus = 'B').
iv. Otherwise if the student did not attempt then: Not Tested Not Accountable (Retest) (PartStatus = 'J').
Note:
7. Students with a blank High_sPerf and sciNTL = ' 1 ' from SIMS are considered to not have prior results.
8. Students with SciNTL = ' 1 ' from SIMS are considered to have previously participated in science as a First Year EL student.
9. If High_sPerf is not a Previously Passed value and SciNTL = ' 1 ', the student is considered Previously Failed.
10. Tests with participation status Void in preliminary reporting may be unvoided during the discrepancy period. Post-Discrepancy any remaining void tests will be suppressed. Students with no test may be built out according to Data Processing rules.

The table below describes the calculation of the applicable participation statuses.

| Summarize | Prior Results | Description | Part Status | Test Stat* | Discrepancy Site |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Code | Text |
| n/a | n/a | Breach | Breach Instructions are applied at the student level regardless of participation status and are identified by Amend > '1' |  |  |  |
|  |  | Void (Preliminary Only) | H | NTO | VAB | Void Answer Booklet |
|  |  | Multiple Answer Documents (Security Breach) |  |  |  |  |
|  |  | Preliminary | I | NTO | DUP | Multiple Answer Booklets |
|  |  | Final | N | NTO | n/a | n/a |
|  |  | Invalidated (Only assigned via Breach List) | N | NTO | INV | Invalidated |
| $\begin{aligned} & \hline 1 \\ & \text { (or } \\ & \text { Grade=09) } \end{aligned}$ | n/a | Tested Accountable Alternate Assessment | A | T | ALT | Tested Alternate Assessment |
|  |  | Tested | Z | T | STD | Tested Standard |
|  |  | Not Tested (/Partially Tested) - LEP <br> (ELA Only) | F | NTL | LEP | Not Tested First Year EL |
|  |  | Not Tested (/Partially Tested) - Transfer | D | NTO | TRN | Transferred |
|  |  | Not Tested (/Partially Tested) - Medically Excused Absent | G | NTM | MED | Medically Excused |
|  |  | Not Tested (/Partially Tested) - Absent | E | NTA | ABS | Absent |
|  |  | Incomplete | S | NTO | INC | Incomplete |
|  | Prev. Failed | Tested Alternate Assessment Accountable Retest | C | TR | ALR | Retested Alternate Assessment |
|  | Prev. Failed | Tested Accountable Retest | Y | TR | RET | Retested |
|  | Prev. Failed | Previously Failed (Not Tested /Partially Tested Accountable Retest) | L | NTO | PRF | Previously Failed |
|  | Prev. Passed | Ineligible Accountable <br> Retest - Previously <br> Passed \& Retested <br> (Preliminary Only- final see K) | P | NTO | PPR | Previously Passed \& Retested |
|  | Prev. <br> Passed | Previously Passed | K | NTO | PAS | Previously Passed |
| 0 | Any | Tested Not Accountable Alternate Assessment (Retest) | W | TR | ALN | Retested Alternate Assessment Not Aggregated |
|  |  | Tested Not Accountable (Retest) | R | TR | REN | Retested Not Aggregated |
|  |  | Partially Tested Not Accountable (Retest) | B | NTO | INC | Incomplete |
|  |  | Not Tested Not Accountable (Retest) | $J$ | NTO | DNT | Did Not Test |
| * Student results achieved while First-year EL, or students currently First-year EL (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. |  |  |  |  |  |  |

## Inclusion/Exclusion Rules

The following applies to Item Analysis Student Inclusion/Exclusion (Ex[sub]) \& Matrix Files:

1. Only first-time accountable test takers that are not first-year LEP (Partstatus = 'Z' and rptLEP[sub] are included for item analysis and psychometric equating files (Ex[sub] = ' 0 '). All other students are excluded (Ex[sub] = ' 1 ').
2. All analysis will be based on CBT tests only for Next Gen
3. For Next Gen tests due to the way some accommodations cannot be spiraled. The accommodations listed below will have the following special handling
a. Students with unique accommodations to be excluded include: paper-based testing, text-to-speech (TTS), Braille, Spanish, screen reader, ASL, and assistive technology;
b. At DESE's discretion data will be provided to psychometrics to study mode effects.
c. Students with these accommodations will be excluded from all matrix files
d. Students with these accommodations will be excluded from CTT and dif calculations for matrix items but will be included for scaling items.
4. The following applies to High School Science (STE's):
a. First time test taker in HS STE is a student with stugrade $={ }^{\prime} 09^{\prime}$ and no prior results (high_sperf2 is null in SIMS) or summarize='1' and no prior results (high_sper2 is null in SIMS)
b. Only first-time test takers are included in analyses.

## Rounding Rules

| Calculation | Rounded (to the nearest) |
| :--- | :--- |
| Average scale score | Whole Number |
| Average reporting category points | Tenth |
| Mean Growth Percentile | Whole Number |

## Files from DESE

1) Breach List
a. Students who are considered a security breach are provided by DESE in the Breach List. Instructions for processing and reporting each security breach case are provided
b. Data Analysis reviews the breach list and adds necessary Amend flag values (> ' 1 ') and instructions to the Amend Code Definition Lookup for each distinct scenario on the Breach List.
c. Data Processing applies any necessary changes to the raw student record based on DESE instructions and applies the corresponding Amend Flag value from the lookup to the student for Data Analysis processing.
2) Technology Failure List
a. DESE will provide a list of students who could not complete the assessment based on a persistent technology issue with the testing platform. This file will be provided at the same time as the Breach List.
b. These students are processed with an Amend code (AmendCode=13).
i. If a student has a PerfLevel $=2,3$, or 4 , the following information is reported:
1. a. Student's earned raw score, earned item scores, and earned mfS caledScore. These students will be reported as NTO
c. iii. If a student does not have a PerfLevel equal to $2,3,4$, then the student is reported as "INC" with their raw score and item scores reported. The student's perf2, numin, and assess values will all be blank
3) SIMS
a. Student data are provided by DESE for reporting use following the SIMS file layout (also provided by DESE.)
b. SIMS contains various demographic, historical scores, and accountability data fields. The data populated depends on the time of year of the handoff
c. Multiple handoffs occur during the year
4) Current Year Student Growth Data
a. Current year student growth percentiles (and corresponding standard errors) are provided for ELA and Math at the student level from DESE based on preliminary results.
b. If a score changes after Preliminary reporting, the growth score from DESE is suppressed and no growth is reported for the test.
c. In 2022, the state growth mean will be calculated and not fixed at 50 .
5) Grade Span Lookup
a. DESE provides a grade span lookup for all public official schools. It is used to assign "SchType" in the various megafile handoffs.
b. Cognia will provide DESE with a list of any public schools that have students assigned to them that are not included in the lookup, resulting in blank grade span data based on the Preliminary data release.
c. All public schools must have a grade span for final post-discrepancy reporting. For earlier releases grade spans may be blank for schools missing from the lookup.
6) Discrepancy Resolution
a. Data from preliminary reporting is posted to the discrepancy site for clean up by the field and the department.
b. See the Discrepancy Site Requirements for more details on which fields are available for editing at each user level.
c. Data Processing re-processes data post-discrepancy to incorporate the updated information and discrepancy resolutions from DESE for DA for final reporting.
d. During final processing all information from the discrepancy site is considered final and is maintained, however, changes to certain fields require additional data audits and/or recalculation of student participation status to ensure consistency. See the Data Reconciliation section for these details.
e. DESE provides a spreadsheet with additional discrepancies reported by schools that were not able to be resolved in the tool or came later than the school window. Any late discrepancies reported well after the close of the window will be reported in the rerun.
f. In 2022, the discrepancy site will not include scaled scores and performance levels for Introductory Physics and Biology. Scaled sores and performance levels are available after Standard Setting.
7) Sprp_sch and Sprp_dis: Exceptions List
a. DESE will provide this list to Cognia
b. The lookup is used in the assignment of official student school and district (See Data Reconciliation Audits for details)
8) One School District List (daSingleSchDisLookup)
a. DESE will provide this list to Cognia
b. The lookup is used in the aggregate calculations (see Aggregate Calculations for details)
9) Official School and Official District Code
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)
1. 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.
2. If a student is from a collaborative school (testing OrgType $=3$ or 4) then the official school is $=05 \mathrm{XX} 0000$ where XX is the 3rd and 4th digit of the testing district code.
3. 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.
4. Otherwise, the official school is the testing school (discode+schcode).
a. Setting of Orgtype
5. Orgtype is based on the official school code
6. Using the official school code link to the MCAS org data file (DA use: icore) and pull the org type (DA use: Reportcode2).
7. 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
b. The table below displays possible values for a school's Orgtype

| Orgtype Code | Description |
| :---: | :--- |
| 1 | Special Education Agency |
| 2 | Special Education School |
| 3 | Collaborative |
| 4 | Collaborative Program |
| 5 | Public School District |
| 6 | Public School |
| 9 | MA State Agency |
| 10 | MA State Agency Unit |
| 11 | Private School |
| 12 | Charter District |
| 13 | Charter School |
| 22 | Charter School Program |
| 25 | Public Alternative 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 |

## Scaling, Equating and Item Statistics

For the purposes of scaling and equating all high school students taking the High School Sciences are treated the same. They have taken the same sets of tests regardless of their student grade. Exclusions from analysis are described in the calculation section.

1) Legacy Scaling
a. Scaling is done using a lookup table provided by psychometrics and the student's overall raw score (by subject).
b. The scaled scores are even numbers from 200 to 280 .
2) Next-Gen Scaling
a. Scaling is completed using a lookup table provided by Psychometrics. Scales are based on student's scaleform, and raw scores
b. The scaled scores are integers from 440 to 560 .
3) Achievement Level Coding
a. The MCAS Standard Assessment has four possible achievement levels, assigned to students using the raw to scaled score lookup provided by psychometrics.
b. Alternate Assessment achievement levels are translated to their corresponding standard assessment achievement level prior to computing any aggregate calculations that include alternate assessment achievement level results as shown below.

| MCAS Achievement <br> Level | MCAS Description | MCAS Alt <br> Achievement Level | MCAS Alt Description |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | N/A | 7 | Incomplete Portfolio (INP) |
|  | Legacy: Failing (F) <br> NextGen: Not Meeting <br> Expectations (NM) | Awareness (AWR) |  |
| $\mathbf{2}$ | Legacy: Needs Improvement (NI) <br> Emerging (EMG) |  |  |
|  | NextGen: Partially Meeting <br> Expectations (PM) | 14 | Progressing (PRG) <br> Not Meeting Expectations-Alt <br> (NM_A) |
| $\mathbf{3}$ | Legacy: Proficient (P) | Needs Improvement-Alt (NIA) |  |
|  | NextGen: Meeting Expectations <br> (M) | 15 | Partially Meeting Expectations- <br> Alt (PM_A) |
| $\mathbf{4}$ | Legacy: Advanced (A) | Proficient-Alt (P_A) |  |
|  | NextGen: Exceeding <br> Expectations (E) | 13 | Meeting Expectations-Alt <br> (M_A) |

## Student Level Calculations

Calculations by Participation Status Summary



${ }^{1}$ rptLEP is LEPFirst for all grades/subjects/participation statuses that do not have prior results. It is a calculated combination of LEPFirst and prior LEP First status for Accountable partstatuses with prior results. See calculations section for details.
${ }^{2}$ Assess exceptions for ELA: there is an additional condition of participation on the Access test. See calculation specifics for details.
3If Summarize $=1$ then Assess $=0$. If Summarize $=0$ then Assess is blank.
*Grade = 09 students are assigned participation statuses as if Summarize = '1'. Perf2, CPI, Numin, and Assess are populated for calculations but set to blank in the Megafile deliverable.
**if (PPR or PAS) and (grade='09' or (grade='10' and summarize='1')) then invalidate current test and report prior results. (2022)
Note: "(M/S 1)" indicates that rptLEP[sub] may also be '1' in Math and Science for the listed participation statuses.

