



Ed-Fi and YOU!!!

CIE Users Group

12

South Carolina Ed-Fi & the path ahead:

2020 - Ed-Fi pilot

2021 - 2022 Full-state integration

2022 - 2023 Ed-Fi rollout

2023 - 2024 Rollin', rollin', rollin'



Data Flow: Past, Present, and Future

↳ 2020: Pilot phase

- ↳ three districts
- ↳ goal was to test SC's intended Ed-Fi architecture

↳ 2021-2022 statewide integration

- ↳ full-state integration for the first time
- ↳ goal was to test ability of SC's intended architecture to scale
- ↳ lift-off of District Data Governance Group (DDGG)

↳ 2022-2023 Ed-Fi Rollout Part 1

- ↳ goal was to refine and standardize processes
- ↳ began error-management training
- ↳ compared legacy and Ed-Fi data streams
- ↳ incorporated a state data warehouse to test analytics and reporting

↳ 2023-2024 Ed-Fi Rollout Part 2

- ↳ goal is to shift the focus toward data quality for quality reporting and analytics
- ↳ training around Ed-Fi errors will center on data quality, not clearing dashboards
- ↳ district data warehouses to soon be integrated statewide



Ed-Fi Integration


Integration Resources:


<https://ed.sc.gov/data/information-systems/interoperability-resources/ed-fi-in-south-carolina/>


Revisions to come in spring 2024



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Ed-Fi In South Carolina

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, Ed-Fi data is published to an Ed-Fi REST API, landing in a district-level Operational Data Stores (ODS). Data required for state reporting then publish to a state-level API and ODS. The Ed-Fi ODS serves as a central repository for integrated data, and in South Carolina, Ed-Fi data warehouses connected to these district and state ODSes then allow authorized users to access and analyze the data. The District Data Governance Group is a partnership between the SCDE and participating school districts to oversee and advise on this consolidated reporting environment.

Ed-Fi Resources and Support

PowerSchool to Ed-Fi Integration

District PowerSchool administrators: refer to the [Power School to Ed-Fi Manual \(v2.1\)](#) for instructions to integrate PowerSchool instances with the Ed-Fi environment prior to each new school year. The manual also includes best practices for Ed-Fi publishing.

[Step-by-Step Ed-Fi Integration videos](#)

Publishing

Check the [Ed-Fi Known Errors and Dependencies](#) page for an inventory of current publishing problems in Ed-Fi. Another resource for SC known issues with Ed-Fi publishing is available through [PowerSchool Community](#).

