

**STATE OF SOUTH CAROLINA**  
**DEPARTMENT OF EDUCATION**



**Start of the School Year**  
**PowerSchool to Ed-Fi Manual**

Office of Research and Data Analysis  
Version 2.3

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## Version Changes

| Version | Date       | Changes within this manual   |
|---------|------------|--|
| 2.3     | July 2024  | <p>The new SCDE logo has been added to the cover page.</p> <p>The recommendations for Ed-Fi publishing have been updated in the All Year Long, Establishing Regular Publishing (p. 4) section.</p> <p>The section ‘Ed-Fi Terms’ has been moved to Appendix C.</p>  |
| 2.2     | June 2024  | <p>The process for distributing credentials for Ed-Fi data integration for 2024-25 has been updated.</p> <p>Recommendations for publishing throughout the year have been updated.</p> <p>PowerSchool navigation was updated to correspond with the enhanced user interface.</p> <p>The introduction was revised to reflect a more current status of the Ed-Fi implementation.</p> <p>Examples of errors and dependencies were removed since there are now examples on the <a href="#">Ed-Fi Known Errors and Dependencies page</a>.</p> <p>Minor language changes were made that did not affect content.</p> |
| 2.1     | June 2023  | <p>The process for distributing credentials for Ed-Fi data integration for 2023-24 has been updated.</p> <p>Once the district’s initial data push is complete, the schedule for data publishing and error/dependency resolution is recommended to occur after State Reporting updates and requires administrators to schedule the publishing of data changes in the On Demand Data section of the dashboard.</p> <p>Minor language changes were made that did not affect content.</p>  |
| 2.0     | April 2023 | <p>The code set mapping section has been removed.</p> <p>Language and formatting changes were made throughout.</p>   |

## **Introduction**

### **What is Ed-Fi?**

Ed-Fi is a solution designed to address challenges faced by school districts and state education agencies when it comes to integrating student data from multiple systems. The purpose of Ed-Fi is to provide a standardized open-source data framework that enables the integration of data from student information systems and other sources.

In South Carolina, data is published to an Ed-Fi REST API (Application Programming Interface). Data required for state reporting then publish to a state-level API. Ed-Fi district and state data warehouses allow authorized users to access and analyze the data. South Carolina's Ed-Fi model is designed to (1) bring together data from multiple systems more efficiently, (2) promote cleaner data snapshots, and (3) over time, boost the scope of efforts that meet data needs voiced by districts, preventing duplication of development work. The District Data Governance Group is a partnership between the SCDE and participating school districts to oversee and advise on this consolidated reporting environment.

### **The Purpose of this PowerSchool to Ed-Fi Manual**

This Ed-Fi integration manual provides instructions for South Carolina school districts to integrate with Ed-Fi each year. District PowerSchool Administrators should reference this document for roadmaps detailing when to integrate with Ed-Fi from their PowerSchool Student Information System (SIS), as well as how to accomplish successful connection to the district Ed-Fi API and publish data. Ed-Fi will not allow data to be published in the case of certain errors, and this welcome packet includes guidance and requirements related to error-resolution.

## Ed-Fi Integration

### Ed-Fi Integration Summary

As part of a regular and required process, annual Ed-Fi integration, data publishing, and error and data quality monitoring begins immediately after PowerSchool end-of-year processing. The following Ed-Fi roadmap details actions that district PowerSchool administrators take each year.

#### *Spring/Summer*

- **June**  
SCDE will email instructions for accessing the key, secret, and API URL to each district chief information officer (CIO), PowerSchool administrators, and technology coordinators. The email will direct CIOs and PowerSchool administrators to resources available to assist with integration, which include this manual and a website with visual steps for accessing credentials and completing the integration.
- **Immediately after the district has completed PowerSchool end-of-year processes**  
Districts first deactivate the previous year's Ed-Fi profile in PowerSchool and then create a new profile for the coming academic year using the aforementioned credentials (key, secret, and API URL) and the Ed-Fi integration instructions in this manual. Integration involves connecting to the district Ed-Fi API for the coming year, publishing data for the first time, ensuring that data changes continue to publish, and monitoring errors that appear in the PowerSchool Ed-Fi publishing dashboard.