## Other Calculations

1) StudentID
a. StudentID = rptStudentID from DPRaw (verified SASID)
b. For non-demonstration students, if StudentID does not begin with ' 10 ' it was generated by DP for linking purposes, and will be set to blank for reporting
2) Accommodations and Accommodation Footnotes
a. If a student did not attempt any items in a subject, the corresponding raw accommodation indicators (from DPRaw) are ignored during the determination of accommodations and footnotes for reporting. Otherwise, if a student attempts at least one item in a subject, the corresponding raw accommodation indicators are evaluated:
i. For ELA and Math accommodation all items (common, matrix, and field-test) are considered.
ii. All of the underlying accommodation fields in DPRaw are maintained as provided, regardless of student attempt status.
b. Standard Accommodations
i. Accom_e = ' 1 ' if the student received any accommodations (except color contrast, answer masking and Alternative Mouse Cursor Pointer, non-IEP/non-504) in ELA, otherwise set it to blank.
ii. Accom_m = ' 1 ' if the student received any accommodations in Math (except color contrast, answer masking and Alternative Mouse Cursor Pointer, non-IEP/non-504), otherwise set it to blank.
iii. Accom_s = ' 1 ' if the student received any accommodations in Science (except color contrast, answer masking and Alternative Mouse Cursor Pointer, non-IEP/non-504), otherwise set it to blank.
c. Special Access ELA Accommodations
i. If Human Read-Aloud as a special access Accommodation is indicated, then Accom_ReadAloud='H'
ii. If Text to Speech accommodation is indicated, then Accom_ReadAloud='T'
iii. If Kurzweii special access Accommodation is indicated, then set Accom_Readaloud='K'
iv. If Human Scribe special access Accommodation is indicated, then Accom_Scribe='H'
v. If Speech to Text Non-Standard Accommodation is indicated, then Accom_Scribe='S'
d. Special Access Math Accommodation
i. If calculation Device Accommodation is indicated, then Accom_Calculator='1'
e. For special access Accommodation Student Report text based on elaNSAFootnote and matNSAFootnote see table Special Access Accommodation Footnote Text (Student Report)
3) Reporting First Year EL Status
a. RptLEP is determined for each subject based on current year partstatus, test attemptedness, EL First-year status, and Prior EL First year status (where applicable) to determine if a student's results should be considered achieved while under EL First year status or as currently EL First year. This takes into consideration the prior status of the student when prior results are eligible for accountability (currently only allowed in science)
b. For all participation statuses that are considered Not Accountable rptLEP[sub] = ELfirstyear.
c. Otherwise, if the student is considered Accountable then:
i. If the student has prior results:
1. If the student meets attemptedness this year, then: $\operatorname{rptLEP}[s u b]=$ ELFirstyear.
2. If the student partially attempts or does not attempt this year, then:
a. rptLEP[sub] = ' 1 ' if either ELFirstyear = ' 1 ' or [sub]NTL = '1
b. Otherwise rptLEP[sub] $=$ ' 0
ii. If the student does not have prior results, then rptLEP[sub] = ELFirstyear
5) Alt
a. [e/m/s]Alt is set to ' 1 ' if a student is considered Tested or Retested Alternate Assessment (accountable or not accountable; PartStatus in ' $A$ ',' ${ }^{\prime}$ ','W'). Otherwise, it is set to ' 0 '.
6) SpecialEd
a. If a student is considered Tested or Retested Alternate Assessment (accountable or not accountable) in any subject (eAlt, mAlt, or sAlt = ' 1 ') then SpecialEd = ' 1 '. Otherwise, it is taken from IEP in SIMS. If it is blank it is defaulted to ' 0 '.
7) SIMS CD
a. The latest CD value from SIMS for Math, ELA, and Science is stored for each student as-is, without any additional formatting as SIMS_[sub]CD
8) SSubject
a. SSubject is set to the science subject that is used for reporting
b. Data Processing will provide the science subject for the current test as well as science subject for prior results
c. If a student took alt, then the alt science subject is reported
d. Report the current science subject, if the test meets attemptedness rules and is not invalidated due to student being in grade 9 or (10 and summarize='1') and previously passed. First time grade 10 is defined as gradesims='10' and summarize='1'.
e. If the student has prior results being reported, use prior subject.
f. Otherwise, report the student as NextGen Biology (ssubject=5)
9) Raw Scores
a. Overall Raw Score
i. The student's overall raw score is the sum of scores for all scaling items
ii. If a student has a partstatus that does not receive reported raw scores or if the student did not attempt any items (Attempt[sub]='N') then the raw score is set to blank after all subsequent calculations are complete.
10) Points Earned
a. MCpts are based on common, scaling multiple choice or selected response items with point values stored in item metadata tables.
b. ORpts are based on non-MC or involving open response, constructed response and short answers (including essay scores). Item point totals are calculated based on item metadata tables.
c. If a student does not receive reported raw scores these calculations are set to blank.
11) Reporting Category Points Earned
a. The total points earned, and the percentage of possible points earned by the student are calculated by reporting category.
b. Calculations include all scaling items.
c. 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
12) Legacy Item Responses
a. 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.
b. Otherwise, re-formatted and re-ordered responses to all common items are reported to support the student report and megafile deliverables (excluding the State File, which includes all items):
i. OR items: the item score or not scorable code is reported. Responses of ' B ' (blank) are set to NULL.
ii. MC items: " + " indicates a correct response, and "- "indicates a masked incorrect response choice (multiple responses ("*") remain unmasked).
iii. Legacy HS STE have no released items.
13) Next Gen Item Responses-Students with a participation status that does not receive reported item scores and those who do not receive item scores due to test attempt status, passing status, or rptLEP conditions will have scores blanked out (NULL) after raw scores have been calculated, if applicable.
a. All scaling items are reported and stored to support the student report and megafile deliverables (excluding the State File, which includes all items):
i. OR and MS items: the item score or not scorable code is reported. Responses of 'B' (blank) are set to NULL.
ii. Scores are formatted as $x / y$ where $x=e a r n e d$ score on the item; $y=$ maximum score possible on the item.
b. The order of the items is the reporting sequence in the test map.
c. Items' release status is stored in the Objective 3 field in the test map. If an item has Objective 3=Release Pending the item is released.
d. RepCatCode is the 2-character reporting category code for each item:
i. Assigned by Item Number for Math and ELA using daReportingCategoriesCrosswalk.
ii. Assigned by dalref.Cat2 for Science using daSciRepCatCodes
iii. Reporting Categories are stored in Objective 1 in the test maps.
14) Current-Year Reporting Results
a. 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.
b. ScaledScore
i. Current year scaled score are used for aggregations. Conditions based on pass/fail, rptLEP or breach codes are not applied. This is an internal MP field that is not directly reported.
ii. Blank for alternate assessment students and students not eligible to receive a scaled score based solely on participation status.
c. PerfLevel
i. Earned current-year achievement level based on scaledscore (1-4). Conditions based on pass/fail, rptLEP, or breach codes are not applied.
ii. For Alternate Assessment students the un-translated PerfLevel from the Alternate Assessment data table StuPL is stored (7-17).
iii. If the student does not receive an achievement level based solely on partstatus PerfLevel is blank.
iv. Valid Values: numeric achievement levels (1-4, 7-17) or blank. Internal Cognia field that is not directly reported.
d. rScaledScore
i. rScaledScore is the current year earned scaled score for Cognia reporting purposes.
ii. rScaledScore = ScaledScore, with suppression based on pass/fail status, rptLEP, or breach codes applied from the participation status summary table.
e. rPerfLevel
i. rPerfLevel is the current year achievement level or partstatus.
ii. rPerfLevel = Perflevel, modified based on pass/fail status, rptLEP, or breach codes for reporting as follows:
1. If perflevel = ' 1 ' and rptLEP[sub] = ' 1 ' and the student has a partstatus that receives the text "LEP" in place of a non-passing achievement level, then rPerfLevel = ' $F$ '. This is applied by subject for all subjects.
2. Otherwise, if perflevel is blank then rPerflevel = partstatus.
3. If a student has a breach code, then rPerfLevel is assigned per the breach instructions to override any other standard rules.
iii. Valid values: numeric achievement levels (1-4, 7-17) and partstatus codes.
f. mfPerfLev (megafile: [e/m/s]PerfLev)
i. Formatted rPerfLevel (current year reporting results) to contain either the student's achievement level abbreviated text (Standard or Alt), or 3-character participation status code for all students (e.g., 'P' or 'P_A' or 'LEP' or 'TRN').
15) Aggregation/Accountability Results
a. Aggregation and Accountability Results combine prior and current results, where applicable. See the Calculations by Participation Status Summary table for details.
b. mfScaledScore (megafile: [e/m/s]scaleds)
i. For Accountable or Grade 09 students mfScaledScore is populated with either the current year scaled score, or prior scaled score as applicable for
accountability. For Not-Accountable students mfScaledScore is populated with current year results as applicable.
ii. mfScaledScore is populated as follows for Accountable students (or Grade 09):
1. $m f S$ caledScore $=r$ scaledScore for First Time Testers and First Time Testers that did not meet attemptedness (ABS, MED, TRN, LEP).
2. mfScaledScore = Prior highest scaled score for Previously Passed (whose test has been invalidated) students ([sub]ScaledScore] from DPraw).
a. Note: if [sub]ScaledScore is blank for the above scenario, the student passed via appeals and an accurate scaled score may not be available. mfScaledScore is left blank.
3. Otherwise mfScaledScore is blank
iii. If rptLEP = ' 1 ' and the student's mfScaledScore (as determined above) is considered Failing, then mfScaledScore is set to blank.
iv. mfScaledScore = rScaledScore for Not-Accountable students.
c. Perf2 (used in aggregate calculations; In 2022, not used for science aggregation for P/G reports)
i. Populated with the achievement level for aggregate calculations and to support the megafile Perf2 using current year and prior results as applicable.
ii. Perf2 is blank for all students with rptLep[sub] = ' 1 '.
iii. Otherwise Perf2 is populated as follows for Accountable or Grade 09 students:
4. Perf2 $=$ rPerfLevel for First Time Testers ( $1-4$, ' 6 ' is translated to ' 1 ').
5. Perf2 is blank for First Time Testers that did not meet attemptedness (ABS, MED, TRN, LEP).
6. Perf2 $=$ Highest achievement level between rPerfLevel and High_xPerf for Accountable Retesters (science only).
7. Perf2 = Highest prior achievement level (High_sPerf) for Previously Passed students.
8. Perf2 $=$ Translated Alternate Assessment Perf2 for students Tested Alternate Assessment or Accountable Retested Alternate
Assessment. Translation is done from Alternate Assessment Achievement Levels of 7-16 to Standard Achievement Levels 1-4
iv. Otherwise perf2 is blank. Perf2 is blank for all Not-Accountable students except for grade 09 (available for grade 09 specific Cognia aggregations).
d. mfPerf2 (megafile: $[\mathrm{e} / \mathrm{m} / \mathrm{s}]$ Perf2)
i. 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.
ii. mfPerf2 is set to blank for grade 09 students in the megafile export.
16) Competency: Updating ELA_CD, Mat_CD, and Sci_CD
a. These variables represent whether a student has met the testing graduation requirement for the subject, combining prior CD information from SIMS with the current test results.
b. The updated mfCD fields begin with the prior CD value from SIMS (studemo SIMS_[sub]CD) 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.
c. 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:
d. For NextGen ELA:
i. If scaled score is $\geq 455$ and scaled score is $<472$ then $C D=1$ '.
ii. Otherwise, if scaled score $\geq 472$ then $C D=$ ' 2 '.
iii. Otherwise, CD is ' 0 '. a
e. For NextGen Math:
i. If scaled score is $\geq 469$ and scaled score is $<486$ then $C D=$ ' 1 '.
ii. Otherwise, if scaled score $\geq 486$ then $C D=' 2$ '.
iii. Otherwise, CD is ' 0 '.
f. For Legacy HS Science:
i. If scaled score $\geq 220$ then $C D=$ ' 1 '.
ii. Otherwise, CD is ' 0 '.
g. For Next Gen Biology:
i. If scaled score $\geq 467$ then $\mathrm{CD}={ }^{\prime} 1$ '.
ii. Otherwise, CD is ' 0 '.
h. For Next Gen Introductory Physics:
i. If scaled score $\geq 470$ then $C D={ }^{\prime} 1$ '.
ii. Otherwise, CD is ' 0 '.
j. For students tested via the Alternate Assessment (Partstatus in ' $A$ ', ' $C$ ', or ' $W$ ') the CD field is taken from the current-year updated CD field in the alternate assessment data (tbIStuPL.mfCD) and is not re-calculated.
17) Graduation Requirement Footnote (CDFootnote) (tblScoredItem)
a. 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.
b. Using the previous CD value, student grade and summarize from SIMS (tblstudemo.SIMS_[sub]CD) and the updated CD value incorporating current test results (tbIScoredItem.mfCD) for each subject determine the appropriate text for the student report. See table in Student Report section more details.
18) Composite Performance Index (CPI) Points (HS Science and Technology/Engineering only)
a. CPI Points are assigned based on results used for Aggregations and Accountability. Assigned to students with sper2.
b. For students whose accountability results are from the Standard MCAS Assessment:
i. CPI points are assigned based on their Accountability Scaled Score (mfScaledScore) per table in Appendix B.
ii. If Partstatus in (' $K$ ', ' $P$ ') and mfscaledscore is missing:
1. If mfperf2 is " Nl " (Standard Assessment) set CPI $=50$ to indicate the student passed via appeals.
2. Otherwise, mfPerf2 is from a prior year Alternate Assessment. CPI points are set per table in Appendix B.
c. For Accountable Alternate Assessment students (Tested Alt or Accountable Retested Alt) CPI points are taken from the Alternate Assessment data
19) Next Gen Composite Performance Index (CPI) Points - HS STE only
a. Calculated using legacy-equivalent scores
b. Calculated for any student with sperf2
c. See Appendix B for point assignments
20) Numln
a. See the calculations by participation status summary for a list of statuses that receive CPI points and numin = ' 1 '. Otherwise, it is ' 0 '
a. The subject specific Assess field is populated to indicate whether Accountable students have met the participation requirement this year based on the Calculations by Participation Status Summary table.
b. Exception for ELA only, when Assess = ' 1 ': If LEP_off = ' 1 ' and ACCESS_Part = ' 0 ' then Assess = ' 0 '.
c. Fields are prefixed with $\mathrm{e} / \mathrm{m} / \mathrm{s}$ in the megafile.
d. Student was assessed: $1=$ student tested on MCAS or student is first year EL, $0=A B S$ or MED or EL student who did not take ACCESS for ELs test, blank=not included in participation reports. See the table on page 12 for more detailed information.
21) Student Growth Percentile (SGP)
a. Student growth percentiles (and standard error range) are reported for accountable first-time test takers that are not considered First Year LEP (PartStatus = 'Z' and LEPFirst[sub] = '0') in year 2 (students must receive test scores in consecutive grades two years in a row or have test scores in grade 8 and grade 10 over three years).
b. For all other students, SGP is blank.
c. Growth is provided by DESE for students in Math and ELA, in grades 4-8 \& 10 .
d. After the discrepancy period, any student with changes to their preliminary raw score, perf2, partstatus, or StudentID will have growth data suppressed.
22) Complexity is populated with the student's alternate assessment composite complexity score for all students Tested or Retested (accountable or not-accountable) Alternate Assessment.

## Aggregate Calculations

1) Aggregation Summary
a. 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. All reporting levels (sch/dis/sta): Only students eligible for accountability (Summarize $=$ ' 1 ') and test status $=$ ' 7 ' are included in aggregate calculations, except for Grade 09 specific calculations.
ii. For grade 9 and 10 HS Biology and Introductory Physics: aggregations include students with Teststatussci='T' (first time testers) for both grades together
iii. Students are aggregated to their official school (sprp_sch) and official district (sprp_dis), unless their sprp_dis is in daSingleSchDisLookup, 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).
iv. Students with an SPRP Orgtype of 6 or 13 are used for school-level aggregations.
v. For district aggregations, if sprp_dis = '99999999' then delete.
vi. Exclusions based on OctEnrol are not applied to one-school district school or district level calculations.
vii. See Appendix B for CPI points assignments
viii. Reporting category aggregations on the mini-MCAS student reports will only include tested students who took mini-MCAS.
ix. Aggregations are suppressed for affected reporting categories where items were removed from their form of the test the student took. In 2022, students taking screen reader form in some grade/contents had items removed. See Addenda 1 for specifics in 2022.

## b. Growth Aggregations

i. All students with tblScoredItem.GP populated are eligible to be included in the calculations.
ii. The following exclusions are applied to the pool of eligible students:

1. Students with OctEnrol $\neq$ ' 1 ' are excluded at the school and district level unless they are at a one-school district.
iii. The state mean growth will be calculated as the average growth across the state.
iv. Minimum N -Requirement: if $\mathrm{N}<20$ for a school or district results are calculated but suppressed from reports.
c. Next Gen Reporting Category Calculations
i. Paper and Online tests are aggregated together.
ii. Students near Meeting Expectations
2. The average number of points earned (nPoints) and the percent of total possible points earned (pPoints) by students at the "low end of the Meeting Expectations level" is calculated for each reporting category at the state level, stacked by subject and reporder. The student group used must be greater or equal to 200 ; if not, the student pool will be expanded to include students with scale scores as follows 501, 499, 502, 498, etc.
3. If any test/mode at a grade/content level does not reach the 200student threshold within the scaled score range of 500-505, the student's report will not include the percent possible points for students scoring near Meeting Expectations for the reporting categories.
4. Only students with partstatus='Z' are included in this calculation.
d. Next Gen Average Points Earned and Average Scale Score
5. Calculate average for School, District and State
6. Only students with partstatus='Z' are included in this calculation.
7. Students with OctEnrol $\neq$ '1' are excluded at the school level unless they are at a one-school district.
8. For HS Sciences, each science is aggregated by itself. Biology students are not combined with Introductory Physics students.

