School Quality Rating Policy: Data Quality Index

The Data Quality Index (DQI) is one of the metrics used to evaluate all schools under Chicago Public Schools’ (CPS) School Quality Rating Policy (SQRP). The DQI indicates the percentage of a school’s data quality indicators that are correct in CPS data systems and, while serving as a SQRP metric, is also part of CPS’s broader Data Quality Initiative (see SQRP Handbook for more details). While the DQI is not comprehensive of all possible data errors, it does cover common errors that play a significant role in the indicators used in the SQRP.

The DQI used in SQRP is composed of a subset of the data quality indicators tracked on Dashboard since 2009. The DQI indicators included as part of a school’s SQRP rating (referred to for the rest of this document as “DQI-SQRP”) and the weighting each carries in the overall calculation are as follows:

**Attendance (40% of total DQI-SQRP):**
- Unsubmitted Attendance (40%)

**Registration and Enrollment (40% of total DQI-SQRP):**
- Invalid Enrollment Code (5.7%)
- Invalid Leave Code (5.7%)
- Missing Federal Race or Ethnicity (5.7%)
- No Future Enrollment (5.7%)
- Potential Drop-Out (5.7%)
- Student Grade Level Changes After PR4 (0%)*
- Students Enrolled After PR4 (0%)*
- Students Projected to Closed Schools (5.7%)
- Students Withdrawn After PR4 (0%)*
- Unverified Out of District Transfers (5.7%)

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1 While the Dashboard calculates the Data Quality score as an error rate, the DQI-SQRP does the inverse. Namely, the DQI-SQRP is an accuracy rate which is calculated as 100% minus the error rate, with the goal being 99% or better accuracy for full credit on the SQRP. Further, as stated above, the error rate calculated for DQI-SQRP is made up of a subset of DQI categories, with each category weighted as specified in this document.

*These DQI measures are not included in SQRP calculations but will remain on Dashboard as important indicators to schools of other potential data issues. They are included in this document as context for the indicators that are included in the DQI-SQRP.
Student Contact Information (15% of total DQI-SQRP):

- Missing Phone Number (3.75%)
- Missing Physical Address (3.75%)
- Missing Physical and Mailing Address (3.75%)
- Unverified Phone Numbers (3.75%)

Student Health (5% of total DQI-SQRP):

- Non-Compliant Medical (5%)

Each of the measures above is calculated separately. The denominator for each measure is the total number of data quality checks performed by the category and the numerator is the number of errors that occur in those data checks. The percentage of errors is then multiplied by the weight for that measure and subtracted from the overall DQI-SQRP score.

For example, School A has 350 students. Of those 350 students, 10 of them have invalid enrollment codes (e.g., manually entered “Enrolled” or “Returned” designations made during the active school year), which means there are 335 successful data quality checks for School A’s Invalid Enrollment Code measure. The calculation for that measure is therefore

\[
\frac{10}{350} \times 4\% = 0.1\%
\]

The result is subtracted from 100%. In this case, if School A has no other data errors, their DQI-SQRP score would be 99.9%. If there are other errors, this calculation is repeated for each of the other measures to determine the final DQI-SQRP score.

Other Notes:

- Additional definitions and other information for each of the DQI-SQRP measures can be found below and on Dashboard, which distinguishes between the DQI measures used in SQRP ratings and those that are not. While all the Data Quality measures listed on Dashboard are important aids for tracking schools’ data processes, only the categories listed above will be included in determining a school’s quality rating and accountability status.

- While Dashboard updates a school’s Data Quality numbers on an ongoing basis (with a delay of up to 48 hours), the measures used in calculating a school’s DQI for SQRP will be final as of the last business day before year-end processing (YEP), which will be June 27 for the 2013-2014 school year.

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\[^2\] Note that the percentage visible on the Dashboard DQI screen will be rounded, but the underlying percentage will be unrounded. Rounding will only occur at the calculation of the final DQI-SQRP percentage, which will be rounded to the first decimal place.
• DQI-SQRP scores are calculated separately for each school ID. For example, School A has a single school ID and serves both elementary and high school grades. School A therefore gets separate elementary and high school ratings that get combined into a weighted all-school SQRP score. School A gets a single DQI-SQRP score that get used in both the elementary and high school ratings. School B, on the other hand, is a combined administration serving elementary and high in separate buildings with two school IDs. In this case, School B gets two DQI-SQRP scores (one for each school ID), which go into the respective SQRP calculations.

• In any instance where schools find a student with multiple student IDs, schools should submit a ITS Help Desk ticket to resolve the issue. Even in cases where these issues are not resolved by the end of the year, these students will be removed from all applicable DQI indicators, so long as there is a help desk ticket on file.

For further questions and additional information about the DQI-SQRP or other SQRP-related questions, please contact the Office of Accountability at sqrp@cps.edu.

**Unsubmitted Attendance (40% of total DQI-SQRP)**

Numerator: Number of instances that attendance-taking homerooms or classes at the school did not submit student attendance per attendance day.