#### *All Year Long*

##### **Establishing Regular Publishing**

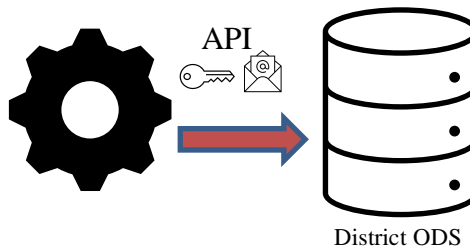
- The first publish of the Ed-Fi dashboard begins with a download of descriptors, followed by a Publish All on each category, moving from top to bottom of the dashboard and publishing each category one at a time. If a category produces errors, republish the category to see if the errors resolve.
- Level Data validations and the Data Quality and Reporting (DQR) application are available to support school and district staff with error and dependency troubleshooting. After making corrections, repeat publishing.
- Continue to monitor errors, dependencies, and data quality issues.
- While SCDE recommends that Ed-Fi publishing is done regularly to keep external data connections and reporting current, ultimately district staff should determine a publishing schedule that fits the needs of the school district. Remember that applications integrating with Ed-Fi (e.g., EdPlan SC) may depend on regular updates; therefore, the frequency and timing for publishing is a consideration affecting many people across the school district.

## Annual Ed-Fi Cycle for Districts

Publish  
Monitor  
Resolve

### Publish / Monitor / Resolve

- Verify district is on latest State Reporting version
- Publish changes
- Resolve data quality issues and republish
- Monitor errors



### Stay current on State Reporting!

Regularly check the [PowerSchool SIS South Carolina Release Notes](#) page to stay informed of the latest State Reporting version, which includes Ed-Fi changes.

## Ed-Fi Integration Instructions for PowerSchool

Follow the steps below to integrate with Ed-Fi for the year; this process must be completed by a district-level PowerSchool administrator.

- Step 1: Ensure that the district PowerSchool instance is updated to the latest State Reporting version.
- Step 2: Locate the credentials (key, secret, and API URL) for the appropriate year.
- Step 3: Set up an Ed-Fi profile for the year (ensuring that last year's is deactivated but NOT deleted).
- Step 4: Connect to the district Ed-Fi API.
- Step 5: Download Descriptors from the Ed-Fi API.
- Step 6: Publish data to the year's Ed-Fi API for the first time (i.e., complete an initial data “push”), and plan for subsequent data pushes and error and dependency monitoring.

### ***Step 1: Ensure the district PowerSchool instance has the latest State Reporting version.***

Supporting documents for Step 1:

[PowerSchool SIS South Carolina Release Notes](#)

### ***Step 2: Locate the credentials (key, secret, and API URL) for the appropriate year.***

#### **Explanation:**

District APIs are operationalized using the district's secure Ed-Fi key and secret, as well as an Ed-Fi API URL. ***Districts will use a NEW district Ed-Fi API key, secret, and API URL each academic year.***

### Access your district's Ed-Fi credentials for the next school year:

- SCDE will email instructions for accessing the key, secret, and API URL to each district chief information officer (CIO), PowerSchool administrators, and technology coordinators. The instructions provide access to a website where credentials for Ed-Fi integration will be generated.
- Save the credentials to a secure location for future use. If not saved, the credentials can be reset via the credential website.
- **Credentials are NOT to be shared with anyone who is unauthorized to manage the district's PowerSchool to Ed-Fi data publishing and error resolution.**
- If the district CIO has difficulty accessing credentials, the CIO should email scEd-Fihelp@educationanalytics.org for assistance.