For Today - Part 1

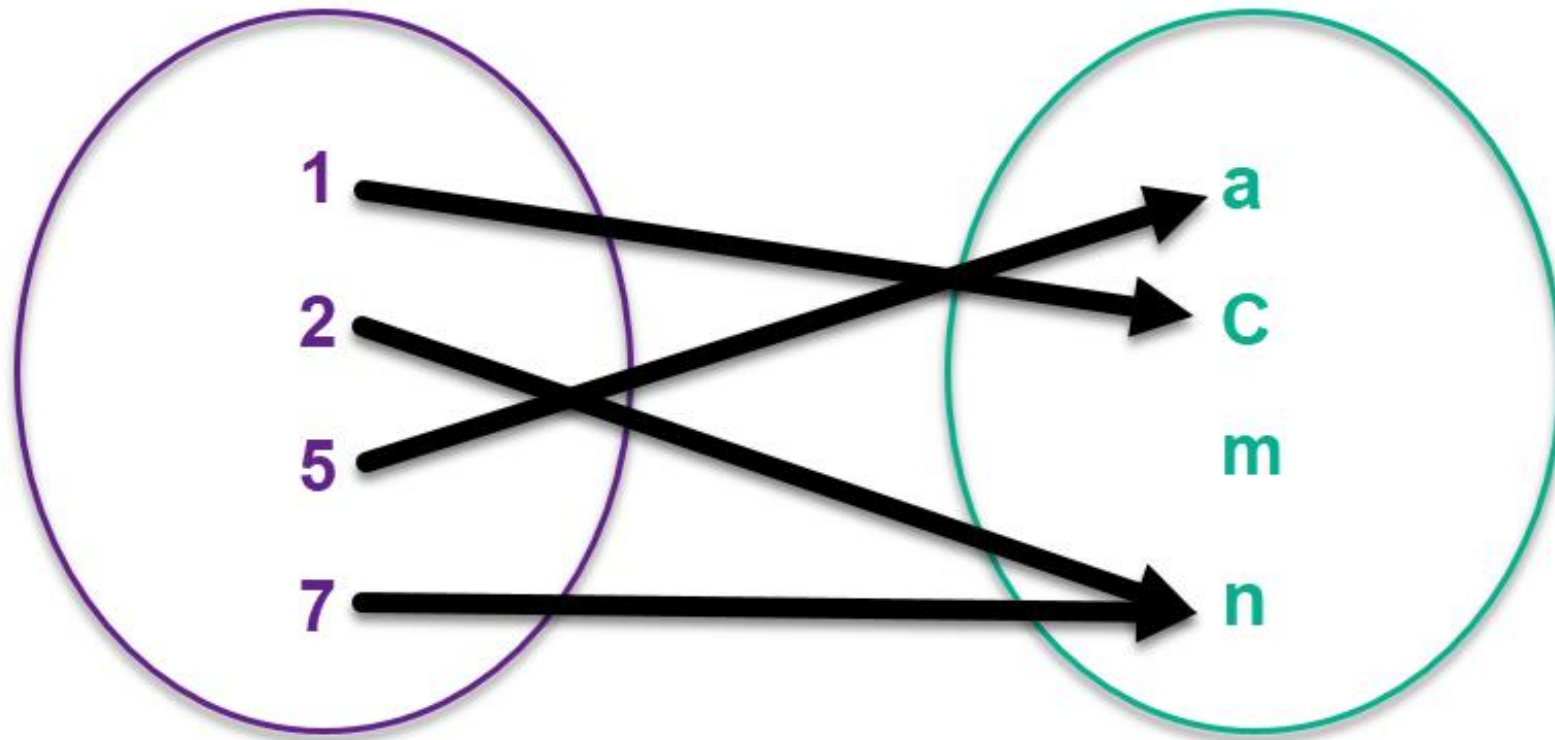
- ↳ Newbies Intro to Ed-Fi
- ↳ Anatomy of the Dashboard
- ↳ When and How to Publish Data
- ↳ When to Panic



What is a **Data Standard**?