## Data Deliverables Specifications MegaFile(s)

1) Generic Details
a. Megafile deliverables are posted by grade to the FTP site for the state and contain data for all processed students.
b. All MegaFile deliverables follow the most recent layout: MCAS 2021-22 File Layout_Cognia.xlsx
c. Test-result based fields that are not applicable to particular deliveries are left blank. SIMS based fields are populated for all releases, where available.
d. Amend
i. If a student receives an amend code for the General or Alternate Assessment, then the amend field will contain the first letter of that test (e.g., A value of "EM" indicates the student received an amend code in ELA and Math).
e. DataChanged
i. DataChanged indicates if a student's record has changed since a prior release of the file. It is defaulted to ' 0 ' for all students.
ii. Students whose record changes during the discrepancy period are flagged as datachanged = ' 1 ' (first full revision) in the post-discrepancy reporting file (release 4).
iii. Only use the following fields when calculating datachanged:
1. sprp_dis
2. sprp_sch
3. $\mathrm{e} / \mathrm{m} /$ steststat
4. $\mathrm{e} / \mathrm{m} / \mathrm{srawsc}$
5. e/m/sscaleds
6. $\mathrm{e} / \mathrm{m} /$ sperflev
7. $\mathrm{e} / \mathrm{m} /$ sperf2
8. $\mathrm{e} / \mathrm{m} / \mathrm{scpi}$
9. $\mathrm{e} / \mathrm{m} / \mathrm{snumin}$
10. $\mathrm{e} / \mathrm{m} /$ sassess
f. Commas are suppressed from school and district names, and student names.
g. If $[\mathrm{e} / \mathrm{m} / \mathrm{s}] \mathrm{Alt}$. $=$ ' 0 ' then set to blank.
h. If LEPFirst = ' 0 ' then set to blank.
i. For the following Accommodation variables, if the accommodation equals ' 0 ', then set to blank: Accom_readaloud, accom_scribe, accom_calculator.
j. $[\mathrm{e} / \mathrm{m} / \mathrm{s}]$ ScaledS is the combined current year and prior year official scaled score results for students included in aggregations and accountability.
k. [e/m/s]Perflev is the formatted current year achievement level or code.
I. [e/m/s]Perf2 is the formatted combined current and prior year achievement level results for accountability and aggregations. Set to blank for Grade $=$ ' 09 '.
m . [e/m/s]_CD is updated with current-year results.
n. [e/m/s]SGP is the reported current-year student growth percentile.
o. If Grade $=$ ' 09 ' then the following accountability fields are set to blank:
i. sPerf2
ii. sCPI
iii. sNumin
iv. sAssess
v. (Grade 09 test results are not included in DESE aggregate calculations until their accountability year)
p. The following fields in the megafile will be blank in 2022:
i. days_remote
ii. days_in_person
iii. member
iv. instruction_mode
v. eremote
vi. mremote
vii. sremote
viii.esession
ix. msession
q. For students affected by the screen reader issue or students who take mini-MCAS form, items not available to the student will have "/" in the item column.
2) Preliminary Release Specifics
a. File Name:MCASYYYY_XX.dat Where $\mathrm{Y} Y Y \mathrm{Y}=4$-digit test year (e.g., 2022), $\mathrm{XX}=2$-digit test grade .
b. Files are produced for grades $03-08$ and HS (includes test grade 09 and 10 data).
c. DataChanged is originally set to ' 0 '. If a student record is new or was modified during the discrepancy period, datachanged is set to ' 1 '. For any subsequent updates the datachanged flag will be maintained and incremented as necessary.
d. MCASRowID

The mcasrowid is a 15 -digit alpha-numeric field created in the following manner:
i. 2 digits $=$ administration year (ie: 22 for the 2022 test)
ii. 2 digits $=$ file grade ( $03-08$ or HS )
iii. 1 digit $=$ test $(1=$ Standard $)$
iv. 10 digits $=$ bookletnumber (derived by DP from the student's SASID or submitted answer document)

## Assigned Accommodations Data File(s)

1) File Name: [sub]Accom.csv
2) One file is produced by subject including all students in all grades and posted to the FTP.
3) The fields are described in the Accommodation File layout.

## Accessed Accommodations Data File(s)

1) File Name: [sub]AccomByltem.csv
2) One file is produced by subject including all students in all grades and posted to the FTP.
3) For each test the file is stacked by item UIN and indicates which accommodations were accessed for that item.
4) Items with no accommodations accessed are not included in the file. If a student has not accessed any accommodations on the test this will result in that student not being included in the file.

## Questionnaire (VOCAL) Data File(s)

1) File Name: Questionnaire Data $G r X X$.csv where $X X=2$-digit grade
2) Layout: MCAS[4-digit year]Questionnairelayout.xIsx
3) Files are produced for Grades 04, 05, 08, and 10 and posted via FTP.
4) All students are included regardless of responses to questionnaire items, listed by SASID (StudentID)
5) Preliminary Questionnaire files will be delivered in June with final versions delivered in August. The Preliminary files will not have clean SASIDs. The MCASRowID in the final file will match the pre-discrepancy megafile.

## Alt \& Standard Participation File

A file is produced including students in all grades that took both the Alternate Assessment and Standard Assessment in the same subject. This file provides score and achievement level information for DESE to determine if any students should have their Standard Assessment results override their Alternate Assessment results. This file is posted to the FTP. The filenaming convention is MCASyyyyTestedMCASandAlt.xlsx where yyyy=the academic year ex. 2122

## State File

A state file is produced after all reruns have been done. The file contains information per the state file layout. An item list file accompanies the state file to indicate the item metadata for each item.

## Report Deliverables Specifications General Rules for Report Generation

1. If a student does not receive a student report, then no label is printed for the student
2. If all tested subjects for the student are under the Alternate Assessment, then students will not receive a label or student report for the general assessment.
3. If all subjects are DNT the student does not receive a label or student report.
4. "Orphan" schools, defined by the district code field in iCore beginning with a letter, have generic district names such as Test Site or Out-of-State School. These generic names will be printed on the slip sheet of the printed reports but will be blanked out on the reports themselves. This applies to both labels and student reports.

## Student Labels

1) Templates
a. There are three different label templates that differ depending on the number of subjects reported for the tested grade:
i. One subject - grade 09 ( $9^{\text {th }}$ grader with no ELA and no Math submitted)
ii. Two subjects - grades $03,04,06,07$
iii. Three subjects - grades $05,08,10$ (also any $9^{\text {th }}$ graders with ELA and/or Math submitted)
2) Label Displays
a. Student Name
i. 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
ii. This section requires special formatting when one or more of the names are missing:
1. If Lname is blank and Fname is blank, then section = "BLANK NAME"
2. If Lname is blank and Fname is not blank, then section = "Fname BLANK"
3. If Lname is not blank and Fname is blank, then section = "BLANK Lname"
b. Grade
i. If grade='10' and summarize $=0$ and StuGrade <> 'SP' then use StuGrade from SIMS.
ii. Otherwise use the Test Grade and remove any leading zeroes.
c. SASID - Student ID from SIMS, no special formatting applied.
d. School Name, School Code, and District Name - School and District names and School Code from iCore based on testing school (discode,schcode). No special formatting applied.
e. Birth Date - DOB from SIMS, no special formatting applied. Stored in tblStudemo.DOB. Must be equal to 10 characters in length (MM/DD/YYYY).
f. Test Date: "Spring 20YY" where 20YY = test year, e.g., 2013.
g. Subject Title - Formatted with the following values:
i. If subject = 'ela' then 'English Language Arts'
ii. If subject = 'mat' then 'Mathematics'
iii. If subject $=$ ' sci ' then and grade is 05 or 08 then 'Science and Technology/Engineering'
iv. Otherwise, if subject = 'sci' and grade is 09 or 10 (HS STE's) then:
4. If rptSciTry = ' 1 ' then 'Biology'
5. If rptSciTry = ' 2 ' then 'Chemistry'
6. If rptSciTry = ' 3 ' then 'Introductory Physics'
7. If $\mathrm{rptSciTry}=$ ' 4 ' then 'Technology/Engineering'
8. If rptSciTry= '5' then 'Biology'
9. If rptSciTry= ' 6 ' then 'Introductory Physics'
h. Scaled Score - student earned scaled score stored as rScaledScore. If a student did not earn a scaled score for a tested subject (rScaledScore is NULL) the display is formatted as "---".
i. Achievement level contains either the achievement level text or the not-tested statement stored in tbIPerfLevelLookup. This is set using the student's rPerfLevel. This is always populated if the subject existed at the tested grade.

## Student Reports

1. Templates
a. One subject - tested grade 09 legacy (9th grader with no ELA and no Math submitted)
b. One subject-tested grade 09 NextGen $\left(9^{\text {th }}\right.$ grader with no ELA and no Math submitted)
c. Two subjects - tested grades $03,04,06,07$
d. Three subjects - tested grades $05,08,10$ (also any 9th graders with ELA and/or Math submitted)
e. The grade 103 -subject report has 2 different templates depending on the HS STE the student took. If the student took a legacy Science (Technology/Engineering or Chemistry) the back page will be in the legacy format. If the student took a Next Gen Science (Physics or Biology) the back page will be in the Next Gen format.
f. If a student is Previously Passed (invalidated or does not attempt) or Previously Failed (and does not attempted) in HS STE, the results will be on the Grade 10 template with the legacy science page.
2. The student's Prior score is reported
3. The prior subject is reported
4. The achievement level is "Previously Passed" or "Previously Failed"
g. If a student is Previously Passed (not invalidated and attempted) or Previously Failed (and attempted) in HS STE, the results will be on the Grade 10 template with the NextGen science page.
5. The student's current earned score is reported
6. The current subject is reported
7. The achievement level is earned achievement level
h. If the student has any other not tested participation status for HS STE, then the grade 10 template with the NextGen HS STE design will be used and the subject will be "Science and Technology/Engineering".
8. Legacy HS (1 subject) Student Report Template (Chemistry or Technology/Engineering and tested grade=9 only)

The following sections discuss the formatting of the various displays presented on the legacy high school student report. All calculations and aggregation rules can be found in earlier sections of this document. Please note that all details mentioned below cover reporting of tested students as outlined in Test Administration Table.
a. Cover Page
i. Title - "Spring 20YY MCAS Tests" where 20YY = test year, e.g., 2022.
ii. Student Name - 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
iii. 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"
iv. SASID - Student ID from SIMS, no special formatting applied.
v. School Name and District Name - School and District names from iCore based on testing school. No special formatting applied.
vi. Grade-Test Grade and remove any leading zeroes.
vii. DOB - DOB from SIMS, no special formatting. Must be equal to 10 characters in length (MM/DD/YYYY).
b. Inner Pages

Reporting Category Display
i. Subject - Formatted with the following values:
ii. If rptSciTry = ' 2 ' then 'Chemistry'
iii. If rptSciTry = ' 4 ' then 'Technology/Engineering'
iv. Reporting category text and two-character codes for the approved text and codes.
v. Reporting category results are displayed only for students who are Tested.
vi. Points earned by your child is the points earned by the student in that reporting category.
vii. Possible Points - points possible for that reporting category.
viii. Percent of possible points earned by your child is points earned by child/points possible times 100. Rounded to the nearest whole number.
ix. Join to tblRepCatSummary based on the subject associated with the student's rptSciTry.
Item Display
i. Subject Title - Formatted with the following values:

If rptSciTry = ' 2 ' then 'Chemistry' If rptSciTry = '4' then 'Technology/Engineering'
ii. Order of rows within each grid

1st = "Question Number" - this is the released item order number.
2nd = "Reporting Category" - this is the two-character reporting category code.
3rd = "Your Child's Score" - this is the response provided by the student.
iii. Formatting of Student Responses

If the student correctly responded for all MC items, this is translated to a ' $P$ ' in the reporting data so that a check mark is displayed. Incorrect responses are replaced with a '-' on the report as all items are unreleased.
iv. Otherwise for all other items the points earned by the student is presented along with the possible points for the item separated by a " "". Examples: 2/4 or 7/12.
v. Item responses are blanked out in tblstuitem for students that should not receive reported item responses in the display
Student Achievement Level and Scaled Score
i. Achievement level - contains either the achievement level text or the not-tested statement stored in tblPerfLevelLookup. This is set using the rPerfLevel
ii. Score is the earned scaled score or blank for not tested students
iii. For HS students where Test status not equal to ' $T$ ', scaledscores are displayed if earning a passing raw score ("Needs Improvement" or higher)
iv. For current year scaled scores use rScaledScore
v. For standard error bar use lowScaledScore and highScaledScore
vi. Graduation requirement notes:

| SIMS grade | g9 or lower taking HS STE only or one subject in g10 ELA/math | g9 or lower taking both g10 ELA \& math (summarize set to 1 in megafile) \& first-time g10 (class of 2024) | repeating g10 \& g11 (class of 2023) | $\begin{gathered} \text { G12, SP } \\ \text { (class of 2022) } \end{gathered}$ | blank (adults or not linked to SIMS) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| summarize | 0/blank | 1 | 0/blank | 0/blank | 0/blank |
| ELA/math: $C D=2$ | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject |
| ELA/math: $C D=1$ | PASSED but requires an Educational Proficiency Plan in this subject | PASSED but requires an Educational Proficiency Plan in this subject | PASSED but requires an Educational Proficiency Plan in this subject | PASSED but an Educational Proficiency Plan may be required in this subject. See above for details about MCAS graduation requirements | PASSED but an Educational Proficiency Plan may be required in this subject. See above for details about MCAS graduation requirements |
| ELA/math: $C D=0$ | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements | HAS NOT MET the MCAS graduation requirement in this subject |
| STE: $\mathrm{CD}=1$ | PASSED and met the MCAS <br> graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject |
| STE: $\mathrm{CD}=0$ | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements. | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements. | HAS NOT MET the MCAS graduation requirement in this subject |

3. Next Gen Student Report Template (note that this also includes legacy HS science for students taking Chemistry or Technology/Engineering)

The following sections discuss the formatting and displays presented on the Next Gen P/G Student Report. All calculations and aggregation rules can be found in earlier sections of this document.