### *Step 3: Set up an Ed-Fi profile for the year.*

#### **Explanation:**

To begin, a district PowerSchool administrator must add an Ed-Fi profile for the upcoming school year under the PowerSchool Data Exchange (DEX) plugin. *Additionally, the previous year's profile will be disabled (but not deleted) after PowerSchool End-of-Year processing.*

#### **Disable last year's Ed-Fi profile and set up a profile for the coming year:**

- A. From the PowerSchool Start Page, select the District Office in the upper right-hand corner. Then locate "System Management" in the left navigation menu.
- B. In the **Server** section, select "Plugin Configuration."
- C. On the **Plugin Configuration** page that appears, scroll down to "PowerSchool Data Exchange (DEX)," and make sure that the check box to the far right is checked. Click **Enable** when asked to do so. This will take you back to the **Plugin Configuration** page. Your checkbox should now be checked.
- D. On the **Plugin Configuration** page, click the "PowerSchool Data Exchange (DEX)" link.
- E. In the **Function** section of the page that appears, click the "Profile Configuration" link.
- F. Disable last year's profile by clicking the "Edit" button to the right of the profile name, then clicking the "Off" radio button and clicking "Save." **DO NOT DELETE** last year's profile as you may need to re-enable it in the future.
- G. Click the "Add Profile" button at the top of the page to create a new profile for the appropriate year.
- H. Type the following as the *Profile Name*, replacing the Xs with the district's four-digit district code and ending with the year that most students will graduate for the given academic year (ie, "2025" for the 2024-2025 academic year). For a district with code 9999 creating a profile for the 2024-2025 academic year, the profile name would be Ed-Fi\_9999\_2025. Further references to the profile name in this documentation will be displayed as Ed-Fi\_XXXX\_YYYY.

- I. Select **ED-FI\_SC\_7** from the *Profile Type* field and ensure that the “On” radio button is selected for the *Enabled* field. Click the “Save” button. If the profile has not appeared in the list, create a support case with PowerSchool for setup assistance.

#### ***Step 4: Connect to the District Ed-Fi API.***

##### **Explanation:**

##### **WARNING: FOLLOW THESE INSTRUCTIONS EXACTLY.**

Set the NEW profile for the coming year to the correct API using your NEW credentials or else you will OVERWRITE last year’s data.

Once the new Ed-Fi profile for the year has been added under the Data Exchange (DEX) plugin, follow the steps below to connect the district’s PowerSchool instance to the district Ed-Fi API.

##### **Connect to the district Ed-Fi API:**

- A. From the Start Page, be sure that “District Office” and the correct school year still appear in the upper right corner (e.g., when connecting to Ed-Fi\_XXXX\_2025, be sure school year 2024-2025 (or equivalent) is selected. Then select “System Management” from the left navigation menu.
- B. Select **Data Exchange** from the flyout menu that appears and select “General Setup”. On the **Data Exchange Setup** page, about half-way down the page, in the dropdown for *Profile*, ensure before doing anything else that the profile created for the year is still selected: Ed-Fi\_XXXX\_YYYY
- C. Near the top of the page, ensure that the “On” radio button for *System Enabled* is selected.
- D. In the dropdown for *Job Processing Frequency*, select “High.”
- E. In the dropdown for *Purge Policy*, select “Seldom.” (“Typical” is also an acceptable option, but it may cause “Error” messages to purge slightly more frequently than if “Seldom” is selected.)
- F. In the field labeled *Simultaneous Connections*, change the number to 50. (Large districts may want to change the number to 100.)
- G. In the two fields labeled *Data Exchange URL* and *Authentication URL*, copy and paste the new API URL **beginning with https://** from the credentials you accessed. **Do NOT add or delete any characters from the URL.**
- H. Check the box for the correct academic year next to *School Years*.

| <b>Troubleshooting</b>  |
|---|
| <b><i>What if there is no check box for the current school year?</i></b><br><br>If there is no check box displayed for the current school year, ensure that the district has the minimum State Reporting version required for this setup. The most current version is preferable. |

- I. Next to *Service Options*, ensure that the boxes are checked for Data Changes, Download, and Publish.