- ↓ Rules for how data should be formatted and exchanged between systems

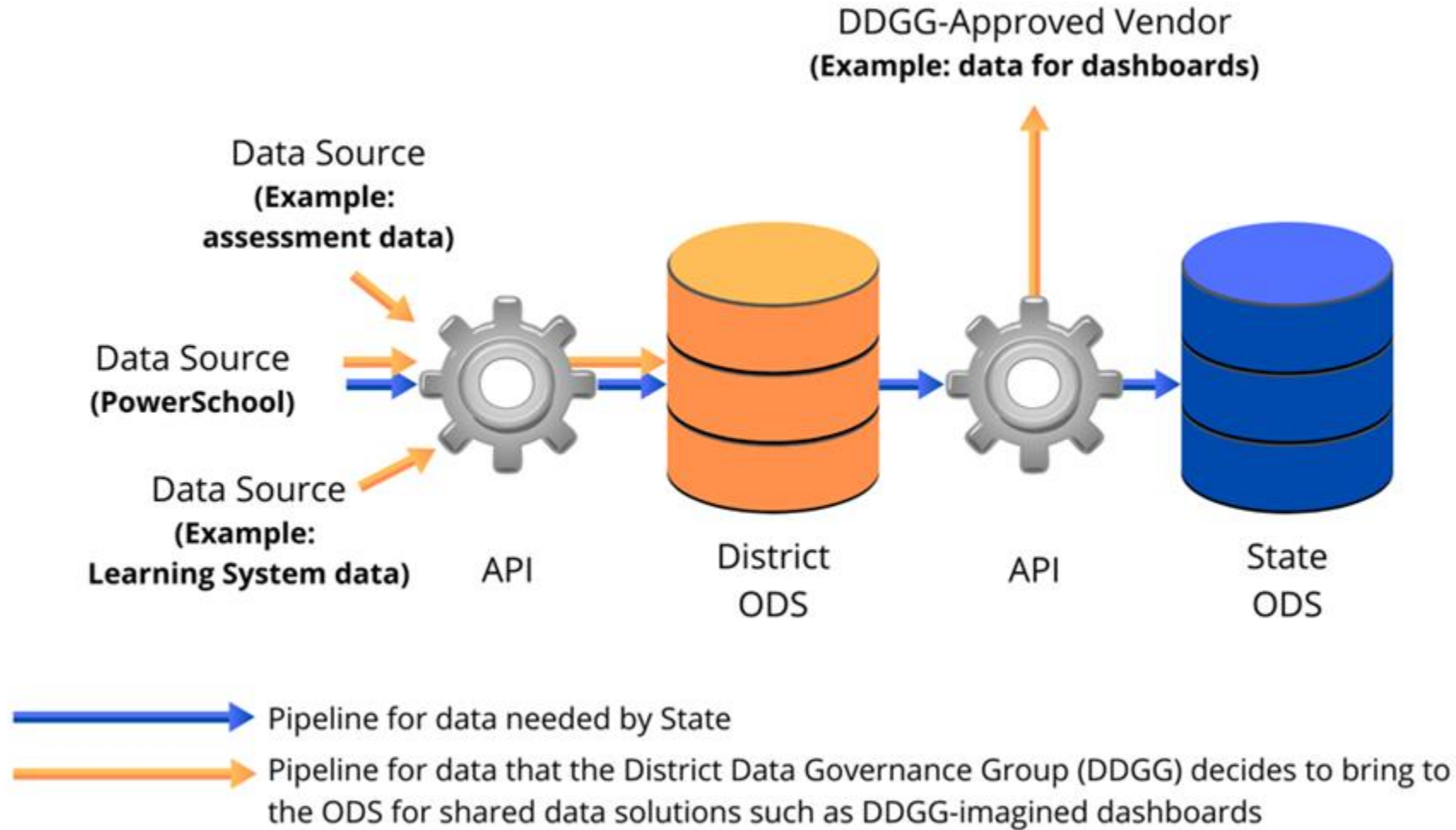


What is **Interoperability**?

- ↳ When data systems talk to each other
 - ↳ The Ed-Fi data standard helps educational data systems do that.
 - ↳ student info systems, learning management systems, assessment vendor systems, etc.



