

“ISBE Midyear Report 2020 - Process Documentation”

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1. Introduction

In Illinois, at the at the end of every semester, each school is required to submit a set of data to the Office of I&I for transmission to the Illinois State Board of Education (ISBE). The state then uses this data to produce the annual State School Report Cards. The purpose of this project is to collect student and teacher data from KIPP Chicago’s different data systems and put them in a format that conforms to ISBE’s reporting requirements.

This document provides a detailed description of each data file and how to find it. The document also points out possible shortcomings and issues with 1) the code, and 2) the report submission process. There are also tips on how and when to begin preparing for the process.

2. Preparation

CPS will send detailed documentation on what is required for the report to whoever is designated as the “data liason”. **Once you find out what pieces of information you need, it is important to begin collecting data as soon as possible.** You may need to collect information from the COO, Chief of Staff, Talent Department and HR, so you need to put in your requests early. For more information on required data read the “3B. Google Cloud Storage Files” section below. Note: Some data requirements may change from year to year.

Store all data collected from outside KIPP Chicago’s database within a Google cloud storage bucket. For example, all collected data for the 19-20 midyear report was saved in the **raw_data_storage** bucket under **ISBE_Student_Courses/19-20_files**.

You can find previous instructions on the Midyear ISBE Reporting Process from CPS in Google cloud storage within the `raw_storage` bucket under `ISBE_Student_Courses/19-20_files/cps_report_instructions`. These files will be downloaded to the documentation folder after running the `02-gcs_files.R` script in the `data` folder.

3. Data Sources and How to Access them

Some files that are needed for this report can be accessed directly from our database, but other files need to be collected from different departments within KIPP Chicago. Below is a list of the files that were required for the 2020 Midyear report.

3A. Google Big Query

All data sources listed in the `01-bq_files.R` script are stored in KIPP Chicago's Big Query Database. In order to access these data sets you will need the credentials to gain access to KIPP Chicago's Google Cloud Platform. For more information please checkout the `01-bq_files.R` script.

3B. Google Cloud Storage Files:

All data sources listed in the `0s-gcs_files.R` script were collected from different departments within KIPP Chicago as well as other outside sources. Below is a list of all files and where to find them. The specific files for 2020 listed in this section can be found in KIPP Chicago's Google Cloud Storage in the `raw_data_storage` bucket under `ISBE_Student_Courses/19-20_files`. **Please make sure to read the descriptions below as well as note all required columns (by looking directly at each .csv) before making requests of other departments.**

I) Mapping of State Course IDs to Local Course IDs and Titles

File Description

File Name: `course_local_number_state_ids.csv`

This csv matches ISBE State Course Codes with local course IDs and local course titles for all KIPP Chicago classes. For more information, see the "ISBE State Course Codes" tab in the "Instructions - 2020 Course Assignment" file located in the documentation folder.

File Location

This file was created manually and should be downloaded from the Google cloud storage `raw_data_storage` bucket under `ISBE_Student_Courses/19-20_files`. As schools add or drop classes (or change course names), this file will need to be manually updated.

II) Zenefits Data (HR Data)

File Description

File Name: `zenefits_teacher_data_isbe_midyear_reporting.csv`

This csv contains a subset of HR information for everyone working at KIPP Chicago.

File Location

This is a custom report created from Zenefits (KIPP Chicago's HR SIS). This information can be pulled by either someone in HR or the Chief of staff.

III) Teacher IEIN Numbers and Birth Dates

File Description

File Name: 19_20_IEIN_numbers.csv

This csv contains identifying information for teachers. Information includes name, date of birth, IEIN number and serving school.

File Location

This file can be collected from the head of talent, COO or HR. Note, first ask both HR and the COO if they have an existing report with this information before putting in a request to talent. The teacherid column is required to match the information in the cc table and will need to be input by hand.

Note: The users table will need to be connected to the schoolstaff table in order to find the correct teacher id for each teacher. The teacher id column is the id column in the schoolstaff table (users and schoolstaff tables are located on big query).

```
users.user_dcid = schoolstaff.user_dcid THEN schoolstaff.id = cc.teacherid
```

IV) List of Start Dates for teachers hired after the first day of school

File Description

File Name: kipp_staff_member_start_after_20190819.csv

Some teachers start after the first day of school. In order to provide the correct start date for those teachers we need a file that lists the start dates for every teacher who started after the first day of school.

File Location

This file can be collected from HR.

V) Datasets of all Students in KIPP Chicago from ASPEN

File Description

File Name: Ex. 400044_ascend_current_students_aspen.csv

File Name: Ex. 400044_ascend_former_students_aspen.csv

These files contain the legal name, date of birth, State and CPS ID and School for all KIPP Chicago Students. This includes both current students and transferred students (Note: our report needs to include students who have transferred within the year).