1) General Rules for Report Generation
a. If all tested subjects for the student are under the Alternate Assessment, then students will not receive a student report or label for the general assessment.
b. Test mode - Displayed is which mode of test the student used
i. "Paper-based test" or "Computer-based test"
ii. If a student has not attempted items ([x]attempt='N') then test mode will be blank on the student's report.
c. Order of the Subject results
i. The inner pages of the report display ELA on the left side of the page and Math on the right side of the page.
ii. If grade is 05,08 or HS , then Science results are displayed on the back page

## 2) Cover Page

a. If tested grade=10: - "Your Child's Overall Results in Grade [GG]" (where grade = student's tested grade)
b. Title - "Spring 20YY MCAS Tests" where 20YY = test year, e.g., 2022.
c. Student Name - Presented as proper case based on LName, FName MI. (with a period after the middle initial when the middle initial is not blank). Examples: Smith, John T. or Jones, Jenny
i. This section requires special formatting when one or more of the names is missing:

1. If Lname is blank and Fname is blank, then section = "Blank Name"
2. If Lname is blank and Fname is not blank, then section = "Blank, Fname"
3. If Lname is not blank and Fname is blank then section = "Lname, Blank"
d. SASID - Student ID from SIMS, no special formatting applied.
e. School Name and District Name - School and District names are truncated names from iCore based on testing school. No special formatting applied.
f. Grade - Student's tested grade will be used for reports
g. DOB - DOB from SIMS, no special formatting. Must be equal to 10 characters in length (MM/DD/YYYY).
h. High School: Use the following table and the earned CD to determine the appropriate note:

| SIMS grade | g9 or lower taking HS STE only or one subject in g 10 ELA/math | g9 or lower taking both g10 ELA \& math (summarize set to 1 in megafile) \& first-time g10 (class of 2024) | repeating g10 \& g11 (class of 2023) | $\begin{gathered} \text { G12, SP } \\ \text { (class of 2022) } \end{gathered}$ | blank (adults or not linked to SIMS) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| summarize | 0/blank | 1 | 0/blank | 0/blank | 0/blank |
| ELA/math: $C D=2$ | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject |
| ELA/math: $C D=1$ | PASSED but requires an Educational Proficiency Plan in this subject | PASSED but <br> requires an <br> Educational <br> Proficiency Plan in <br> this subject | PASSED but requires an Educational Proficiency Plan in this subject | PASSED but an Educational Proficiency Plan may be required in this subject. See above for details about MCAS graduation requirements | PASSED but an Educational Proficiency Plan may be required in this subject. See above for details about MCAS graduation requirements. |
| ELA/math: $C D=0$ | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements | HAS NOT MET the MCAS graduation requirement in this subject |
| STE: CD=1 | PASSED and met the MCAS graduation | PASSED and met the MCAS graduation | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation requirement in this subject | PASSED and met the MCAS graduation |


| SIMS grade | g9 or lower taking HS STE <br> only or one subject in g10 ELA/math | g9 or lower taking both g10 ELA \& math (summarize set to 1 in megafile) \& first-time g10 (class of 2024) | repeating g10 \& g11 <br> (class of 2023) | $\begin{gathered} \text { G12, SP } \\ \text { (class of 2022) } \end{gathered}$ | blank (adults or not linked to SIMS) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| summarize | 0/blank | 1 | 0/blank | 0/blank | 0/blank |
|  | requirement in this subject | requirement in this subject |  |  | requirement in this subject |
| STE: CD=0 | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements. | HAS NOT MET the MCAS graduation requirement in this subject but may be eligible for the modified CD. See above for details about MCAS graduation requirements. | HAS NOT MET the MCAS graduation requirement in this subject |

i. If tested grade=10: print Not Tested reason below the text from the above table. If the student is tested this section is blank. The not-tested reason wording is stored in tbIPerfLevelLookup. This is set using the rPerfLevel variable from tbIStuTest
j. If tested grade=10: Print Student Growth Percentile under scaled score information
k. If the student is being reported on the legacy science Grade 10 template, then apply the following:

Graduation requirement footnotes
i. If student has cd='0' then print "Your child has not met the MCAS graduation requirement in this subject.
ii. If student has PartStatus='K' then print "Your child has already met the MCAS graduation requirement in this subject."
iii. If student has cd='1' then print "Your child has met the MCAS graduation requirement in this subject."
I. If tested grade is in 3-8: Print Family Guide text for each subject based on the next higher grade than the student's tested grade. Grade 8 will have text from High School.
m. Grade 9 reports will have text from High School. The same science text displayed on the Grade 8 reports.
3) Inner pages
a. Reporting Category Display
i. Subject- Formatted with the following values:

If subject = 'ela' then 'English Language Arts'
If subject $=$ 'mat' then 'Mathematics'
If subject $=$ 'sci' and grade is 05 or 08 then 'Science and Technology/Engineering'
Otherwise, if subject = 'sci' and grade is 09 or 10 (HS STEs) then:
If rptSciTry = ' 1 ' or ' 5 ' then 'Biology'
If rptSciTry = ' 3 ' or ' 6 ' then 'Introductory Physics'
If rptSciTry = '2' then 'Chemistry'
If rptSciTry = '4’ then 'Technology/Engineering'
b. Next Gen: Reporting category text, two-character codes, and report display ordering - refer to daRepCatTextLookup for the approved text and codes.
c. Reporting categories are sorted in the order listed in appendix $A$.
d. Reporting category results and state comparisons are displayed only for students who are Tested. State results include only students who are Tested.
e. Legacy Science only: Percent of points earned by your child- pRawScore variables from tbIStuRepCatPoints, no special formatting with RepCatID indicating the Reporting category RepOrder in daPointsPossible.
f. For ELA, Math, 5 and 8 Science, and NextGen HS STE (Biology and Introductory Physics) the comparison is "Average points earned" includes Meeting Expectation students who scored close to 500"

## g. Item Display

i. Prior to calculation, the pool of students used must be no less than 200. If there are less than 200 students at the 500 level, then expand the student pool to include students with scale scores equal to 501, $499,502,498$, etc. until a minimum $n$ of 200 students is reached, only considering students within the same test mode and scaleform.
ii. For any mode at a grade/content level that does not reach the 200student threshold within the scaled score range of 500-505, the student's report will not include the average points for the reporting categories.
iii. Data displaying averages in the scaled score table should include data from the full population, and not separated out by test mode.
iv. For students who are scored using a non-standard scaleform, the reporting category for which the reduced number of points is associated, display "N/A".
i. Subject Title and Subject Ordering follow the same rules as above.
ii. Order of rows within each grid

1 = "Question Number" - this is the released item order number.
$2=$ "Reporting Category" - this is the two-character reporting category code. This is displayed for HS Science students only If subject is ELA or Math then: 3 = "Points Earned" - this is the score the student received for the item/total points possible for the item. If subject is STE then: 3=Practice Category-The single character abbreviation for the Practice Category assigned to the item. If there is no Practice Category assigned to the item then " $/$ " If subject is STE then: 4=" Points Earned"- this is the score the student received for the item/total points possible for the item.
iii. Order of items
a. Items are ordered in the order specified in the reporting sequence column in the test maps.
b. Item responses are ordered by the reportingsequence column in the test maps.
c. For essays points for each trait will be printed separately on the report in released item and trait order.
iv. Formatting of Student Responses
a. Legacy HS Science data will include the following:

Check marks for correct answers
An asterisk for more than one answer provided A dash if a student incorrectly answered the item Open response items are displayed with the number of points earned out of the total possible points (Ex. 3/4 or 0/1).
b. ELA and Math and 5\&8 Science data are displayed as the number of points earned out the total points possible (Ex. 1/1 or $0 / 3$ ).
c. If a student did not answer an item, that cell will be blank.
h. Student Achievement Level and Scaled Score Statements
i. Next Gen: "Your Child's Achievement Level:" Achievement level earned by the student or the not tested reason for not tested students
ii. Next Gen: "Your Child's Score:" earned scaled score, the rScaledScore variable from tbIStuTest.
iii. EL First-year students:
a. Students who are not Tested do not receive scaled scores
b. if TestStat $=$ NTL:

Scaled scores printed for ELA and Math and 5\&8 Science if earned Achievement Level is PM or above.
Scaled scores printed for HS Science students earning an achievement level of NI or above.
iv. State results will only include students who fully attempted.
i. Special Access Accommodation Student Report text based on table Non-Standard Accommodation Footnote Text (Student Report). See below for wording.
j. Next Gen: Average Scaled Scores and Prior Scaled Scores
i. Display current year average scaled score based on official school and official district
ii. Prior grades and scaled scores will be pulled from the SIMS data
iii. Prior scores in grades $3-8$ to be reported are for years 2019 and 2021 where available. Grade 10 will have results for 2019 and 2018 where available.
k. Student Growth Percentile Display
i. Growth is provided by DESE
ii. If a student's test status changes to Not Tested, then growth will be blanked out
iii. Mean growth is based on official school and official district
iv. Your Child - presents the student's growth percentile
v. GP is used to mark the location of the circle with score.
vi. lowGP and highGP are used to draw a standard error bar behind the student score circle.
vii. School/District - Mean value from tblSummary for school/district based on official school and district (sprp_sch and sprp_dis).
viii. School/District Means are displayed regardless of whether the student has a growth percentile displayed
ix. In 2022, State mean is not fixed at 50 . The display will reflect the calculated value.
I. Special access accommodation footnote

| Special Access <br> Accommodation | Student Report Text |
| :--- | :--- |
| Read aloud | Information provided by the school indicates student received a special access accommodation (the ELA test was <br> read aloud to student) as required by their IEP or 504 plan. |
| Scribe | Information provided by the school indicates student received a special access accommodation (student used a <br> scribe for the ELA test) as required by their IEP or 504 plan. |
| Calculator | Information provided by the school indicates student received a special access accommodation (student used a <br> calculator for the non-calculator session of the mathematics test) as required by their IEP or 504 plan. |
| Read aloud and <br> Scribe | Information provided by the school indicates student received special access accommodations (the ELA test was <br> read aloud to student and student used a scribe for the ELA test) as required by their IEP or 504 plan. |

## Portfolio Feedback Form (PFF)

The Portfolio Feedback Form is produced in June for the students who participate in the Alternate Assessment.

## Reporting Category Table

The red text in the below table indicates legacy Biology and Physics reporting categories. The last 3 rows in the table below are the science practice categories.

| Grade | Subject | RepCatID | RepCatLabel | RepCatAbb | rptRepCatOrder |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | ela | 1 | Reading | RE | 1 |
| 3 | ela | 2 | Language | LA | 2 |
| 3 | ela | 3 | Writing | WR | 3 |
| 3 | mat | 1 | Operations and Algebraic Thinking | OA | 2 |
| 3 | mat | 2 | Number and Operations in Base Ten | NT | 2 |
| 3 | mat | 3 | Number and Operations-Fractions | NF | 3 |
| 3 | mat | 4 | Measurement and Data | MD | 4 |
| 3 | mat | 5 | Geometry | GE | 5 |
| 4 | ela | 1 | Reading | RE | 1 |
| 4 | ela | 2 | Language | LA | 2 |
| 4 | ela | 3 | Writing | WR | 3 |
| 4 | mat | 1 | Operations and Algebraic Thinking | OA | 1 |
| 4 | mat | 2 | Number and Operations in Base Ten | NT | 3 |
| 4 | mat | 3 | Number and Operations-Fractions | NF | 3 |
| 4 | mat | 4 | Measurement and Data | MD | 4 |
| 4 | mat | 5 | Geometry | GE | 5 |
| 5 | ela | 1 | Reading | RE | 1 |
| 5 | ela | 2 | Language | LA | 2 |
| 5 | ela | 3 | Writing | WR | 3 |
| 5 | mat | 1 | Operations and Algebraic Thinking | OA | 1 |
| 5 | mat | 2 | Number and Operations in Base Ten | NT | 3 |
| 5 | mat | 3 | Number and Operations-Fractions | NF | 3 |
| 5 | mat | 4 | Measurement and Data | MD | 4 |
| 5 | mat | 5 | Geometry | GE | 5 |
| 5 | sci | 1 | Earth and Space Science | ES | 1 |
| 5 | sci | 2 | Life Science | LS | 2 |
| 5 | sci | 3 | Physical Science | PS | 3 |
| 5 | sci | 4 | Technology/Engineering | TE | 4 |
| 6 | ela | 1 | Reading | RE | 1 |
| 6 | ela | 2 | Language | LA | 2 |
| 6 | ela | 3 | Writing | WR | 3 |
| 6 | mat | 1 | Ratios and Proportional Relationships | RP | 1 |
| 6 | mat | 2 | The Number System | NS | 2 |
| 6 | mat | 3 | Expressions and Equations | EE | 3 |
| 6 | mat | 4 | Geometry | GE | 4 |
| 6 | mat | 5 | Statistics and Probability | SP | 5 |
| 7 | ela | 1 | Reading | RE | 1 |
| 7 | ela | 2 | Language | LA | 2 |
| 7 | ela | 3 | Writing | WR | 3 |
| 7 | mat | 1 | Ratios and Proportional Relationships | RP | 1 |
| 7 | mat | 2 | The Number System | NS | 2 |
| 7 | mat | 3 | Expressions and Equations | EE | 3 |
| 7 | mat | 4 | Geometry | GE | 4 |
| 7 | mat | 5 | Statistics and Probability | SP | 5 |
| 8 | ela | 1 | Reading | RE | 1 |
| 8 | ela | 2 | Language | LA | 2 |
| 8 | ela | 3 | Writing | WR | 3 |
| 8 | mat | 1 | Number System \& Expressions/Equations | NE | 1 |
| 8 | mat | 2 | Functions | FN | 2 |
| 8 | mat | 3 | Geometry | GE | 3 |
| 8 | mat | 4 | Statistics and Probability | SP | 4 |
| 8 | sci | 1 | Earth and Space Science | ES | 1 |
| 8 | sci | 2 | Life Science | LS | 2 |
| 8 | sci | 3 | Physical Science | PS | 3 |
| 8 | sci | 4 | Technology/Engineering | TE | 4 |
| 10 | bio | 1 | Biochemistry and Cell Biology | BC | 1 |
| 10 | bio | 2 | Genetics | GE | 2 |


| Grade | Subject | RepCatID | RepCatLabel | RepCatAbb | rptRepCatOrder |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | bio | 3 | Anatomy and Physiology | AP | 3 |
| 10 | bio | 4 | Evolution and Biodiversity | EV | 4 |
| 10 | bio | 5 | Ecology | EC | 5 |
| 10 | che | 1 | Properties of Matter and Thermochemistry | TH | 1 |
| 10 | che | 2 | Atomic Structure and Periodicity | AS | 2 |
| 10 | che | 3 | Bonding and Reactions | BR | 3 |
| 10 | che | 4 | Solutions, Equilibrium, and Acid-Base Theory | SO | 4 |
| 10 | ela | 1 | Reading | RE | 1 |
| 10 | ela | 2 | Language | LA | 2 |
| 10 | ela | 3 | Writing | WR | 3 |
| 10 | mat | 1 | Number and Quantity | NQ | 1 |
| 10 | mat | 2 | Algebra and Functions | AF | 2 |
| 10 | mat | 3 | Geometry | GE | 3 |
| 10 | mat | 4 | Statistics and Probability | SP | 4 |
| 10 | phy | 1 | Motion and Forces | MF | 1 |
| 10 | phy | 2 | Heat and Heat Transfer | HT | 2 |
| 10 | phy | 3 | Waves and Radiation | WV | 3 |
| 10 | phy | 4 | Electromagnetism | EM | 4 |
| 10 | tec | 1 | Engineering Design | 1 |  |
| 10 | tec | 2 | Construction and Manufacturing | CM | 2 |
| 10 | tec | 3 | Fluid and Thermal Systems | FL | 3 |
| 10 | tec | 4 | Electrical and Communication Systems | EL | 4 |
| 10 | bio | 1 | Molecules to Organisms | MO | 1 |
| 10 | bio | 2 | Heredity | HE | 2 |
| 10 | bio | 3 | Evolution | EV | 3 |
| 10 | bio | 4 | Ecology | EC | 4 |
| 10 | phy | 1 | Motion, Forces, and Interactions | MF | 1 |
| 10 | phy | 2 | Energy | EN | 2 |
| 10 | phy | 3 | Waves | WA | 3 |
|  | sci | N/A | Investigations and Questioning | A | N/A |
|  | sci | N/A | Mathematics and Data | B | N/A |
|  | sci | N/A | Evidence, Reasoning, and Modeling | C | N/A |