SC Ed-Fi Pipelines

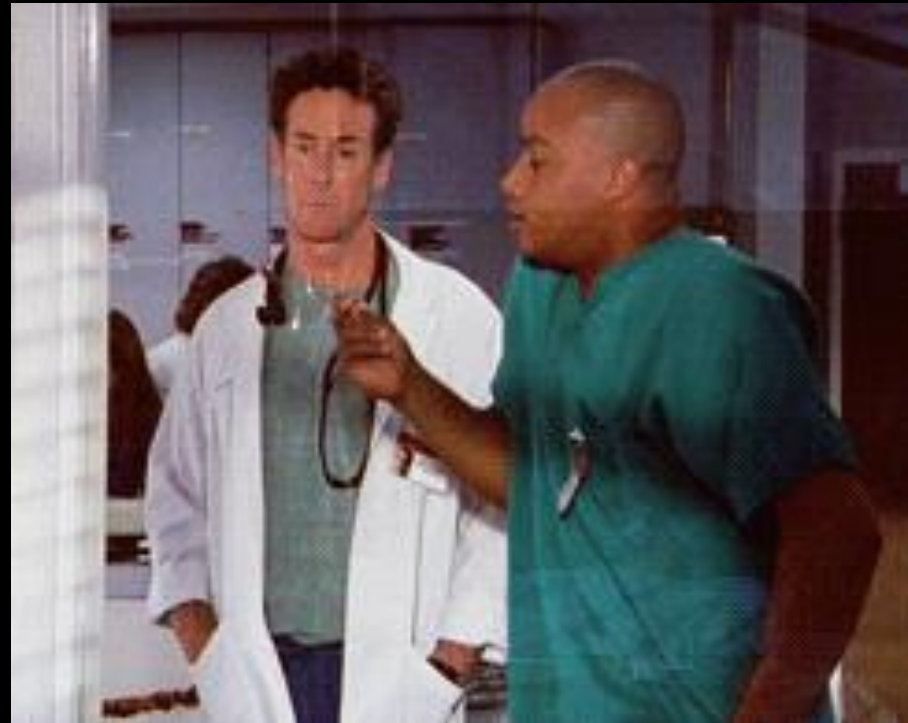


PowerSchool Fields Mapped to Ed-Fi

Over 504 PowerSchool compliance reporting fields currently mapped these Ed-Fi resources:

1) Alt and Supp Services	8) School Calendar
2) Assessment	9) Staff
3) BellSchedule	10) StudentAcademicRecord
4) ClassPeriod	11) StudentAttendance
5) Discipline	12) Student
6) EducationOrganization	13) Survey
7) Enrollment	14) Teaching and Learning

Anatomy of the PowerSchool Ed-Fi Dashboard



Anatomy of the PowerSchool to Ed-Fi publishing dashboard

partneresc.powerschool.com/admin/reports/dashboard_dex.html?profileId=201&profileName=EdFi_9998_2024

PowerSchool SIS

Start Page > Data Exchange > EdFi_9998_2024

District Office 23-24 Year

EdFi_9998_2024

Refresh

Details	Download Data	Downloading	Errors	Data Exceptions	Downloaded	Last Activity	Run All			
<input type="checkbox"/>	Descriptors (Common Codes)	No	Review	0	0 / 0	3584	19 hours ago	Run Now		
Details	Publish Data	Processing	Dependencies	Publishing	Errors	Data Exceptions	Published	Last Published	Run All	
<input type="checkbox"/>	Organization Info	0	0	0	Review	0	0 / 0	323	19 hours ago	Run Now
<input type="checkbox"/>	Organization Calendars	0	0	0	Review	0	0 / 0	1333	19 hours ago	Run Now
<input type="checkbox"/>	Organization Schedules	0	0	0	Review	0	0 / 0	5326	19 hours ago	Run Now
<input type="checkbox"/>	Student Identification	0	4	0	Review	0	0 / 0	678	36 minutes ago	Run Now

Ed-Fi Publishing Dashboard

Start Page > Data Exchange > EdFI_9994_2023 District Office ▾ 22-23 Year ▾

EdFi_9994_2023 Your district's four-digit number Current year

Details	Download Data	Downloading	Errors	Data Exceptions	Downloaded	Last Activity	Run All	
+	Descriptors (Common Codes)	No	Review	0	0 / 0	2550	1 day ago	Run Now
+	State Courses	No	Review	0	0 / 0	3462	14 days ago	Run Now

Details	Publish Data	Processing	Dependencies	Publishing	Errors	Data Exceptions	Published	Last Published	Run All	
+	Organization Info	0	0	0	Review	0	0 / 0	1507	7 days ago	Run Now
+	Organization Calendars	0	0	0	Review	0	0 / 0	13516	13 days ago	Run Now
+	Organization Schedules	0	0	0	Review	0	0 / 0	9818	7 days ago	Run Now
+	Student Identification	0	9	0	Review	0	0 / 0	14301	13 days ago	Run Now
+	Student Enrollments	0	2588	0	Review	0	0 / 0	23683	13 days ago	Run Now
+	Student Contacts	0	6	0	Review	0	0 / 0	62485	13 days ago	Run Now
+	Student Sections	0	48	0	Review	0	0 / 0	129089	7 days ago	Run Now
+	Staff Demographics	0	0	0	Review	0	0 / 0	1553	10 days ago	Run Now
+	Staff Associations	0	0	0	Review	0	0 / 0	4901	10 days ago	Run Now
+	Teacher Sections	0	0	0	Review	0	0 / 0	7396	7 days ago	Run Now
+	Student Programs	0	1182	0	Errors	76	0 / 0	4392	10 days ago	Run Now
+	Assessments	0	105	0	Review	0	0 / 0	3246	10 days ago	Run Now
+	Student Discipline	0	0	0	Errors	318	0 / 0	9317	10 days ago	Run Now