File Location

These files (8 in total) are downloaded from ASPEN. In order to log into ASPEN you will need your cps username and password (the same credentials that you use to log into your CPS email address). Below is a step-by-step guide for finding this information in ASPEN.

1. Log into ASPEN then navigate to the view tab and select school view.

The screenshot shows the KIPP - ACADEMY 2019-2020 interface. At the top, there is a navigation bar with tabs: My Info, Student, Attendance, Gradebook, Planner, Assessment, Tools, and a dropdown menu for Staff view. The Staff view dropdown menu is open, showing options: School, Staff, and Health. The 'School' option is highlighted with a red box. Below the navigation bar, there is a banner with the Aspen logo. The main content area is divided into several sections: Teacher Classes, Announcements, School Links, Workflows, District Resources, and @CPS Twitter. The Workflows section shows a table with columns: Received, Workflow, Task, and Subject. The District Resources section lists links to CPS Aspen Parent & Student Portal - Training Materials and CPS Student Code of Conduct. The @CPS Twitter section shows tweets by @ChiPubSchools.

2. Select a School

The screenshot shows the KIPP - ACADEMY 2019-2020 interface. At the top, there is a navigation bar with tabs: School, Student, Staff, Attendance, Behavior, Grades, Assessment, Schedule, Extracurriculars, Global, Tools, Admin, and Plans. The 'Select school' button is highlighted with a red box. Below the navigation bar, there is a banner with the Aspen logo. The main content area is divided into several sections: Announcements, Student Search, School Links, Workflows, District Resources, and @CPS Twitter. The Student Search section shows a search bar with a 'Search' button and checkboxes for 'Include Archive' and 'Secondary Students'. The Workflows section shows a table with columns: Received, Workflow, Task, and Subject. The District Resources section lists links to CPS Aspen Parent & Student Portal - Training Materials and CPS Student Code of Conduct. The @CPS Twitter section shows tweets by @ChiPubSchools.

3. Select the filter icon and choose either “All Active Students” or “Former Students”. NOTE: You cannot pull all students at the same time and will need to go through the following steps for both filters for all 4 schools.

KIPP - ACADEMY 2019-2020

School view Select school

Log Off

Pages
School
Student
Staff
Attendance
Behavior
Grades
Assessment
Schedule
Extracurriculars
Global
Tools
Admin
Plans

Student List

Details
Contacts
Attendance
Behavior
Transcript
Assessments
Academics
Schedule
Membership
Transactions
Documents
At Risk
Snapshots
Awards

Options Reports Help Search on Name

1:Aaron, Shaliyah

Manage Filters...

0 of 512 selected

All Active Students

Name

Aaron, Shaliyah

Adams, Antonio

Adams, Dana

Adams, Jameil

Adams, Keon

Alexander, Darrick

Anderson, Damarion

Anderson, David

Anderson, Julianna

Anderson, Kyia

Anderson, Leroy

Anderson, Timell

Anderson, Zhavier

Primary Active Students

All Primary Students

All Secondary Students

All Students

Current Members

Former Students

Next Year Students

ES - Missing Scheduled Math Class

ES - Missing Scheduled Reading Class

ES - Missing Scheduled Science Class

ES - Missing Scheduled Social Science Class

Extracurricular Participation

Extracurricular Program = ?

Gender = ?

Grade Level = ?

Home Language = ?

Home Language Survey = Yes

Homeroom = ?

Endar

EnrStatus

Grade

Homeroom

YOG

DOB

Alerts

QuickStatus

Organization

Enrolled

08

319 HU

2024

5/28/2006

CHARTER

Enrolled

04

SH203

2028

8/4/2010

CHARTER

Enrolled

05

118JSU

2027

2/23/2009

CHARTER

Enrolled

04

SH203

2028

4/17/2010

CHARTER

Enrolled

04

ND206

2028

1/8/2009

CHARTER

Enrolled

04

ND206

2028

12/10/2009

CHARTER

Enrolled

06

220 NW

2026

11/4/2007

CHARTER

Enrolled

04

KU 201

2028

10/23/2009

CHARTER

Enrolled

08

322FAMU

2024

6/17/2006

CHARTER

Enrolled

08

317 CAU

2024

3/1/2006

CHARTER

Enrolled

K

Hampton104

2032

12/28/2013

CHARTER

Enrolled

05

118JSU

2027

6/24/2009

CHARTER

Enrolled

K

Depaul106

2032

6/8/2014

CHARTER

Enrolled

K

Depaul106

2032

6/8/2014

CHARTER

4. Click on the “Report” tab and select “Quick Report” in the drop-down menu.

[illegible]

5. Select “New Report” then click “Next. On the next screen select”Simple" then click Next.

6. Ensure that “Student” is selected in the drop down menu then add all variables included in the “Selected Fields” box pictured below. Afterwards click next.