- J. Click the “Save” button at the bottom of the page. *If “Save” is not clicked at this point, the connection may not be successful when tested as part of a later step.*
- K. Near the bottom of the page, select “Configure” to access the fields in which the remaining credentials will be entered.
- L. Next to *LEA Enabled*, select On.
- M. In the Authentication Key field, copy and paste the new key from the credentials you accessed. Ensure that there are no spaces and that **ONLY** the key is in the field.
- N. In the Authentication Secret field, copy and paste the new secret from the credentials you accessed. Ensure that there are no spaces and that **ONLY** the secret is in the field.
- O. Click the “Test Connection” button. If successful, a green check mark will appear. “Save” and “Close.”

| Troubleshooting   |
|---|
| <p><i><b>What if the connection was not successful?</b></i></p> <p>If not successful, ensure there are no leading or trailing spaces in the API URL, key, and secret fields. Then, click “Save” and close the dialog box. Save the previous page with the API URL. Refresh the page and test the connection again. If still not successful, open a ticket for support by emailing <a href="mailto:scEd-Fihelp@edanalytics.org">scEd-Fihelp@edanalytics.org</a>.</p> |

- P. **VERY IMPORTANT:** Click the “Save” button again on the **Data Exchange Setup** page to ensure that all selections and credentials have been saved.

Once saved, select Data and Reporting from the left navigation menu and Data Exchange from the flyout menu. This will take you to your publishing dashboard.

### ***Step 5: Download Descriptors from the Ed-Fi API.***

#### **Explanation:**

Once the connection from PowerSchool to the district Ed-Fi API has been established, download Descriptors (Common Codes) **BEFORE** attempting an initial data push to the API.

#### **Download Descriptors from the Ed-Fi API:**

- A. From the left navigation menu, select **Data and Reporting**, then **Data Exchange**. The Ed-Fi publishing dashboard appears.
- B. Ensure that the correct school year and “District Office” show in the upper right-hand corner of the page.
- C. Locate the Descriptors (Common Codes) category and click “Run Now” which appears on the far-right side of the dashboard. This begins the download of descriptor codes and values. After 10-15 seconds, refresh the page, and the value of “No” that appears in the *Downloading* column for Descriptors (Common Codes) will likely have changed to “Yes.” Refresh the page to see the value in the *Downloading* column returns to “No,” and the download is complete.

| Troubleshooting  |
|--|
| <p><b><i>What if the download has not begun after 5 minutes?</i></b></p> <p>If the download has not begun after 5 minutes (if “No” has not changed to “Yes” in the Downloading column) or if the Last Activity column has not updated, refresh the page and create a PowerSchool support case.</p> <p><b><i>What if the download is taking longer than expected to complete?</i></b></p> <p>Submit a PowerSchool support case and notify Data Collection Team of your case number.</p> |

***Step 6: Publish data to the API for the first time.***

1. On the publishing dashboard, locate the Organization Info category in the column labeled *Publish Data* and click the “Run Now” button on the far-right side of the dashboard. Select the “PUBLISH ALL – Run checks and publish any valid added or changed data” parameter from the dropdown that appears. Then, click the “Submit.”

**Note:** Refresh the page automatically or manually in the upper right-hand corner of the page.

2. Once the *Processing* column returns to 0, click “Run Now” for the next category. Repeat these actions for each category listed in the order in which they appear, waiting until the *Processing* column returns to 0 before each “push.”

**Note:** It will take longer to publish than to download descriptors, especially On Demand categories. The time it takes will depend on the number of students in the district.

3. Locate the Attendance category and click the “Schedule” button on the far-right side of the dashboard. When a box pops up asking whether to continue, click the “OK” button. In the dropdown next to “Data Publishing Option\*”, select the “PUBLISH ALL – Publish all attendance data for the entire school year” parameter. There exists the option to schedule this data push or to “run now.” Do not schedule future publishing for this category until after the initial data push. Select “Run Now” to push attendance data.
4. Repeat these steps for the other “On Demand Data” categories in the order in which they appear. Note that On Demand Data categories may take much longer to run.