Details	On Demand Data	Processing	Dependencies	Publishing	Errors	Data Exceptions	Published	Last Published	Run All	
+	Attendance	0	51	0	Review	0	0 / 0	338035	9 days ago	Schedule
+	Student Grades	0	35078	0	Errors	7981	0 / 0	116370	7 days ago	Schedule
+	Transcripts	0	50	0	Errors	875	0 / 0	149653	7 days ago	Schedule
+	Cohort Groups	0	0	0	Review	0	0 / 0	2510	7 days ago	Schedule
+	Surveys	0	0	0	Review	0	0 / 0	122	25 days ago	Schedule
+	Survey Question	0	0	0	Review	0	0 / 0	605	25 days ago	Schedule
+	Survey Response	0	0	0	Review	0	0 / 0	6859	29 days ago	Schedule
+	Survey Question Response	0	0	0	Review	0	0 / 0	379435	29 days ago	Schedule

State/Provincial Content: USA-SC 23.6.1.0.2.0 State Reporting version that your district is currently on

Anatomy of the PowerSchool to Ed-Fi Publishing Dashboard

Details	Download Data	Downloading	Errors	Data Exceptions	Downloaded	Last Activity	Run All			
▼	Descriptors (Common Codes)	No	Review	0	0 / 0	2550	1 day ago	Run Now		
▼	State Courses	No	Review	0	0 / 0	3462	14 days ago	Run Now		
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▼	Organization Schedules	0	0	0	Review	0	0 / 0	9818	7 days ago	Run Now
▼	Student Identification	0	9	0	Review	0	0 / 0	14301	13 days ago	Run Now
▼	Student Enrollments	0	2568	0	Review	0	0 / 0	23683	13 days ago	Run Now
▼	Student Contacts	0	6	0	Review	0	0 / 0	62465	13 days ago	Run Now
▼	Student Sections	0	48	0	Review	0	0 / 0	129089	7 days ago	Run Now
▼	Staff Demographics	0	0	0	Review	0	0 / 0	1553	10 days ago	Run Now
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▼	Teacher Sections	0	0	0	Review	0	0 / 0	7396	7 days ago	Run Now
▼	Student Programs	0	1102	0	Errors	76	0 / 0	4392	10 days ago	Run Now
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▼	Attendance	0	51	0	Review	0	0 / 0	338035	9 days ago	Schedule
▼	Student Grades	0	35078	0	Errors	7961	0 / 0	116370	7 days ago	Schedule
▼	Transcripts	0	50	0	Errors	875	0 / 0	149653	7 days ago	Schedule
▼	Cohort Groups	0	0	0	Review	0	0 / 0	2510	7 days ago	Schedule
▼	Surveys	0	0	0	Review	0	0 / 0	122	25 days ago	Schedule
▼	Survey Question	0	2	0	Review	0	0 / 0	605	25 days ago	Schedule
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▼	Survey Question Response	0	0	0	Review	0	0 / 0	379435	29 days ago	Schedule

How to do “publishing”



Parameter Selection [Close]

Parameter	
Data Publishing Option	PUBLISH CHANGES - Run checks and publish any valid added or changed data
	PUBLISH CHANGES - Run checks and publish any valid added or changed data
	PUBLISH ALL - Run checks and publish all valid data
	RETRY ERRORS - Retry publishing data currently marked with an error status
	PUBLISH ERRORS - Run checks and publish data currently marked with an error status
	PUBLISH DEPENDENCIES - Run checks and publish data currently marked with a dependency status
	PURGE UNPUBLISHED - Remove the data identified for publishing that have never been published
	INITIATE RECONCILIATION - Download current ODS data to facilitate reconciliation