Denominator: Total number of attendance-taking homerooms or classes at the school expected to submit attendance multiplied by the number of attendance days.

Why this is important: The accurate and timely recording of student attendance is Board policy and is also a primary catalyst for school funding. In addition, the tracking of student attendance is a critical support for the school-based safety and security apparatus.

How to maintain a good score: All teachers who are expected to submit attendance must do so daily and make sure they hit the “Submit” button every time they take attendance. Attendance Coordinators should also monitor all classrooms’ submissions regularly.

Additional guidance on this measure can be found on the IMPACT site [here](#).

**Invalid Enrollment Code (5.7% of total DQI-SQRP)**

Numerator: Students whose school has enrolled them with an invalid enrollment code. Invalid enrollment codes include manually entered ‘Enrolled’ (E) or ‘Returned’ (R) designations made during the active school year.

Denominator: All students enrolled in the school.
Why this is important: Incorrect enrollment codes will have a downstream effect on projections, scheduling, grading and attendance for a student. It will also have a negative impact on state reporting.

How to maintain a good score: Schools should not use the codes “Enrolled” or “Returned” when enrolling a student. Instead schools should use one of the valid CPS enrollment codes.

Additional guidance on this measure can be found on the IMPACT site here.

Invalid Leave Code (5.7% of total DQI-SQRP)
Numerator: Students who exited the school with an invalid leave code (see below) in the current school year.

Denominator: All students that have exited the school in the current school year with no subsequent enrollment.

Why this is important: Incorrect leave codes will have a downstream effect on projections, scheduling, grading and attendance for a student. It will also have a negative impact on state funding and reporting if it is not clear whether or not the student is actively enrolled. Schools should make sure students are either re-enrolled or withdrawn using a proper leave code.

How to maintain a good score: Make sure not to use Leave Codes of “L” or “99” when withdrawing a student. These codes should only be added by the system through automation. Instead schools should use one of the valid CPS leave codes.

Additional guidance on this measure can be found on the IMPACT site here.

Missing Federal Race or Ethnicity (5.7% of total DQI-SQRP)
Numerator: Students with incomplete federal race or ethnicity data.

Denominator: All students enrolled in the school.

Why this is important: As per the U.S. Department of Education, school districts are required to identify the race and ethnicity of students for reporting aggregate data to the U.S. Department of Education and the Illinois State Board of Education.

How to maintain a good score: Schools should ensure that the following two fields are completed for each student: “Federal ethnic category” and “Federal race categories.”

Additional guidance on this measure can be found on the IMPACT site here.
No Future Enrollment (5.7% of total DQI-SQRP)
Numerator: All PE through eleventh graders and retained twelfth graders without an enrollment within SIM for the next school year.

Denominator: All PE through eleventh graders and retained twelfth graders in the current school.

Why this is important: Students without a projected enrollment will not be available for scheduling in the planning calendar for the following school year.

How to maintain a good score: Schools should ensure that all PE through eleventh graders and retained twelfth graders have a projected school of enrollment for the next year.

Additional guidance on this measure can be found on the IMPACT site here.

Potential Dropout (5.7% of total DQI-SQRP)
Numerator: Students coded with a transfer code of 31 who do not have a subsequent enrollment code at another school.

Denominator: All students who have an exit code of 31 in the current school year.

Why this is important: The district must track students that have a code 31 transfer and no resulting CPS enrollment to ensure schools are following through with all students who leave their school to another school in the district. Students who withdraw with the intent to enroll in another CPS school, but do not subsequently enroll in another CPS school are included in the district’s dropout rate.

How to maintain a good score: Schools should make sure that students who withdraw with the intent to enroll in another CPS school are enrolled without a gap in attendance days.

Additional guidance on this measure can be found on the IMPACT site here.

Student Grade Level Changes After PR4 (Not included in DQI-SQRP)
Numerator: Students who have a grade level change in the last month of the school year.

Denominator: All students enrolled in the school.

Why this is important: In IMPACT SIM, a student is promoted or retained at Year End Processing based on their “Promotion Status.” If a school changes a student’s grade level before
Year End Processing, the student could potentially be in the wrong grade level in the next school year.

How to maintain a good score: Schools should ensure that all students are in their correct grade level.

Additional guidance on this measure can be found on the IMPACT site here.

**Students Enrolled After PR4 (Not included in DQI-SQRP)**

Numerator: Students enrolled during the final five weeks of the school year.

Denominator: All students enrolled in the school.

Why this is important: Often times a school will enroll a student during the current school year so that they may build a schedule for them. If a student is enrolled during this year but does not attend until next year, the student will get promoted at Year End Processing.

How to maintain a good score: Schools should make sure that late enrolling students not expected to attend until next year have their enrollment date set to July 2nd or later.

Additional guidance on this measure can be found on the IMPACT site here.

**Students Projected to Closed Schools (5.7% of total DQI-SQRP)**

Numerator: Students enrolled at a closed school or whose “Requested School” field has been set to an closed school.

Denominator: All students enrolled in the school.