Quick Report: Field Selection

Step 3 of 8

Available Fields

Student

Is Listed Phone 3

Is Listed Phone 4

Medicaid number

Is Listed Phone 5

Alerts

Hispanic or Latino

Quick status

Phone 4

Phone 5

BirthDate Verification

Graduation history notes

Citizenship Status

Goes By Gender

Ethnic Category

Native Language

Add >

< Remove

Selected Fields

School > Name

Student ID

State ID

Last name

First name

Middle name

Date of Birth

Enrollment status

Up

Down

Previous

Next

Finish

Cancel

7. The next screen shows an almost identical display. No need to add variables to the “Selected Fields” box. Click next.

Quick Report: Sort OrderStep 4 of 8

Available Fields

Student

Photo
Last name
First name
Middle name
Title
Suffix
Gender
Date of Birth
Globally Unique Identifier
Globally Unique Identifier 2
Phone 1
Globally Unique Identifier 3
Phone 2
Name
Phone 3

Add >>
<< Remove

Selected Fields

Name

Up
Down

Change sort

PreviousNext

FinishCancel

8. Select comma-separated-values from the drop down menu. Afterwards select “Finish” This will open up a new page with all requested information. You can then copy and paste this information into a CSV and separate the column by commas (Google how to do this).

Quick Report: Totals and StatisticsStep 5 of 8

Totals

| Group | Total Count | Page Break |
|---------|-------------|------------|
| Overall | | |

Statistics

School > Name

Add

PreviousNext

FinishCancel

2. In the menu select “comma-separated-values” then click “Run”. This will produce a csv file to be downloaded to your device.

Enrollment Activity

| | |
|-----------------|------------------------------|
| Organization | CHARTER |
| School | KIPP - ASCEND |
| Start date | 7/1/2019 |
| End date | 2/29/2020 |
| Sort results by | Date |
| Format | Comma-separated values (CSV) |

Run **Cancel**

VIII) Name Corrections

File Description

File Name: `cps_name_replacement_aspen.csv`

List of names that were still incorrect the day before the submission was due. Because we are using names from ASPEN we should not need this file in future submissions.

4. Initial Report Generation

1. Ensure that you have the `ProjectTemplate` package installed in R.
2. Ensure that you have All required R Packages (check the `config/global.dcf` file for all required libraries).
3. Ensure that you have all required permissions for KIPP Chicago Google Cloud Platform account (Big Query and Google Cloud Storage used for this project).
4. Navigate to the `src` folder and run `01-A_write_submission_files.R` file. This will produce the report files in the required format for ISBE and write them to the `output\final_reports` folder. Note: if you'd like to see the final Files in R, then open the `isbe_midyyear_report_400146`, `isbe_midyyear_report_400044`, `isbe_midyyear_report_400163`, and `isbe_midyyear_report_400180` data frames.

5. Error Handling

1. After you receive your first error report from CPS navigate to the `src` folder and run the `02-A_evaluate_cps_validation_period_errors.Rmd` file. This file will produce data frames that

show all unique errors by school. This file will also produce data frames that list all unique name errors and date of birth errors.

2. Use the `03-A_produce_write_submission_files_with_error_fixes.R` file to fix problems with the final reports that cannot be corrected in the original code (Note: use this file cautiously or not at all).

6. Issues and areas that need improvement

6A. Code

- i) As of now, there is no clear way to connect teacher personal information with their course information. The solution used was to add each teachers teacherid to the personal information file by hand (explained in the Google Cloud Storage Section).
- ii) The student enrollment information downloaded from ASPEN Appears to have a number of issues. Many students are marked as enrolled, withdrawn and then enrolled again in the same school over the course of a couple of days. This makes choosing the correct enrollment date tricky. Because of this, it is likely that after you make your first submission and receive an error report you will need to hand-correct a number of students enrollment dates in order for them to be accepted by ISBE.
- iii) The process for matching elementary school students (specifically K - 3 because 4th grade is rostered in powerschool like middle school students) needs improvement. Even after running the final code some students are rostered to the same class twice within the same school. This problem needs to be examined before the start of the next reporting cycle.

6B. File Submission

- i) If the data validation process is conducted in Google drive do not erase the original file. Instead, copy and paste the data into the files provided.
- ii) The date will need to be put in the correct format in Google sheets (mm/dd/yyyy). All dates will throw an error if this step is skipped.
- iii) It is likely that you will run into different spellings for students names between the ASPEN and power school systems. This is why it is important to use the name and dob listed in ASPEN.

7. Useful Links

Below are links that lay out the exact validation information set by ISBE.

- <https://www.isbe.net/Pages/Illinois-State-Course-System.aspx>
- <https://www.isbe.net/Pages/SIS-Data-Elements-approved-codes-and-indicators.aspx>