[Review]

Three kinds of Ed-Fi data publishing

↓ Initial data push

- ← May take some extra efforts to get a clean publish at the start of the year (and PowerSchool may need to help)
- ← Medium level of effort

↓ Publishing throughout the year (regular maintenance)

- ← Publish after each State Reporting update
- ← Lowest level of effort

↓ Investigating and resolving data quality issues

- ← Requires more in-depth understanding of PowerSchool fields and what the dashboard is suggesting
- ← Highest level of effort



Ed-Fi Resources

↴ Ed-Fi in South Carolina page

<https://ed.sc.gov/data/information-systems/interoperability-resources/ed-fi-in-south-carolina/>



The screenshot shows the website for Ed-Fi in South Carolina. The browser address bar displays the URL: ed.sc.gov/data/information-systems/interoperability-resources/ed-fi-in-south-carolina/. The website header includes navigation links: Home | About | Data & Reports | State Board & Policy | Newsroom | Contact, and a "Select" dropdown menu. The main content area features the South Carolina Department of Education logo and the text "SOUTH CAROLINA DEPARTMENT OF EDUCATION ed.sc.gov". To the right of the logo are two icons: a yellow circle with a white house icon labeled "Districts & Schools" and a green circle with a white person icon labeled "Educators". Below the logo is a breadcrumb trail: Home / Data / Information Systems / Interoperability Resources / Ed-Fi In South Carolina. The main heading is "Ed-Fi In South Carolina". The text below the heading reads: "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." Below this text, it states: "In South Carolina, Ed-Fi data is published to an Ed-Fi REST API, landing in a district-level Operational Data Stores (ODS). Data required for state reporting then publish to a state-level API and ODS. The Ed-Fi ODS serves as a..."

Processes and Procedures

- What do you do every single week?
- What processes are kicked off and what should you monitor (D&Es)?
- How often should I publish my data?
- What to do when you have a D/E you can't resolve?
- When can I cry?



Two Kinds of Errors (for this workshop)



Whose bucket?