## CPI Charts for Grade 10

| By ALT standard (nextGen or legacy) | CPI 2022 (G10 all 4 STE subjects) |
| :---: | :---: |
| INP | 25 |
| AWR | 50 |
| EMG | 75 |
| PRG | 100 |
| By Grade-Level complexity (nextGen) | $\begin{gathered} \text { CPI } 2022 \\ \text { (G10 Bio \& Phy) } \end{gathered}$ |
| NM_A | 25 |
| PM_A | 75 |
| M_A | 100 |
| E_A | 100 |
| By Grade-Level complexity (legacy) | CPI 2022 <br> (G10 Chem \& Tech/Eng) \& banked results |
| F_A | 25 |
| NI_A | 75 |
| P_A | 100 |
| A_A | 100 |
| Standard Test (legacy or legacy-equivalent) | CPI |
| 240-280 | 100 |
| 230-238 | 75 |
| 220-228 | 50 |
| 210-218 | 25 |
| 200-208 | 0 |

## Addenda

1. The following items have been removed from the specified forms:

| FormName | FormID | UIN | Item <br> Type | PvMax | Comment |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MCASma08sp22OPform00SR | 22MA08SPSREN0102 <br> 22MA08SPATEN0102 | MA715920050_PA | CR | 4.0 | Removed <br> from <br> SR/NSR <br> forms only |
| MCASsc05sp22OPform01SR | 22SC05SPSREN0102 <br> 22SC05SPATEN0102 | SC313154_PA | CR | 3.0 | Removed <br> from <br> SR/NSR <br> forms only |
| MCASsc08sp22OPform01SR | 22SC08SPSREN0102 <br> 22SC08SPATEN0102 | SC631744146_PA | CR | 3.0 | Removed <br> from <br> SR/NSR <br> forms only |

2. The following describes effects on the student report for affected students
a. A is populated in the cell in the item grid for the affected subject for the item in sequence
b. A corresponding footnote appears below the item grid for the affected subject only
c. The note reads: ".=This question was not administered on the version of the test your child took and did not count toward their results."
d. ** appear in the affected reporting category row for columns: Average Points in School, Average Points in District, Average Points in State, and Average Points at Meeting Expectations
e. A corresponding ** footnote appears below the reporting category table
f. The ** footnote reads" Average number of points for the school, district, state and at Meeting Expectations are not available for the version of the test your child took."
3. In the megafile the items that are not scored are presented with a " $/$ ".
4. The following items will have 1 pt. credited (i.e., added to their earned score on the other parts of the item) for affected items for the affected students who took the screen reader form MCASscBlsp22OPform01SR:

| UIN | Form ID | Issue | Points added |
| :--- | :--- | :--- | :--- |
| SC816235890_PA | 22SCBISPATEN0101 | SR/NSR students will not be able to use <br> subscripts and won't be able to populate <br> directly into the equation in Part A like paper <br> students will be able to. | 1 |
| SC312659_PA | 22SCBISPATEN0101 |  |  |
| 22SCBISPSREN0101 | SR/NSR students will not be able to draw in <br> Parts B \& D as the item instructs them to. | 2 |  |

5. Students who took the mini-MCAS test will be treated as follows:
a. They are aggregated only with other students who took the mini-MCAS who are classified as tested.
b. On their student report, the item grid will have • where the item was not presented on the mini-MCAS test.
c. A footnote will appear below the item grid that reads=This question was not administered on the version of the test your child took and did not count toward their results."
d. In the megafile the items that are not scored are presented with a "l".
e. In the megafile, ssession=1 to indicate regular test, and 3 to indicate mini form.
6. The following table clarifies changes to reporting students who previously passed or previously failed in 2022.

| Partstatus | Invalidated*? | score on ISR | Sscaleds/sperflev <br> in megafile | ssubject |
| :---: | :---: | :---: | :---: | :---: |
| PAS | Y | prior only (legacy <br> template) | prior SS/PAS | Sperf2 in megafile <br> summarize=1 only) |
| PRF (no attempt <br> spr22) | NA | prior only (legacy <br> template) | prior SS/PRF | Prior |
| PRF (attempted <br> spr22) | NA | Current | Current SS/current sperflev <br> + prior (new fields) | current |
| PAS | N | Current | Current SS/current sperflev <br> + prior (new fields) | current |

7. Students with no prior scaledscore but prior perflevel and no prior science are reported on the NextGen template with subject=Biology. The aggregations will be reported where available.
8. Students from DESE who are under investigation are reported as INC with no item level data. Perflev='INC' and other performance fields are blank in the megafile. In 2022, the students and subjects are listed in To Suppress 8.19.22.xIsx

## MCAS-ALT Contract Overview

## Reporting Business Requirements <br> Massachusetts Comprehensive Assessment System Alternate Assessment (MCAS-Alt) Spring 2022

This section of Appendix Q details requirements for analysis and reporting for MCAS-Alt. 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, DESE sign-off will be obtained for each such rule.

## New For This Year

a. Legacy HS STE CPIs will be calculated in 2022
b. Will not apply in 2022: For Grade 10 STE, if a student does not have results instead of "Required, but not submitted" being printed on student report, the achievement level column on the report will be blank. These will be treated as students in grades 11,12 , or $12+$.
c. On the Student Report, students with participation status Previously Failed will have Achievement Level="Previously Tested" printed
d. Achievement Level "Incomplete Portfolio" is changed to "Incomplete"

Test Administration(s) Adminid=5

| Subject | Required Grades | Permissible Grades | Test Type |
| :--- | :--- | :--- | :--- |
| ELA | $03-08,10$ | $03-08,10+$ | Portfolio |
| Mathematics | $03-08,10$ | $03-08,10+$ | Portfolio |
| Science \& Technology/Engineering | 05,08 | 05,08 | Portfolio |
| One of either High School Biology, <br> Chemistry, Introductory Physics, or <br> Technology/Engineering | 10 | $09,10+$ | Portfolio |

## General Information

- Client and internal deliverables for this contract are listed. Specifications for each deliverable are detailed in the Deliverable Specifications section provided.

| Deliverable | Type | Delivery | Administration |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Prelim | Post-Discrepancy |  |  |
| Student data Files | .xls | To PM | ü |  | ü |
| Alt Mega File | .dat | To PM | ü |  |  |
| Comments Summary | .xls | To PM |  | ü |  |
| General Portfolio <br> Comments Summary | .xls | To PM |  | ü |  |
| State Performance Level <br> Summary | .xls | To PM |  | ü | ü |


| Deliverable | Type | Delivery | Administration |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | June | Prelim | Post-Discrepancy |  |
| State Participation <br> Summary | .xls | To PM |  |  | ü |
| Teacher Survey | .xls | To PM |  | ü |  |
| Participation by Disability | .xls | To PM |  |  | ü |
| Portfolio Feedback Form <br> (school level pdf) | .pdf | FTP for State | ü |  |  |
| Portfolio Feedback Form <br> (by student pdf) | .pdf | Shipped with <br> Portfolio | ü |  |  |
| Parent/Guardian Report <br> (school and district copy) | .pdf | Shipped to District |  | ü |  |

## Internal Data Sources

## Scoring

- If score 1 does not match score 2 for any dimension, there must be a 3rd score for that dimension.
- If there is a $3^{\text {rd }}$ score for a dimension, that score is the score of record. Otherwise, the $1^{\text {st }}$ score is the score of record.
- If scorer 3 bubbles Strand not Submitted, the strand will be considered not submitted and no scores will be reported.
- If Demonstration of Skills or Independence has a score of ' $M$ ' then both Demonstration of Skills and Independence must have a score of ' $M$ '.
- A score of ' $M$ ' for scorer 1 and/or 2 will always have a $3^{\text {rd }}$ score.
- A score of ' 1 ' for Level of Complexity from scorer 1 and/or 2 will always have a $3^{\text {rd }}$ score.
- If Level of Complexity has a score of 1 then all other scores for that strand must be blank.
- If 'At or Close to Grade Level Bubble' is 1 for a content area then at least one of the required strands for that content area must have a Complexity score of 3 or higher.
- A score of 'M' for Demonstration of Skill and Independence counts as a 1 for analysis.
- The performance level for each strand is determined by a lookup table (see section VI.B) using scores from Complexity, Demonstration of Skills, and Independence.
- Bubbled comments that do not have text associated with them will be suppressed.
- Strands with a Level of Complexity score of 1 will be treated as not submitted for analysis. If a required strand has a Level of Complexity score of 1 , then the resulting performance level will be incomplete.
- For High School sciences DP sets the SciTry variable to indicate which science test was submitted for the current year, SciTry is calculated by reconciling the subject indicated by scorer 1 with scorer 3.
e. '1' = Biology
f. '2' = Chemistry
g. '3' = Physics
h. ' 4 ' = Technology/Engineering
i. '5' = next-gen Biology
j. '6' = next-gen Physics
k. For grades 10+ where science was not submitted, default sciTry to 1.
I. SciTry is blank for grades 03-08.
m. DA calculates the final reporting SciTry value as rptScitry.


## Data Processing (DP)

- Amend Flag
n. The Amend flag for each content area is set by DP based on test booklet reconciliation and the DESE Breach List on an individual student basis. The default Amend flag value for all students is ' 0 '.
o. See the Amend Flag Lookup (a Cognia internal Document) for valid Amend Flag values and their impact on reporting.


## External Data Sources

## Breach List

- 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.
- Data Analysis adds necessary Amend flag values (> ' 1 ') and instructions to the Amend Flag Lookup for each distinct scenario on the Breach List.
- Data Processing applies any necessary changes to the student record based on the DESE instructions and applies the corresponding Amend Flag value from the lookup to the student for Data Analysis processing.


## SIMS

- 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.
- Summarize
p. Summarize is populated in SIMS as either '1' or '0' or blank:
i. Summarize $=$ ' 1 ' indicates that the student is expected to test in the subjects specified for their grade and should be included in aggregations (where applicable). Their results are included in accountability determinations.
Students in Grades 03-08 are all expected to test.
Students in Grade 10 (or students skipping grade 10 who have not yet been tested) are expected to test in Math and ELA and are expected to test or to have prior scores for science. They will have Summarize $=$ ' 1 '.
ii. Summarize = blank in SIMS is only applicable to students from the student directory that do not link to SIMS.
iii. Summarize $=$ ' 0 ' indicates that the student is not expected or required to test at this time for accountability. These students are excluded from aggregations (except for grade 09 specific aggregations). Their results are not counted towards accountability determinations. This includes but is not limited to: student grade 09 students, students that are retesting to meet graduation requirements in a subject they previously failed or missed, students that are retesting to increase their scores for scholarship purposes, or students that are new to Massachusetts.
q. See the Data Reconciliation section IV.A for Data Processing rules for determining the final Summarize source or default value in the views for DA based on Test Grade and SIMS data.
- Banked Prior Achievement Level
r. Only applicable for science. All references are specific to science; in the event that these determinations are needed for Math or ELA, the corresponding Math and ELA specific fields would be used.
s. High_sPerf in SIMS contains the prior high achievement level to be considered during participation status assignment. ELA and Math fields are High_ePerf and High_mPerf respectively and are expected to be blank for HS students with Summarize $=$ ' 1 '.
t. All other fields with historical score or performance information, including the CD fields, are ignored during the participation status determination for students.
u. Data are stored in DPRaw for DA in [sub]PerfLevelHigh (for all subjects) and [sub]NTL fields (for Science).
- SciNTL
v. If SciNTL = ' 1 ' a student is considered to have previously tested in science as a firstyear LEP student and was reported with a sTestStat = 'NTL'.


## Grade Span Lookup

w. The DESE provides a grade span lookup for all public official schools. These are joined to student data based on sprp_sch in tblStudemo.
x. Cognia will provide DESE with a list of any public schools that have students assigned to them that are not included in the lookup, resulting in blank grade span data based on the Preliminary data release.
y. All public schools must have a grade span for final post-discrepancy reporting. For earlier releases grade spans may be blank for schools missing from the lookup.

## Discrepancy Site

- Data from preliminary reporting is posted to the discrepancy site for clean up by the field and the department.
- See the Discrepancy Site Requirements for more details on which fields are available for editing at each user level.
- Data Processing re-processes data post-discrepancy to incorporate the updated information and discrepancy resolutions from the DESE for DA for final reporting.
- During final processing all information from the discrepancy site is considered final and is maintained, however, changes to certain fields require additional data audits and/or recalculation of student participation status to ensure consistency. See the Data Reconciliation section for these details.


## Alternate Assessment Override

- Based on preliminary results from the Alt and Standard Results data file, the DESE may identify any students whose Standard Assessment results should be reported instead of their Alternate Assessment results during final reporting (subject specific).
- The DESE will provide this list to Data Processing with the discrepancy resolutions.
- DP will set the amend flag to appropriately identify these students for DA.


## Data Reconciliation

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 and reporting, as applicable:

## Summarize (performed by DP)

- If test grade is in 03-08, summarize is defaulted to ' 1 ' for all students, regardless of SIMS value.
- If test grade is '09' summarize is defaulted to ' 0 ' for all students, regardless of SIMS value.
- If test grade is ' 10 ':
z. If student grade is $\leq$ ' 09 ':
iv. If the student submitted both Math and ELA (Alt or Standard), then summarize $=$ '1'.
v. Otherwise, summarize = ' 0 '.
aa. If student grade $=$ ' 10 ',' 11 ','12', or 'SP' then summarize is taken from SIMS. If summarize is missing, or if student grade is missing, it is defaulted to ' 0 '.
- The same rules are applied post-discrepancy, except summarize is taken from the updated Discrepancy data in place of SIMS. If summarize is updated during discrepancy reporting the participation status is set to blank to be reassigned.


## LEPFirst/ YrsInmass/ YrsInmass_num

- Lepfirst is provided in SIMS and is not audited by Cognia
- YrsInmass and YrsinMass_num are not audited by Cognia


## LEP

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


## LEPFLEP

- If LEPFirst = ' 1 ' or LEP = '1' or LEPFormer (DA Use: "flep_off' in dpraw) = ' 1 ' then update existing LEPFLEP to ' 1 '.


## Official School and Official District Code Terminology:

- Discode = Cognia Testing Discode from DPRaw (See DP Specifications)
- SchCode = Cognia Testing SchCode from DPRaw (See DP Specifications)
- SendDiscode = Sending District from SIMS
- SimsDisCode = Official Discode from SIMS
- SimsSchCode = Official SchCode from SIMS
- Testing Orgtype $=$ Testing school (discode+schcode) Org type
- OrgType = SPRP school org type
- Exceptions List is provided to Cognia by the DESE.
- (DA Use): The exceptions list is stored in daTestSitelookup


## Official District (sprp_dis)

- 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.
- If the student's testing orgtype is 6,13 or 22 then the official district is set to the discode concatenated with four zeroes.
- 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'.


## Official School (sprp_sch)

- 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.
- If a student is from a collaborative school (testing OrgType $=4$ ) then the official school is $=05 X X 0000$ where $X X$ is the 3rd and 4th digit of the testing district code.
- 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.
- Otherwise the official school is the testing school (discode+schcode).