Why this is important: Students projected to closed schools will not be accounted for in next year scheduling. The student ID will also not be accessible for enrollment after YEP, causing duplicate records and missing data.

How to maintain a good score: Schools should make sure that the “Requested School” field under the panel labeled “Planning District Calendar (For Home School)” is correct and applies to an open school.

Additional guidance on this measure can be found on the IMPACT site here.
Students Withdrawn After PR4 (Not included in DQI-SQRP)

Numerator: Students withdrawn during the final five weeks of the school year with a withdrawal code of 31, 32, 33, or 34.

Denominator: All students enrolled in the school.

Why this is important: Withdrawing students so that the next year school can enroll them is not proper practice. Doing so could lead to students being reported as potential dropouts. Instead, schools should use the projection process for students. Students leaving the district should have this confirmed during the next school year as part of the DNA process. This way if a student does stay enrolled in the district, they will have a schedule.

How to maintain a good score: Schools should not withdraw students in the last five weeks of school, and should track this measure before Year-End Processing to ensure no errors. Schools should also note that this is a measure that would not show any errors at all until after PR4.

Additional guidance on this measure can be found on the IMPACT site here.

Unverified Out of District Transfers (5.7% of total DQI-SQRP)

Numerator: Students who have transferred out of district and whose re-enrollment has not been verified in IMPACT SIM.

Denominator: Students who have been withdrawn with one of the following leave codes:
  - “32 – Transfer to Chicago non-public”
  - “33 – Transfer outside of Chicago”
  - “34 – Transfer to residential institution”

Why this is important: If a student’s transfer is not accurately verified, the student will be reported as a dropout.

How to maintain a good score: When a student transfers out of district, the CPS school should ensure there is a verification that the student has indeed re-enrolled into another school. Once verified, the information must be entered into IMPACT SIM on the Verification of Out-of-District Transfers page.

Additional guidance on this measure can be found on the IMPACT site here.
**Missing Phone Number (3.75% of total DQI-SQRP)**

Numerator: Students that do not have phone numbers entered into IMPACT-SIM.

Denominator: All students enrolled in the school who are not part of the Students in Temporary Living Situations (STLS) program.

Why this is important: Incomplete demographic information, including phone numbers, severely hampers effective outreach to students and parents alike. This becomes critical when there is a concern for student safety.

How to maintain a good score: Schools should ensure that enrolled students, excluding STLS, have at least one phone number within their student record.

Additional guidance on this measure can be found on the IMPACT site [here](#).

**Missing Physical Address (3.75% of total DQI-SQRP)**

Numerator: Students that do not have physical addresses entered into IMPACT-SIM.

Denominator: All students enrolled in the school who are not part of the STLS program or in grade level 20.

Why this is important: Missing physical addresses leads to students not receiving a zoned school, which will prevent them from obtaining projected enrollments.

How to maintain a good score: Schools should ensure that every enrolled student, excluding STLS, has a physical address associated with their record.

Additional guidance on this measure can be found on the IMPACT site [here](#).

**Missing Physical and Mailing Address (3.75% of total DQI-SQRP)**

Numerator: Students that do not have either a physical or a mailing address entered into IMPACT-SIM.

Denominator: All students enrolled in the school who are not part of the Students in Temporary Living Situations (STLS) program or in grade level 20.

Why this is important: Incomplete demographic and contact information severely hampers effective outreach to students and parents alike.
How to maintain a good score: Schools should ensure that every enrolled student, excluding STLS, has a physical address or a mailing address associated with their record.

Additional guidance on this measure can be found on the IMPACT site [here](#).

**Unverified Phone Numbers (3.75% of total DQI-SQRP)**

Numerator: Students and their contacts’ phone numbers that have been entered into IMPACT-SIM and have not been verified as valid.

Denominator: All student phone numbers for students enrolled in the school who are not part of the Students in Temporary Living Situations (STLS) program.

Why this is important: Incomplete demographic information, including phone numbers, severely hampers effective outreach to students and parents alike.

How to maintain a good score: Schools should ensure that every enrolled student, excluding STLS, has only valid phone numbers associated with their record.

Additional guidance on this measure can be found on the IMPACT site [here](#).

**Non-Compliant Medical (5% of total DQI-SQRP)**

Numerator: Students who are out of health compliance because they not have received all required immunizations and/or examinations by the due date.

Denominator: All students enrolled in the school. Students who are a part of the STLS program who do not have required immunizations on file will be removed from this metric upon the final calculation. However, schools will continue to see these students in the Dashboard DQI during the year and if they do have medical forms on file, they will remain in the final calculation in order to give the school proper credit.

Why this is important: The district has to be at a 90% compliance rate by October for state funding purposes. CPS tracks this measure throughout the year to ensure that schools are collecting these records from newly-enrolled students.

How to maintain a good score: Schools need to put in place effective outreach efforts to ensure that families provide students with the required immunizations and examinations by the due date. Schools should make sure all immunization and examination data is entered and provide an ongoing tally of immunizations to school leadership.

Additional guidance on this measure can be found on the IMPACT site [here](#).