Once each category in the dashboard has been pushed, the displayed value in the *Publishing* column is 0, and the *Published* column has stopped incrementing, your district’s initial data push is complete.

5. After the initial data push for these “On Demand Data” categories, schedule a “Publish Changes.” Note that Survey categories only need to be published to deliver School Climate Survey data in the spring or as directed, so regular scheduling for Survey data should be avoided.

## Staying Current and Informed

### Maintenance of Data Publishing

PowerSchool administrators review regularly errors and dependencies in the publishing dashboard to understand and correct data quality issues. Data with errors or dependencies are not sent to the state-level API, which **could result in loss of funding if the data are funding-related.**

[Updating to the latest State Reporting version](#) is necessary so that any bug fixes in PowerSchool Ed-Fi business rules are applied to your PowerSchool instance. This is another way to be proactive toward reducing errors in your district's Ed-Fi data publishing.

### Learning and Growth

ORDA is committed to helping you build skill and confidence with Ed-Fi integration, regular data publishing, and error monitoring. If you are interested in learning more about Ed-Fi, please consult the [Ed-Fi in South Carolina](#) page.

## Errors and Dependencies

### Defining Errors and Dependencies

“Errors” are an indication of records that were published and rejected by the Ed-Fi API due to data quality or other issues. “Dependencies” are an indication of records that cannot be published until some other valid resource or element has been published.

The district PowerSchool administrator needs to investigate errors and dependencies to determine if it is a data quality issue. If so, it will need to be resolved, and the record republished.

Dependencies may be more challenging to diagnose, but in the case of data quality issues, they typically point to a record higher up in the dashboard with errors. Resolving these errors and republishing is often the best course of action.

### Locating Dependencies and Errors in the Ed-Fi Publishing Dashboard

Errors are signaled with red buttons on the dashboard that are typically dark blue when no errors occurred during publishing. Be sure to work from top to bottom when diagnosing errors. Errors in a top-level category tend to cascade down to lower-level categories. As an example, if an Organization Information error prevents a student record from being published, that student's course enrollments and grades in lower-level categories will also fail to publish until the error with the student record is resolved.

To view error messages and API response codes, click the red button for a category, select the option from the first dropdown that includes the word “errors,” and examine each “data view” category. Press the “Clear Cache” button when examining each category to ensure you see the most current data.

If there is an error, an “Error Code” (an API response code) will be displayed, and if the category was recently pushed, there will be a “Message Detail.” If there are errors but no “Error Code” or “Message

Detail,” republish the data for that category, and then check again, as error messages are purged periodically.

The JSON payload is helpful for tracking down data quality issues and can usually be accessed using the following path:

Start Page > System Management > Data Exchange > Data Publishing.

If you cannot locate the JSON for a particular error, reach out to the ORDA Data Collection Team for assistance: [Ed-Fi@ed.sc.gov](mailto:Ed-Fi@ed.sc.gov). Note that JSON is not available for dependencies, only errors that have an API response code.

## Known Errors and Resolutions

Not every issue can be fixed immediately. Some errors are caused by problems in the software, for example, and will be fixed in a future State Reporting release. Please see the [Ed-Fi Known Errors and Dependencies page](#) to find out if your publishing issue is known and has guidance. If the issue is not indicated there, place a ticket with PowerSchool support.

## API Response Codes

The following is a list of API response codes that district PowerSchool administrators may encounter when monitoring data publishing.

400 - Bad Request, the JSON payload is malformed, or request headers are incorrect.

**Problem:** Usually this is a malformed JSON payload.

**Recommendation:** Create a support case with PowerSchool that includes the JSON payload that was sent from PowerSchool to the target resource. It can be accessed using the following path: Start Page > System Management > Data Exchange > Data Publishing. To view the SC Ed-Fi API specifications go to SC’s [Swagger](#) site and scroll to the resource in question; then look at the POST definitions.