## Setting of Orgtype

- Orgtype is based on the official school code
- Using the official school code link to the MCAS org data file (DA use: icore) and pull the org type (DA use: Reportcode2).
bb. 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.


## YrsInSch and YrsInDis

- If sprp_sch or testing school (discode+schcode) = the official SIMS school code from June SIMS (simsDiscode + simsSchcode) then use YrsInSch value from SIMS. Otherwise set YrsInSch = ' 1 '.
- If sprp_dis = SendDiscode+0000 from June SIMS then use the YrsInDis value from SIMS. Otherwise set YrsInDis = ' 1 '.


## Oct_Enrol (enrolled in same location since Oct)

- If sprp_sch or testing school (discode+schcode) = SIMS school code from June SIMS (simsDiscode+simsSchcode) then OctEnr = Oct_off from SIMS. Otherwise set Oct_Enr = ' 0 '.


## Con_Enrol (continuously enrolled for 2 years)

- Only populated for students in the grade 10 view, otherwise blank.
- If sprp_sch or testing school (discode+schcode) = the official SIMS school code from June SIMS (simsDiscode + simsSchcode) then use con_enr_sch value from SIMS. Otherwise set con_enr_sch = blank.
- If sprp_dis = SendDiscode+0000 from June SIMS then use the con_enr_dis value from SIMS. Otherwise set con_enr_dis = blank.
- ConEnr_sta is taken from SIMS.


## Student Participation and Reporting Status Basic Definitions

- Test Attemptedness (by subject)
cc. A strand was submitted if there is at least one scoring dimension with a valid score
dd. Attempt: A student participated if at least one required strand was submitted
ee. Did not attempt: Students did not submit any required strands.
- Not Tested Indicators (by subject)

The following Not Tested reasons may be bubbled on the student's answer booklet.
ff. Tested Standard MCAS
gg. Absent-Medically Documented (MED)

- Transfer
hh. If Active_Test $=$ ' 1 ' and at least one required strand is missing the student is considered a transfer student.
- Void
ii. Students whose only Student Information booklet (SIB) has been voided (Void = ' 1 ') are considered "Void".
- Prior Results (by subject)

Prior results currently only apply to HS Science. All references to High_sPerf and SciNTL should be considered subject specific in the event that ELA and Math are updated to allow for prior result determinations.
jj. No Prior Results
Students with a blank High_xPerf and sciNTL $\neq$ ' 1 ' from SIMS are considered to not have prior results.

## kk. Previously Passed

Students with a High_xPerf from SIMS in ('A', 'P', 'NI', 'A_A','P_A', 'NIA','M','E', or 'PM') are considered to have previously passed the subject.
II. Previously Failed

Students with a High_xPerf from SIMS in ('F', 'PRG', ‘EMG', 'AWR', and 'INP','NM') are considered to have previously failed the subject.
mm. Previously First Year LEP
vi. Students with SciNTL = ' 1 ' from SIMS are considered to have previously tested in science as a First Year LEP student and were reported as TestStat = 'NTL'.

Applies to Science only, corresponding variables for ELA and Math do not currently exist in SIMS.
If High_sPerf is not a Previously Passed status and SciNTL = ' 1 ', the student is considered Previously Failed.

## Participation Status Assignment Hierarchy (by subject):

- Breach List (Amend Flag > '1:' continue through assignment, breach instructions will trump all reporting instructions)
- Summarize = '1' or Grade='09' without prior results:
nn. If the student meets attemptedness Tested (PartStatus='A).
oo. If the student did not attempt:
vii. If subject = 'ELA' and First Year LEP then: Not Tested, LEP (PartStatus='F')
viii. Otherwise if MED then: Not Tested Medically Documented (PartStatus=‘G’)
ix. Otherwise if Tested Standard MCAS is indicated then: Tested MCAS Standard Assessment (PartStatus='Z')
x. Otherwise: Not Tested Absent (PartStatus='E')
- If (Summarize='1' or Grade='09') and Previously Failed:
pp. If the student meets attemptedness then: Tested Accountable Retest (PartStatus='C').
qq. If the student partially attempted or did not attempt then: Not Tested Accountable Retest (PartStatus='L').
- If (Summarize='1' or Grade='09') and Previously Passed: Previously Passed (PartStatus='K')
- Summarize = ' 0 ' and grade $\neq$ ' 09 ' (regardless of any prior test results):
rr. If the student meets attemptedness: Not Accountable Retester (PartStatus=‘W').
ss. If the student did not attempt: Not Tested Not Accountable (PartStatus=' $ل$ ').


## Participation Status Summary

- Note there are some participation statuses in the chart that are not in the hierarchy above. These are not achievable in the alt and will only come out of the discrepancy site.

| Summarize | Prior Results | Description | Part Status | Test Stat* | Discre Code | cy Site Text |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $n / a$ | n/a | Breach | Breach Instructions are applied at the student level regardless of participation status and are identified by Amend > '1' |  |  |  |
|  |  | Void (Preliminary Only) Multiple Answer Documents (Security Breach) | H | NTO | VAB | Void Answer Booklet |
|  |  | Preliminary | I | NTO | DUP | Multiple Answer Booklets |
|  |  | Final | N | NTO | n/a | n/a |
|  | $n / a$ | Invalidated (Only assigned via Breach List) | N | NTO | INV | Invalidated |
|  |  | Tested Accountable Alternate Assessment | A | T* | ALT | Tested Alternate Assessment |
|  |  | Tested | Z | T* | STD | Tested Standard |
| $\begin{aligned} & 1 \\ & \text { (or } \end{aligned}$ |  | Not Tested (/Partially Tested) - LEP (ELA Only) | F | NTL | LEP | Not Tested First Year LEP |
| Grade=09) |  | Not Tested (/Partially Tested) - Transfer | D | NTO | TRN | Transferred |
|  |  | Not Tested (/Partially Tested) - Medically Documented | G | NTM | MED | Absent-Medically Documented |


| Summarize | Prior Results | Description | Part Status | Test Stat* | Discrepancy Site |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Code | Text |
| $\begin{aligned} & 1 \\ & \text { (or } \\ & \text { Grade=09) } \end{aligned}$ | n/a <br> Prev. <br> Failed <br> Prev. <br> Failed <br> Prev. <br> Failed | Not Tested (/Partially Tested) - Absent Tested Alternate Assessment Accountable Retest | E | NTA | ABS | Absent |
|  |  |  | C | TR* | ALR | Retested Alternate Assessment |
|  |  | Accountable Retest |  |  |  |  |
|  |  | Tested Accountable Retest | Y | TR* | RET | Retested |
|  |  | Previously Failed (Not Tested /Partially Tested Accountable Retest) Ineligible Accountable Retest - Previously Passed \& | L | NTO* | PRF | Previously Failed |
|  | Prev. <br> Passed | Retested <br> (Preliminary Only-final see K) | P | NTO* | PPR | Previously Passed \& Retested |
|  | Prev. Passed | Previously Passed | K | NTO* | PAS | Previously Passed |
| 0 | Any | Tested Not Accountable Alternate Assessment (Retest) | W | TR* | ALN | Retested Alternate Assessment Not Aggregated |
|  |  | Tested Not Accountable (Retest) | R | TR* | REN | Retested Not Aggregated |
|  |  | Partially Tested Not Accountable (Retest) | B | NTO* | INC | Incomplete |
|  |  | Not Tested Not Accountable (Retest) | $J$ | NTO* | DNT | Did Not Test |

* 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.


## Post-Discrepancy Assignment

- DA only "recalculates" participation statuses for students with a blank participation status during post-discrepancy processing. All other participation statuses are maintained as they are provided from the discrepancy data.
- DP will reset participation statuses to blank prior to final processing for the following discrepancy events so DA will recalculate a new status:
tt . Student test grade is changed.
uu. Summarize is changed (not applicable in unchanged grades 03-08, 09).
vv. First year LEP status is changed.
ww.Answer document is still void (entire book is suppressed).
xx. Answer document(s) are added or removed for a student.
yy. Prior results (high_xPerf, sciNTL) are changed for a student.


|  |  | Description |  | $\begin{aligned} & \text { - } \\ & \frac{0}{5} \\ & \text { 号 } \\ & \text { ü } \\ & \text { 흔 } \end{aligned}$ |  | Current Year Reporting Results |  |  |  | Aggregation/Accountability Results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | ('---' indicates data are blank) |  |  |  |  |  |  |  |
|  |  |  |  |  | \# <br> \# <br> \# |  |  |  |  |  |  |  | 告 |
|  |  |  |  | 1 | NTL |  |  |  |  | --- | --- | --- | 1 |
|  |  |  |  | 0 | T |  |  | earned | earned | earned | earned | ü | 1 |
|  |  | Tested | Z | 1 | NTL | earned | earned | Pass: <br> earned <br> Else: - | Pass: earned Else: LEP | Pass: earned Else: -- | --- | --- | 1 |
|  |  | Not Tested <br> /Partially Tested - <br> LEP <br> (ELA Only) | F | 1 | NTL |  |  |  | HS Pass: earned Else: LEP |  | --- | --- | 1 |
|  |  | Not Tested /Partially Tested Transfer | D | $\begin{aligned} & 0 \\ & \text { (M/S } \\ & \text { 1) } \end{aligned}$ | NTO |  |  | HS Pass: | HS Pass: earned Else: TRN | HS Pass: | --- | --- | --- |
|  |  | Not Tested <br> /Partially Tested - <br> Medically <br> Documented <br> Absent | G | $\begin{aligned} & 0 \\ & (\mathrm{M} / \mathrm{S} \\ & 1) \end{aligned}$ | NTM | earned |  | earned <br> Else: - | HS Pass: earned Else: MED | earned <br> Else: -- | --- | --- | 0 |
|  |  | Not Tested /Partially Tested Absent | E | $\begin{aligned} & 0 \\ & (\mathrm{M} / \mathrm{S} \end{aligned}$ 1) | NTA |  |  |  | HS Pass: earned Else: ABS |  | --- | --- | 0 |
|  | $F$ | Tested Alternate Assessment | C | 0 | TR |  |  |  |  | --- | highest (Alt) | ü | 1 |
|  |  |  |  | 1 | NTL |  |  |  |  | --- | --- | --- | 1 |
|  |  |  |  | 0 | TR |  |  | earned | earned | highest | highest | ü | 1 |
|  | $F$ | Accountable Retest | Y | 1 | NTL | earned | earned | Pass: earned Else: - | Pass: earned Else: LEP | Pass: highest Else: -- | --- | --- | 1 |
|  |  | Previously Failed (Not Tested |  | 0 | NTO | Pass: | Pass: | Pass: | Pass: earned Else: PRF | highest | highest | ü | 1 |
|  | $F$ | /Partially Tested <br> Accountable <br> Retest) | L | 1 | NTL | earned Else: - | earned Else: -- | earned Else: - $\qquad$ | Pass: earned Else: LEP | Pass: highest Else: -- | --- | --- | 1 |
|  |  | Ineligible <br> Accountable <br> Retest - |  | 0 | NTO |  |  |  |  | prior | prior | ü | 1 |
|  |  |  <br> Retested (Preliminary Only) |  | 1 | NTL |  |  |  |  | prior | --- | --- | 1 |
|  |  |  |  | 0 | NTO |  |  |  |  | prior | prior | ü | 1 |
|  |  |  |  | 1 | NTL |  |  |  |  | prior | --- | --- | 1 |


| $\begin{aligned} & \text { N } \\ & \text { N } \\ & \text { © } \\ & \text { E } \\ & \vdots \\ & \text { E } \end{aligned}$ | Prior Results | Description | $\begin{aligned} & \text { 荡 } \\ & \text { 高 } \\ & \hline \end{aligned}$ | -$\stackrel{-}{3}$号ㄹ흔 |  | Current Year Reporting Results |  |  |  | Aggregation／Accountability Results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | （＇－－－＇indicates data are blank） |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | $\qquad$ |  |  |  |  | N |
| 0 |  | Tested Not <br> Accountable <br> Alternate <br> Assessment <br> （Retest） | W | 0 1 | TR <br>  <br> NTL | －－－ | －－－ | －－－ | earned（Alt） | －－－ | －－－ | －－－ | －－－ |
|  |  | 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： <br> earned <br> Else：－ <br> －－ | 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 a calculated combination of LEPFirst and prior LEP Firs status for Accountable partstatuses with prior results．See calculations section for details． <br> ${ }^{2}$ Assess exceptions for ELA：there is an additional condition of participation on the Access test．See calculation specifics for details． <br> 3｜f Summarize $=1$ then Assess $=0$ ．If Summarize $=0$ then Assess is blank． <br> ＊Grade $=09$ students are assigned participation statuses as if Summarize＝＇1＇．Perf2，CPI，Numin，and Assess are populated for calculations but set to blank in the Megafile deliverable． <br> Note：＂（M／S 1）＂indicates that rptLEP［sub］may also be＇1＇in Math and Science for the listed participation statuses． |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Calculations

## Calculation Summary by Participation Status（by subject）

## Student Level Calculations

－StudentID（tbIStudemo）
zz．StudentID＝rptStudentID from DPRaw． aaa．If StudentID begins with＇ 8 ＇it will be set to blank．
－Grade Span（tb／Studemo）
bbb．Calculated using a lookup file provided by the DESE．
－Reporting First Year LEP Status（rptLEP［sub］）（tblStudemo）
ccc．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.
ddd. For all participation statuses that are considered Not Accountable rptLEP[sub] = LEPFirst.
eee. Otherwise if the student is considered Accountable then:
xi. If the student has prior results:

If the student meets attemptedness this year then: rptLEP[sub] = LEPFirst.
If the student does not attempt this year then:
rptLEP[sub] = ' 1 ' if either LEPFirst = ' 1 ' or SciNTL = ' 1 '. Otherwise rptLEP[sub] = '0'.
xii. If the student does not have prior results then rptLEP[sub] = LEPFirst..

