

# Improving the Data Quality of the Chicago Public School Dashboard

## Customer Background

Chicago Public Schools (CPS) is the 3rd largest school district in the United States. It is comprised of over 600 public elementary, charter, and high schools and over 400,000 students are enrolled in the district.

CPS had an existing dashboard that supported users in the Central Office and principals in the district schools. The dashboard was expanded to include the Data Quality Index (DQI), a tool used by CPS to analyze student data to ensure that schools are adequately supported with resources need.

## Technical Challenge

The dashboard displays student information related to their attendance, behavior, grades, and test results. It also shows staff attendance and statistics related to the school technical equipment. However, since the information captured was manually entered into the system, data integrity suffered, creating a lack of trust in the data provided to school leadership. CPS needed to improve the accuracy of the data, display the data for easier analysis, and use the dashboard to highlight areas needing improvement.

## Solution

Reports and scorecards were created to support the data quality initiative in the district and allow users to see the Data Quality Index, which is comprised of different KPIs. DQI highlighted the percentage of incorrect records in the system, assigned a grading system based on the number of errors and performed a comparison of selected schools against the numbers for the area and district.

## Technologies

- Consulting
- Microsoft SQL Server Analysis Services 2008
- Microsoft SharePoint 2007
- Microsoft PPS 2007
- Microsoft SSRS 2008

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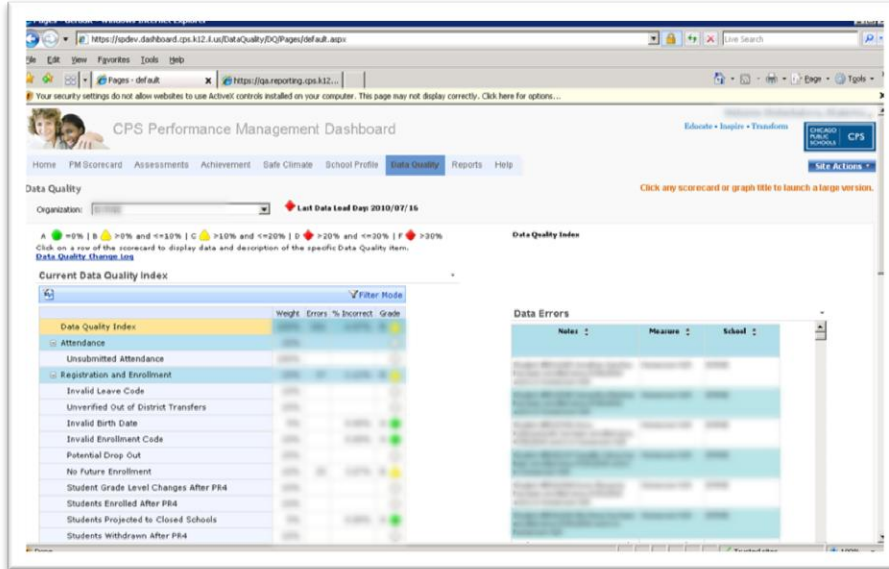


Figure 1: CPS Performance Management Dashboard

## Benefits

MicroLink improved CPS's Data Quality Index, (DQI) and presented it in an easy and transparent dashboard form. Improving CPS's Data Quality Index (DQI) was an important piece of the enhancement. Users can click on any KPI or metric (missing phone number, physical address, invalid birth date or invalid enrollment code, etc.) and view any errors associated with it. This allows a user to know exactly where the problem is and correct it if needed.

The dashboard allows a user to see trends of incorrect data, and this enriched the trend analysis conducted by school leadership and administrators. By showing data comparisons by school and area, leadership can decide which schools may need more support.

The overall improvement of the CPS Dashboard's data integrity and the enhanced analytical and visual display provided faster analysis of the data and simplified the decisions needed to improve the school system.

## About MicroLink

Founded in 1998, MicroLink provides Business Intelligence, Business Process Automation Information Discovery, and Collaboration solutions. We have a history of providing reliable, high quality, customer-driven solutions that focus on improving productivity, collaboration, and teamwork throughout our customers' enterprise.

With a reputation for consistent, superior performance, and outstanding work at federal agencies, and commercial organizations, we have earned the respect of our clients, partners, and employees.