401 - Authentication error or API credentials are invalid

**Problem:** This is usually an authentication error.

**Recommendation:** Check that the API credentials you entered are correct.

403 - Relationship Error. Claim Set Authorization Error

**Problem:** Earlier resources in the dependency tree were not posted correctly. As noted earlier in this document, upstream errors (e.g., Student Identification) must be resolved before proceeding to publish downstream records (e.g., Student Enrollments).

**Recommendation:** See if there is a relationship that you can identify to another error in a previously published, higher-level category. If you can resolve previous errors and then republish everything up to and including the category with the 403 error, the 403 error may be resolved. If not, reach out to [Ed-Fi@ed.sc.gov](mailto:Ed-Fi@ed.sc.gov).

404 - Resource is not found or does not exist

**Problem:** The format of the requested resource end point is probably not correct.

**Recommendation:** Reach out to [Ed-Fi@ed.sc.gov](mailto:Ed-Fi@ed.sc.gov).

409 - Relation Error. A related resource was not found.

**Problem:** There is a related resource that does not exist for the record to be created successfully.

**Recommendation:** As with the 403 error, check to see that higher-level resources were pushed successfully.

**Note:** Try simply republishing only those categories with 409 errors. Do this in order, from top to bottom, in the Ed-Fi publishing dashboard and wait until one category has finished before kicking off another.

500 - Server Error

**Problem:** Something is not right on the API servers.

**Recommendation:** Retry at another time, or if it recurs, reach out to [scEd-Fihelp@edanalytics.org](mailto:scEd-Fihelp@edanalytics.org)

## Appendix A

### Publishing Best Practices

| Intent   | Best Practices  |
|--|---|
| <p><b>Publish data for the first time to the year’s API</b></p>  | <ul style="list-style-type: none"> <li>• Download descriptors is first, followed by publishing data categories.</li> <li>• Ignore the “Run All” button, and instead publish each category one at a time using the “Run Now” button on the right side of the dashboard. Select <b>Publish All</b> if this is the first publish or if a category has not been published in the past 7 days.</li> <li>• For the first three categories, and using a “top down” approach, run <b>Publish Errors</b> or <b>Publish Dependencies</b> several times, if needed. For your initial data push, this repetition alone may clear out some dependencies and errors.</li> <li>• If a category is stuck/stalled for over 24 hours, submit a <a href="#">PowerSchool support case</a>.</li> </ul>   |
| <p><b>Republish after the latest State Reporting Release</b> – Maintain regular publishing of data changes.</p>                                      | <p>After you have verified that you are on the latest State Reporting (SR) version, Publish Changes or Publish All.</p>   |
| <p><b>Resolve dependencies and errors</b> – Do targeted publishing when diagnosing and dealing with issues resulting in dependencies and errors.</p> | <ul style="list-style-type: none"> <li>• Use a “top down” approach, resolving all dependencies and errors for a category before focusing on those lower on the dashboard.</li> <li>• Troubleshoot in this order: (1) Error, (2) Dependency, (3) next line.</li> <li>• Refer to error and dependency resolution information on the <i>Ed-Fi Known Errors and Dependencies</i> page.</li> <li>• Republish the category using <b>Publish All</b> or <b>Publish Errors</b> if there are errors with messages that have been purged.</li> <li>• Use <b>Retry Errors</b> as a first step when investigating 400 errors. If this doesn’t resolve any errors, then try <b>Publish Errors</b>.</li> </ul> <p>For a walk-through of the anatomy of the Ed-Fi publishing dashboard and additional insights on dealing with dependencies and errors, please see <a href="#">this video segment from the Ed-Fi Regional Workshop 2022 face-to-face training</a>.</p> |