- SpecialEd (tblStudemo)
fff. If a student is considered Tested or Retested Alternate Assessment (accountable or not accountable) in any subject, then Sped_off = ' 1 '. Otherwise, it is ' 0 '.
- ParentLetter (tblStudemo)
ggg. The Parent Letter flag is set to ' 0 ' to indicate that the student should not receive a Parent/Guardian Report in the following cases:
xiii. If a student is classified as not tested or breach in all required subject then ParentLetter = ' 0 '.
hhh. Class Pack Identifiers (Cognia) for printing the Parent version of the Parent/Guardian Report are produced for all students with ParentLetter = ' 1 '.
- General Portfolio Comments (tbIStuDemo)
iii. Scorers have the option of leaving comments for individual strands as well as for the portfolio as a whole.
ijj. Comments will be sorted numerically.
kkk. Only the first 4 general portfolio comments will be kept and reported on the portfolio feedback form.
III. If a student did not receive a performance level of incomplete and the student has less than 4 general portfolio comment codes, then
xiv. Data Analysis will add comment code associated with Gen Comment 1 from the lookup provided by client services as a general portfolio comment. If the student still has less than 4 general portfolio comment codes, Data Analysis will add comment code associated with Gen Comment 2 from the lookup provided by client services as a general portfolio comment.
- Strand Specific Comments (tb/StuScore)
mmm . Scorers have the option of leaving comments for individual strands as well as for the portfolio as a whole.
nnn. Comments will be sorted numerically and then alphabetically

0. Data Analysis will set comment code associated with LOC=1 from the lookup provided by client services automatically when the Level of Complexity score is ' 1 '.
ppp. Only first 2 strand specific comments will be kept and reported on the portfolio feedback form.
qqq. For Strand Specific comments, if the student's final score for a particular strand does not have an ' $M$ ' for Independence and Demonstration of Skill, then comments that refer to an ' $M$ ' in either of these dimensions will be suppressed.
rrr. For strand specific comments, if a student's final score for a particular strand has an ' M ' for Independence or Demonstration of Skills then the student will receive at least one comment that refers to an 'M.' (This is handled at scoring not programmatically)
sss. If the performance level for a particular subject is Student took the Standard MCAS then suppress all strand specific comments for that subject.
tt . For grades 11, 12, and $12+$ suppress the comment "Strand required but not submitted" for all strands.

## - Performance Level (tblStuPL)

uuu. A content area has a performance level of Incomplete when one of the following occurs:
xv . When not all the required strands are submitted for a content area, the content performance level is Incomplete.
xvi. If Demonstration of Skills and Independence $=\mathrm{M}$ :

For contents requiring 3 strands, if there are 2 strands or more M's in either Independence or Demonstration of Skills, the content performance level is Incomplete.
For contents requiring 2 strands, if there is 1 strand or more M's in either Independence or Demonstration of Skills, the content performance level is Incomplete.
vvv.For content areas that are not incomplete, the performance level is found using the overall strand performance level and the lookup table.
xvii. The overall strand performance level for a content requiring 3 strands is found by averaging the performance levels of the 3 final strands of record. If the average is between 3 and 3.9 round down, otherwise, round to the nearest whole number.
xviii. When more than 3 strands are submitted for a content area that requires the choice of 3 , use the 3 strands that yield the highest overall strand performance level. If more than 3 strands have the same performance level, sort the strands by self-evaluation, complexity, and generalized performance, and select the top 3 based on those criteria.
xix. The overall strand performance level for a content requiring 2 strands is determined by averaging the performance levels of the 2 strands and rounding down.
$x x$. If the calculations for strand score average yield a performance level of 11 (Needs Improvement) or 14 (Partially Meeting Expectations), then check that the student meets other requirements to earn Needs Improvement or Partially Meeting Expectations before assigning the final performance level.
www. Needs Improvement (Legacy STE only) or Partially Meeting Expectations (NextGen only):
xxi. Grades 03-08 only

For grades 03-08, in order to earn an overall performance level of Partially Meeting Expectations the student must meet the following criteria:
For ELA, a student must complete the 3 required strands and earn a performance level of 4 for each of the strands.
For Mathematics, complete all 5 strands and earn a performance level of 4 for each of the strands.

For Science, a student must complete strands in three different STE disciplines and earn a performance level of 4 for each of the strands.
If the student is marked "at or close to grade level" and submits fewer than 3 strands with a performance level of 4 , the student will be reported as Not Meeting Expectations.
If a student submits 3 or more strands when 2 are required, the 2 required strands and the highest scoring additional strand will be used to determine Partially Meeting Expectations.
xxii. Competency: Grades 09-12+ only

The Competency List is provided by DESE and lists students in grades 09-12+ who were judged by a panel of competency experts to be at a performance level of Needs Improvement or Partially Meeting Expectations or above. Only students on the Competency list are eligible for a performance level of Needs Improvement/Partially Meeting Expectations or above. The students must also meet the following criteria:
For ELA, a student must complete the 3 required strands and earn a performance level of 4 for each of the strands.
For Mathematics, complete all 5 strands and earn a performance level of 4 for each of the strands.
For Science, a student must complete all 4 strands in one discipline and earn a performance level of 4 for each of the strands.
If a student is on the Competency List and the requirements are met, the earned scores are reported but the performance level is taken from the list.
If a student is on the Competency List and the requirements are not met a list is sent to Program Management for resolution.
If any HS student attempting competency (at or close to grade level is marked) and does not meet the requirements above for any reason, the test is reported as Failing/Not Meeting Expectations.
If resubmitted appeal / competency determination portfolio, Math students will be tested against the 13-14 Math strands. Otherwise, students will be aligned with the 18-19 Math strands.

- Aggregation/Accountability Results (tb/StuPL)

Aggregation and Accountability Results combine prior and current results, where applicable.

## xxx.Perf2 (Cognia aggregate calculations)

xxiii. Populated with the achievement level for aggregate calculations and the megafile.
xxiv. Perf2 is blank for all students with rptLep[sub] = '1'.
$\boldsymbol{x x v}$. Perf2 = rPerfLevel for Tested Alternate Assessment that are not first-year LEP (PartStatus = 'A' and rptLEP = ' 0 '). It is translated to standard assessment achievement levels (1-4).
$\boldsymbol{x} \boldsymbol{x v i}$. Perf2 = the highest achievement level between PerfLevel and [sub]PerfLevelHigh for Accountable Retest Alternate Assessment students that are not first-year LEP (PartStatus = ' C ' and rptLEP = ' 0 '). It is translated to standard assessment achievement levels (1-4).
xxvii. Otherwise, Perf2 is calculated in general MCAS.

- NumIn (tblStuPL for Megafile)
yyy.For HS students and 5 and 8 Science, the subject specific numin field is set to ' 1 ' if the student is assigned CPI Points for the subject. Otherwise it is ' 0 '. Fields are prefixed with $e / m / s$ in the megafile.
zzz.For 03-08 ela and math, See the calculations by participation status summary for a list of statuses that result in numin = ' 1 '. Because this calculation is only be done at grade $03-08$, if Teststat is ' $T$ ' then numin=' 1 '. Otherwise it is ' 0 '.
- Assess (tbIStuPL for Megafile):
aaaa. Blank since alt mega file is only produced in June
- Composite Level of Complexity (tbIStuPL)
bbbb. All students who receive an alt performance level will have a Composite Level of Complexity (CLC) computed.
cccc. Composite Level of Complexity is calculated using the Complexity scores from the final strands used to calculate the content performance level, the 'At or Close to Grade Level' bubble (if it exists), and a lookup table, which is based on the number of strands.
dddd. Students attempting Partially Meeting Expectations Grade 03-08
xxviii. When a two-strand portfolio contains the required strands plus at least one additional strand, apply the rules for a three-strand portfolio.
xxix. If there is more than one additional strand submitted use the strand with the higher complexity score to compute the CLC.
eeee. Incomplete Portfolios
xxx. For portfolios with not all required strands submitted, only the required strands that were submitted will be used to compute the CLC.
xxxi. When a three-strand portfolio has a strand missing, apply the rules for a twostrand portfolio.
xxxii. When a two or three strand portfolio has only one of the required strands, apply the rules for a one strand portfolio.
- Competency: Updating ELA_CD, Mat_CD, and Sci_CD (tbIStuPL) ffff. Applicable to High School only
gggg. 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.
hhhh. The updated CD fields begin with the prior CD value from SIMS (studemo
SIMS_[sub]CD) 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.
iiii. The CD Status from SIMS is then updated using the current test results if and only if it increases, otherwise the prior value is retained:
ijij. For Math and ELA:
xxxiii. If rPerflevel $=$ ' 11 ' or ' 14 ' then $C D=$ ' 1 '.
xxxiv. Otherwise, if rPerflevel in (' 12 ',' $13^{\prime}, ' 15^{\prime}, ' 16$ ') then $C D=' 2$ '.
$x x x v$. Otherwise, CD is ' 0 '.
kkkk. For Science:
xxxvi. If rPerflevel in ('11','12','13','14','15','16') then CD = '1'.
xxxvii. Otherwise, CD is ' 0 '.
- Composite Performance Index Points (daStuCPI)

For HS science, DESE provides Cognia with the number for students tested in MCAS and MCAS-Alt. These counts are provided at the subject level. DA use: These counts are stored in tblstuCPILookup.

IIII. CPI will be calculated for only legacy high school science and technology/engineering (STE)
mmmm. CPI Points are assigned based on results used for Aggregations and Accountability.
nnnn. Students with Test Status='T' or (PartStatus="C" and rptLEP=0) will receive CPI points.
oooo. Otherwise, CPI points will not be assigned.
pppp. Breach cases will not receive CPI points.
qqqq. Assign cpi points for students with Test Status=" T" as follows
xxxviii. Assign cpi points based on performance level as follows for performance levels other than PRG

CPI=100 for PerfLevel=A_A or P_A.
CPI=75 for PerfLevel=EMG or NIA.
CPI=50 for PerfLevel=AWR
CPI=25 for PerfLevel=INP.
xxxix. Assign cpi points based on performance level as follows for PRG

Step 1
CPI=100 for PerfLevel=PRG and NatureofDis=01, 09, 10, 11, or 13 and LevelOfNeed=04.
CPI=75 for PerfLevel= PRG and NatureofDis not equal to $01,09,10,11$, or 13 or LevelOfNeed not equal to 04
If Step 1 results in the number of students with 100 CPI points being less than 1.0499 percent of the total tested students in both the alt and standard MCAS then proceed to Step 2:
Step 2
CPI=100 for PerfLevel=PRG and NatureofDis=01, 09, 10, 11, or 13 and LevelOfNeed=03 or 04.
CPI=75 for PerfLevel= PRG and NatureofDis not equal to $01,09,10,11$, or 13 or LevelOfNeed not equal to 03 or 04
If Step 2 results in the number of students with 100 CPI points being less than 1.0499 percent of the total tested students in both the alt and standard MCAS then proceed to Step 3:
Step 3
CPI=100 for PerfLevel=PRG and NatureofDis=01, 09, 10, 11, or 13 and LevelOfNeed=01, 02, 03, or 04.
CPI=75 for PerfLevel= PRG and NatureofDis not equal to $01,09,10,11$, or 13 or LevelOfNeed not equal to $01,02,03$, or 04.
If Step 3 results in the number of students with 100 CPI points being greater than 1.0499 percent of the total tested students in both the alt and standard MCAS then proceed to Step 4:
Step 4
CPI=100 for PerfLevel=PRG and NatureofDis=01, 09, 10, 11, or 13 and LevelOfNeed=03 or 04.
Also CPI=100 for PerfLevel=PRG and NatureofDis=01 and LevelOfNeed=01 or 02.
CPI=75 for PerfLevel= PRG and NatureOfDis and LevelOfNeed do not satisfy I or II.

If Step 4 results in the number of students with 100 CPI points being greater than 1.0499 percent of the total tested students in both the alt and standard MCAS then proceed to Step 5:

## Step 5

CPI=100 for PerfLevel=PRG and NatureofDis=01, 09, 10, 11, or 13 and LevelOfNeed=04.
Also CPI=100 for PerfLevel=PRG and NatureofDis=01 and LevelOfNeed=03.
CPI=75 for PerfLevel= PRG and NatureOfDis and LevelOfNeed do not satisfy I or II.
xl. If Step 4 or 5 results in the number of students with 100 CPI points being less than 1.0499 percent of the total tested students in both the alt and standard MCAS then stop.
xli. If Step 5 results in the number of students with 100 CPI points being greater than 1.0499 percent of the total tested students in both the alt and standard MCAS then proceed to Step 1 and then stop.
rrrr. Assign student's with (PartStatus="C" and rptLEP=0) CPI points as follows
CPI points will be based on either current year Alternate assessment
Achievement level or Prior year test results which may be from the Alternate Assessment or MCAS. The results from the assessment that produces the highest CPI points will be used.
Calculate the current year CPI points using the Alternate Assessment translation below on the tblstuPL.rPerfLevel
If ScaledScoreHigh is populated, calculate the prior year CPI points using the MCAS lookup table below. Otherwise, use the Alternate Assessment lookup table on PerfLevelHigh.

Composite Performance Index (CPI) - Legacy MCAS Tests
(High School Science and Technology/Engineering only)

| Test | ScaledScore Range | CPI Points |
| :--- | :--- | :--- |
| Standard MCAS | $240-280$ | 100 |
|  | $230-238$ | 75 |
|  | $220-228$ | 50 |
|  | $210-218$ | 25 |


| CPI - MCAS-Alt(High School Science and Technology/Engineering only) |  |  |
| :---: | :---: | :---: |
| Test | Alt Performance Level: | CPI Points |
| Alternate Assessment (Only when reassigning based on prior-year Alt Results for Accountability) | $\begin{aligned} & \text { A-A } \\ & \text { PA } \\ & \text { PRG } \end{aligned}$ | 100 |
|  | $\begin{aligned} & \text { EMG } \\ & \text { NIA } \end{aligned}$ | 75 |
|  | AWR | 50 |
|  | INP | 25 |

- Achievement Level Coding
ssss. The MCAS Standard Assessment has four possible achievement levels, assigned to students using the raw to scale score lookup provided by psychometrics.
tttt. Alternate Assessment achievement levels are translated to their corresponding standard assessment achievement level prior to computing any aggregate calculations that include alternate assessment achievement level results as shown below:

| MCAS and MCAS-Alt Achievement Levels |  |  |  |
| :---: | :---: | :---: | :---: |
| MCAS Achievement Level | MCAS Description | MCAS Alt Achievement Level | MCAS Alt Description |
| 1 | 03-08, 10 (Next Gen): Not Meeting Expectations (NM) Legacy HS Science: Failing (F) | 7 <br> 8 <br> 9 <br> 10 <br> 17 | Incomplete (INC) <br> Awareness (AWR) <br> Emerging (EMG) <br> Progressing (PRG) <br> Not Meeting Expectations-Alt (NM_A) |
|  | Legacy HS Science: Needs | 11 | Needs Improvement (NIA) |
| 2 | Improvement (NI) <br> NextGen: Partially Meeting Expectations (PM) | $14^{*}$ | Partially Meeting Expectations-Alt (PM_A) |
| 3 | Legacy HS Science: Proficient (P) | 12 | Proficient (P_A) |
| 3 | NextGen: Meeting Expectations (M) | 15* | Meeting Expectations-Alt (M_A) |
| 4 | Legacy HS Science:Advanced (A) | 13 | Advanced (A_A) |
| 4 | NextGen: Exceeding Expectations (E) | 16* | Exceeding Expectations-Alt (E_A) |

## Aggregate Level Calculations

## - Aggregation Rules

uuuu. 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. vvvv. Tested Students (PartStatus = 'A) are included in aggregations.