## Appendix B

### Submitting a PowerSchool Support Case

1. Go to the [PowerSchool Case Portal](#), log in, and click the "New Case" button.
2. From the "Product" dropdown, select PowerSchool SIS. Type anything in the field below that; then wait until the "Continue to Case Creation" button appears (if necessary, click the magnifying glass search icon to make that button appear at the bottom of the page).
3. Click "Continue to Case Creation". In "Account", select your district's account.
4. In "Subject", type a brief but descriptive subject that begins with "Ed-Fi."
5. In the "Product" field, select "PowerSchool SIS." In the "Priority" field, select the "P2" option.
6. In the "Business Impact" field, select the best option.
7. In the "Description" field, describe the issue in detail. Whenever possible, include a screenshot(s) documenting the issue. For example, you might include screenshots of your dashboard before and after a data push, or you might include a screenshot of available JSON related to an error, being careful to obscure any personally identifying information.
8. When a PowerSchool agent reaches out to assist you, be as responsive as possible so that they can assist you as promptly as possible.

## Appendix C

### Ed-Fi Terms

#### Application Programming Interface (API)

APIs allow applications to talk to other applications. The Ed-Fi API is “how users interact with” the Ed-Fi Operational Data Store (ODS). ([How Ed-Fi Can Help You Make the Most of Your Data](#), p. 3) The Ed-Fi API follows REST conventions (HTTP using verbs GET, POST, PUT, DELETE).

#### category (PowerSchool publishing category)

In the context of the Ed-Fi publishing dashboard, a category is a grouping of data elements for which records are published to one or more Ed-Fi “resources” in the district Ed-Fi API.

#### data dictionary

A data dictionary clarifies how data elements are defined.

#### data model

A data model is conceptual, a logical way to think of how entities within a model relate to each other.

#### domain (Ed-Fi domain)

Ed-Fi domains are what the Ed-Fi Unifying Data Model (UDM) is most broadly organized into. There are 17 base domains in the UDM. See the Ed-Fi Alliance’s [Tech Docs page on Ed-Fi domains](#).

#### Ed-Fi

“Ed-Fi is a set of technologies that use the Ed-Fi Data Standard, a set of rules that establish a unified structure for K-12 educational data.” ([How Ed-Fi Can Help You Make the Most of Your Data](#), p. 3)

#### Ed-Fi Alliance

“The [Ed-Fi Alliance](#) is the group of educators, technologists, and thought leaders shaping the future of education technology through the Ed-Fi Data Standard and the ecosystem of Ed-Fi Technologies.”

#### Ed-Fi Data Standard

“The [Ed-Fi Data Standard](#) is the set of rules for the collection, management, and organization of educational data that allows multiple systems to share their information in a seamless, actionable way.”

#### Ed-Fi publishing dashboard

The Ed-Fi publishing dashboard is available for a given school year after a South Carolina school district has followed SCDE’s instructions to create a new Ed-Fi profile for the year and connected to the district’s Ed-Fi API using district-specific and year-specific credentials.

#### Ed-Fi Unifying Data Model (UDM)

The terms “Unifying Data Model (UDM)” and “Ed-Fi Data Standard” are often used interchangeably. The UDM is the foundation of all Ed-Fi standards and the way to ensure that standards are compatible. The UDM is made up of entities, attributes, and associations. It is highly normalized which means that it is optimized for storage of very granular data. Note that the Ed-Fi API schema is NOT a standard; the logical data model is a standard.

#### JSON

[JSON](#) stands for JavaScript Object Notation and is a format for “storing and transporting data.” The JSON payloads that you are likely to see in PowerSchool after publishing data to the district Ed-Fi API



include representations of Ed-Fi resources. In general, the element name is followed by a colon and then the value for that element. See the [SC Swagger website](#) where all resources are provided as a single JSON object.

### **Operational Data Store (ODS)**

The ODS is where data land when they are transferred from a source system that has mapped to Ed-Fi directly onto the structure of the Ed-Fi ODS. It can be thought of as the entire scope of tables that support the Ed-Fi data model.

### **resource (Ed-Fi resource)**

An Ed-Fi resource corresponds to a single or multiple tables in the Ed-Fi API.