## Lookup Tables

- Required Strands by Content Area and Grade

| Grade | Content Area | Number of <br> Strands <br> Required |  |
| :---: | :---: | :---: | :--- |
| 3 | ELA | 3 | Language, Reading \& Writing* |
| 3 | Math | 2 | Operations and Algebraic Thinking, Measurement and Data |
| 4 | ELA | 3 | Language, Reading \& Writing* |
| 4 | Math | 2 | Operations and Algebraic Thinking, Numbers and Operations - Fractions |
| 5 | ELA | 3 | Language, Reading \& Writing* |
| 5 | Math | 2 | Number and Operations in Base Ten, Numbers and Operations - Fractions |
| 5 | Sci | 3 | Choice of 3*** |
| 6 | ELA | 3 | Language, Reading \& Writing ${ }^{*}$ |


| Grade | Content Area | Number of <br> Strands <br> Required |  |
| :---: | :---: | :---: | :--- |
| 6 | Math | 2 | Statistics and Probability, The Number System |
| 7 | ELA | 3 | Language, Reading \& Writing* |
| 7 | Math | 2 | Ratios and Proportional Relationships, Geometry |
| 8 | ELA | 3 | Language, Reading \& Writing* |
| 8 | Math | 2 | Expressions and Equations, Geometry |
| 8 | Sci | 3 | Choice of 3** |
| $10+$ | ELA | 3 | Language, Reading, Writing |
| $10+$ | Math | 3 | Choice of 3** |
| $09,10+$ | Sci | 3 | Any three learning standards from one discipline: <br> Biology, Chemistry, Physics, or Technology/Engineering |

*ELA o3-O8: Students that test at or near grade level will take strands: Reading, Reading II \& Writing.
${ }^{* *}$ Math 10+: The strands titles are: 'Functions', 'Geometry', 'Statistics and Probability', 'Number and Quantity', and 'Algebra'.
${ }^{* * *}$ Science o5 and o8: Choice of 3 of the following: 'Earth and Space Science', 'Life Science', 'Physical Sciences', and
‘Technology/Engineering’

## - Strand Performance Level

| Level of complexity | Demonstration of skills | Independence | Performance Level |
| :---: | :---: | :---: | :---: |
| 2 | 1 | 1 | 1 |
| 2 | 1 | 2 | 1 |
| 2 | 1 | 3 | 1 |
| 2 | 1 | 4 | 1 |
| 2 | 2 | 1 | 1 |
| 2 | 2 | 2 | 1 |
| 2 | 2 | 3 | 1 |
| 2 | 2 | 4 | 1 |
| 2 | 3 | 1 | 1 |
| 2 | 3 | 2 | 1 |
| 2 | 3 | 3 | 2 |
| 2 | 3 | 4 | 2 |
| 2 | 4 | 1 | 1 |
| 2 | 4 | 2 | 1 |
| 2 | 4 | 3 | 2 |
| 2 | 4 | 4 | 2 |
| 3 | 1 | 1 | 1 |
| 3 | 1 | 2 | 1 |
| 3 | 1 | 3 | 1 |
| 3 | 1 | 4 | 1 |
| 3 | 2 | 1 | 1 |
| 3 | 2 | 2 | 1 |
| 3 | 2 | 3 | 2 |
| 3 | 2 | 4 | 2 |
| 3 | 3 | 1 | 1 |
| 3 | 3 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 3 | 3 | 4 | 3 |
|  |  |  | continued |


| Level of complexity | Demonstration of skills | Independence | Performance Level |
| :---: | :---: | :---: | :---: |
| 3 | 4 | 1 | 1 |
| 3 | 4 | 2 | 2 |
| 3 | 4 | 3 | 3 |
| 3 | 4 | 4 | 3 |
| 4 | 1 | 1 | 1 |
| 4 | 1 | 2 | 1 |
| 4 | 1 | 3 | 1 |
| 4 | 1 | 4 | 1 |
| 4 | 2 | 1 | 1 |
| 4 | 2 | 2 | 1 |
| 4 | 2 | 3 | 2 |
| 4 | 2 | 4 | 2 |
| 4 | 3 | 1 | 1 |
| 4 | 3 | 2 | 2 |
| 4 | 3 | 3 | 3 |
| 4 | 3 | 4 | 3 |
| 4 | 4 | 1 | 1 |
| 4 | 4 | 2 | 2 |
| 4 | 4 | 3 | 3 |
| 4 | 4 | 4 | 3 |
| 5 | 1 | 1 | 1 |
| 5 | 1 | 2 | 1 |
| 5 | 1 | 3 | 2 |
| 5 | 1 | 4 | 2 |
| 5 | 2 | 1 | 1 |
| 5 | 2 | 2 | 2 |
| 5 | 2 | 3 | 3 |
| 5 | 2 | 4 | 3 |
| 5 | 3 | 1 | 1 |
| 5 | 3 | 2 | 2 |
| 5 | 3 | 3 | 3 |
| 5 | 3 | 4 | 4 |
| 5 | 4 | 1 | 1 |
| 5 | 4 | 2 | 2 |
| 5 | 4 | 3 | 3 |
| 5 | 4 | 4 | 4 |

- Content Area Performance Lookup

| Strand Performance Levels | Content Achievement Level | Description |
| :---: | :---: | :---: |
| 1 | 8 | Awareness |
| 2 | 9 | Emerging |
| 3 | 10 | Progressing |
| 4 | 11 | Needs Improvement |
|  | 14 | Partially Meeting Expectations |
| 5 | 12 | Proficient |
|  | 15 | Meeting Expectations |
|  | 13 | Advanced |
|  | 16 | Exceeding Expectations |
|  | 7 | Incomplete |
|  | 17 | Not Meeting Expectation |

## - Composite Level of Complexity

Composite Level of Complexity Look up for a 3 strand Portfolio

| At or Near Grade Level <br> Bubble | Strand 1: Level of <br> Complexity Score | Strand 2: Level of <br> Complexity Score | Strand 3: Level of <br> Complexity Score | Composite Level of <br> Complexity |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 2, or 1 | 2, or 1 | 2 , or 1 | ACC |
| 0 | 3,2, or 1 | 3,2, or 1 | EP |  |
| 1 | 3,2, or 1 | 3,2, or 1 | 3,2 , or 1 | GL |
| 0,1 | 3,2, or 1 | 3,2 , or 1 | 4 or 5 | GL |
| 0,1 | 3,2, or 1 | 4 | 5 | GL |
| 0,1 | 3,2, or 1 | 4 | 5 | GL |
| 0,1 | 3,2, or 1 | 4 | 4 | 4 |
| GL |  |  |  |  |
| 0,1 | 4 | 4 | 5 | GL |
| 0,1 | 4 | 5 | 5 | GL |
| 0,1 | 5 | 5 | 5 | GL |

Composite Level of Complexity Look up for a 2 strand Portfolio

| At or Near Grade Level Bubble | Strand 1: Level of <br> Complexity Score | Strand 2: Level of <br> Complexity Score | Composite Level of <br> Complexity |
| :---: | :---: | :---: | :---: |
| 0 | 2, or 1 | 2, or 1 | ACC |
| 0 | 3,2 , or 1 | 3 | EP |
| 1 | 3,2, r 1 | 4 | GL |
| 0,1 | 3,2, or 1 | 5 | GL |
| 0,1 | 3,2 or 1 | 4 | GL |
| 0,1 | 4 | 5 | GL |
| 0,1 | 4 | 5 | GL |
| 0,1 | 5 |  |  |

Composite Level of Complexity Look up for a 1 strand Portfolio

| At or Near Grade Level Bubble | Strand 1: Level of Complexity Score | Composite Level of Complexity |
| :---: | :---: | :---: |
| 0 | 2, or 1 | ACC |
| 0 | 3 | EP |
| 1 | 3 | GL |
| 0,1 | 4, or 5 | GL |


| Key: |
| :--- |
| ACC $=$ Access Skill |
| EP=Entry Point |
| GL $=$ Grade Level Achievement Standards |

# Data Deliverables Specifications Student Data Files 

Student Demographics

Student Scores
Student Performance Levels

- Use Roster code for the Performance Levels


## MegaFile

## Generic Details

- Megafile deliverables are posted to the FTP site for the state and contain data for all processed students.
- All MegaFile deliverables follow the layout: 2122MCASAlt2122AllStudentFileLayout.xls.
- Fields that are not applicable to particular deliveries are left blank.
- Students with Amend > ' 1 ' are reported as Amend = ' 1 '.
- Subject specific fields are prefixed by ' $x$ ' such that: $m=m a t h, ~ e=e l a, s=s c i e n c e$.
- $\quad x$ Alt $=$ ' 1 ' if the student Tested or Retested Alternate Assessment, otherwise blank.
- Sped_Off = tblStudemo.SpecialEd.
- $\quad$ xPerflev = tbIStuPL.rPerfLevel reformatted to DESE code or achievement level code based on rPerfLevelLookup. DESE Code (See Appendix D).
- $\quad x$ Perf2 $=$ tbIStuPL.Perf2.
- The mcasrowid is a 15 -digit number created in the following manner
wwww. 2 digits=year (22)
xxxx. 2 digits=grade
yyyy. 1 digit=x
xlii. $x=1$ if at least one strand was submitted for all required content area.
xliii. $x=2$ if at least one strand was submitted for ELA and no strands were submitted for other required content areas.
xliv. $x=3$ if at least one strand was submitted for Math and no strands were submitted for other required content areas.
xlv. $x=4$ if at least one strand was submitted for science and no strands were submitted for other required content areas.
xlvi. $x=5$ if at least one strand was submitted for any 2 required content areas, but nothing was submitted for the third required content area.
xlvii. $\mathrm{X}=6$ if a student did not submit any content areas.
zzzz. 10 digits=bookletnumber


## Summary Files

## Comments Summary

- Contains Counts of each strand specific comment by grade, subject, and strand
- One tab includes all students
- One tab includes student with Performance Level Incomplete


## General Portfolio Comments Summary

- Contains counts of each General Portfolio Comment by grade
- Includes all students


## State Performance Level Summary

- Layout is MCASAlt2122PerfSummaryLayout.xls
- Include counts and percents
- Only include students who earned an achievement level
- One tab will contain achievement levels aggregated by grade and subject
- One tab will contain achievement levels aggregated across grades and subjects
- One tab will contain achievement level aggregations for grades 09 and 10 by subject. aaaaa. Will include the alt students who earned a competency in either May or July Competency determination.
- One tab will contain achievement levels aggregations for grades 11, 12, and 12+ by subject.
bbbbb. This data will include the alt students who earned competency in either the May or July Competency determination.


## State Participation Summary Files

- Layout is MCASAlt2122PartSummaryLayout.xls
- "Assessed Student" = partstatus in ('A','Z') and TestStatus = 'T' based on data in MCAS tbIStudemo (therefore NTL or first-year lep students are excluded).
- $\quad$ Retest Students (TestStatust $=$ 'TR' or Alt students in grades, 11, 12, or 13) were excluded from all counts.
- Sort first tab by subject, then grade and the PartByCLC tab by grade then subject.
- One tab will contain counts and percents by grade and subject.
- Percent is based on number of students assessed in standard MCAS or MCAS-Alt
- One tab will contain count and percent of students taking alt across all grade and subjects.
- Percent is based on number of students assessed in standard MCAS or alt.
- One tab will contain counts and percents by grade and subject for the tested in Standard MCAS, Tested in MCAS Alt with a composite level of complexity of Grade Level, and Tested in MCAS Alt with a composite level of complexity of Access Skills or Entry Point.


## Teacher Survey Summary

- This file is created every other year and will be produced for the 2122 reporting year.
- Only include records with a first and last name and at least one response.
- Calculate total number of surveys.
- Compute counts and percentages of responses for each question. Also compute number of non-responses for each question.


## Participation by Disability

- Counts of tested students by disability type


## Report Deliverables Specifications

## Portfolio Feedback Form

- The files will be named PortfolioFeedbackForms2122_[DisCode][SchCode].pdf
- A grade 09 or higher report lists the science discipline strands instead of the science strands that appear for grades 03-08.
- For grades 03-08 math and ela the titles of the strands that were not submitted and not required will not print.

Indicated in tblStuScore where RepAction='0'
For these cases the strands below will move up to display with all blank rows at the bottom.
In grade five where there are six possible strands if a student turns in all six only the first five will print based on the strand sort order. The strand "Measurement and Data" will not print in this case.

- An asterisk (*) is displayed in place of missing strand scores for required strands that were not submitted
- For grades 11, 12, and $12+$ do not display asterisks in any strands.
- If the performance level for a particular subject is Student took the Standard MCAS then do not display asterisks in any strands.
- Missing scores are left blank for non-required strands.
- All strands submitted will be reported.
- At most 4 general portfolio comments (see section III for description of choosing general portfolio comments).
- At most 2 strand specific comments (see section III for description of choosing strand specific comments).


## Parent Report

- Cover Page Header

For student name print Last Name, First Name, MI. in all caps.
Print the two-digit grade print for grades 03-12 and 12+ will print for grade 13.
Print the school name associated with the student's testing school.

Print the district name associated with the student's sending district if it exists. Otherwise print the district name associated with the student's testing district.

- Achievement Display

For tested students, place a check and shade the achievement level box corresponding to the student's achievement level.
For not tested students, print the not tested reason in the achievement display for that content area. Based on tbIPerfLevelLookup
If a content area is not tested at a given grade then do not shade or check any achievement level boxes or that content area. Print 'NOT ASSESSED FOR STUDENTS IN THIS GRADE'.

- Score Display

If the student did not submit the required number of strands print an asterisk (*) after the subject text.

Print ‘REQUIRED BUT NOT SUBMITTED' in the grid for required strands that were not submitted.
If the achievement level for a particular subject is Student took a Standard MCAS then do not display the asterisk or print 'REQUIRED BUT NOT SUBMITTED' in the grid for any strand.
A grade 09 or higher report lists the High School STE discipline strands instead of the STE strands that appear for grades 03-08.
Score Grid
All strands submitted will be reported.
For strands that were submitted, gray shade the box associated with the dimension score for level of complexity, demonstration of skills, independence, self-evaluation, and generalized performance.

- Data Page Header

For student name print Last Name, First Name, MI in proper case.
Print SASID.

## Appendix-Exceptions List

I. Assigning Sprp_sch and Sprp_dis: Exceptions List (daTestSiteLookup)

This information is collected and stored with the Operational General Assessment program.
Please refer to the Operational General Assessment rules for the list of exceptions.
a. One-School District List

This information is collected and stored with the Operational General Assessment program. Please refer to the Operational General Assessment rules for the list of one-school districts.
b. rPerfLevel Lookup for MegaFile Codes

| Achievement Level or Part Flag | MegaFile Code | Description |
| :---: | :---: | :---: |
| 1 | F | Failing |
| 2 | NI | Needs Improvement |
| 3 | P | Proficient |
| 4 | A | Advanced |
| 6 | W | Warning |
| 7 | INP | Incomplete |
| 8 | AWR | Awareness |
| 9 | EMG | Emerging |
| 10 | PRG | Progressing |
| 11 | NIA | Needs Improvement-Alt |
| 12 | P_A | Proficient-Alt |
| 13 | A_A | Advanced-Alt |
| 14 | PM_A | Partially Meeting Expectations-Alt |
| 15 | M_A | Meeting Expectations-Alt |
| 16 | E_A | Exceeding Expectations-Alt |
| 17 | NM_A | Not Meeting Expectation |
| B | INC | Incomplete |
| D | TRN | Transferred |
| E | ABS | Absent |
| F | LEP | First-year LEP |
| G | MED | 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 |  |
|  |  |  |
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