- ↳ PowerSchool
- ↳ SCDE
- ↳ EA
- ↳ District



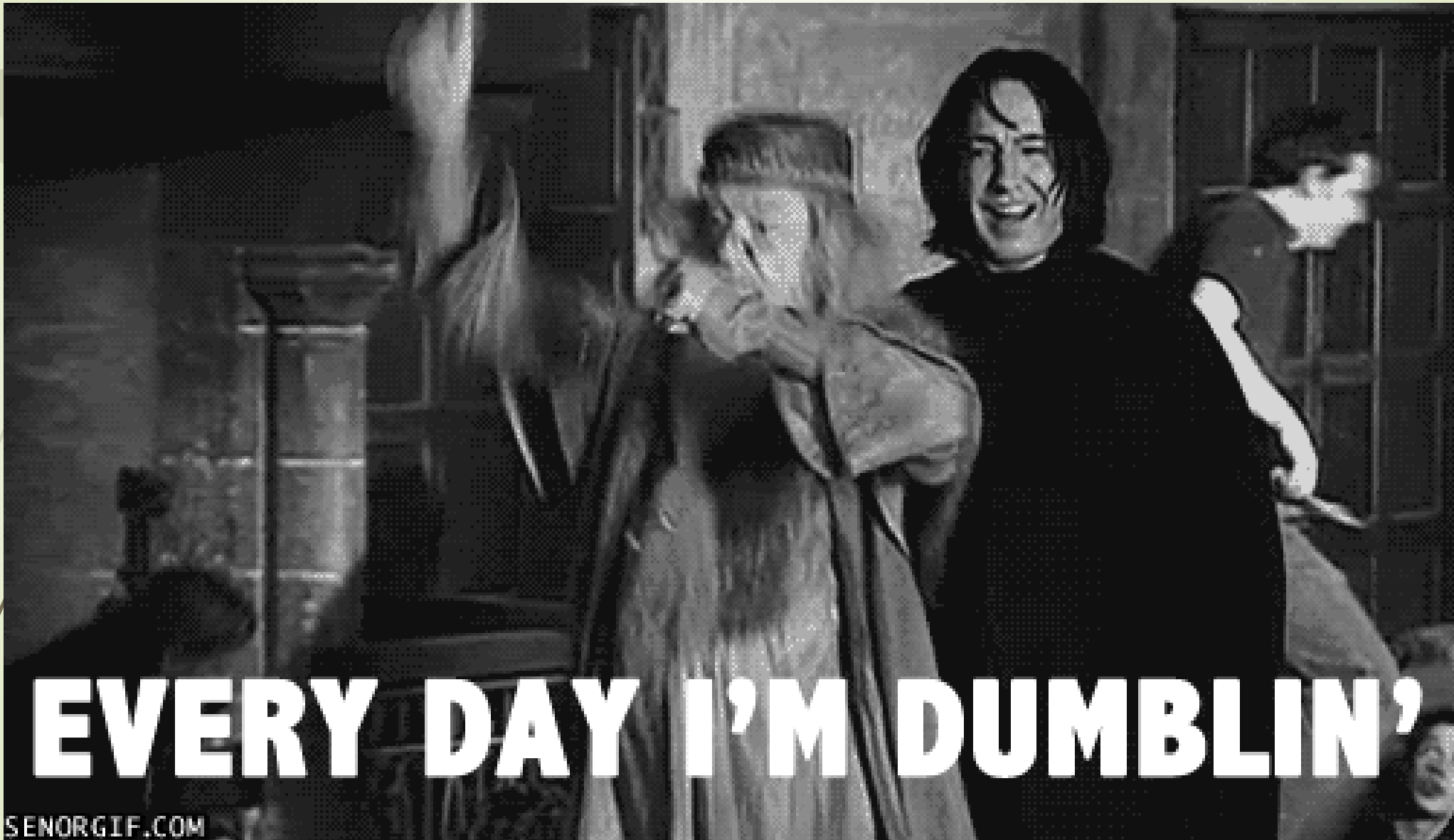
Two Kinds of Errors

- ↴ Level 1 Errors - YOUR bucket!
 - ↵ Data cannot land in the ODS (red button)
 - ↵ Remember that you have resources to help!
- ↴ Level 2 Errors - Also YOUR bucket!
 - ↵ Data land in the ODS but quality is still bad
 - ↵ Example: $96=9$



Error Tips and Tricks





EVERY DAY I'M DUMBLIN'

SENORGIF.COM

Where do we go from here?



Publishing Tips

Start Page > Data Exchange > EdFi_9998_2023 District Office ▾ 22-23 Year ▾

EdFi_9998_2023

Refresh ▾

Download Data Downloading Errors Exceptions Downloaded Last Activity **Run All**

Details Descriptors

Parameter Selection

Parameter

Data Publishing Option

- PUBLISH CHANGES - Run checks and publish any valid added or changed data
- PUBLISH CHANGES - Run checks and publish any valid added or changed data
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- RETRY ERRORS - Retry publishing data currently marked with an error status
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- PURGE UNPUBLISHED - Remove the data identified for publishing that have never been published
- INITIATE RECONCILIATION - Download current ODS data to facilitate reconciliation

Category	Count	Errors	Exceptions	Downloaded	Last Activity	Action		
Organizational	0	898	0	Errors 828	0 / 0	42334	hours ago	Run Now
Calendar	0	197	0	Errors 3389	0 / 0	47184	8 days ago	Run Now
Organizational	0	7091	0	Errors 203	0 / 0	94462	8 days ago	Run Now

Tip: Initiate a data push for a category by clicking its "Run Now" button. Then, select "PUBLISH ALL" as the Parameter.

Publishing Tips

- Publish data for the relevant categories, ONE AT A TIME (**do NOT click the “Run All” button**) by clicking the “Run Now” button and selecting the “PUBLISH ALL” parameter.
- Wait for the first category to complete before moving to the next category.
- When the “Publishing” column returns to “0” and the number in the “Published” column stops incrementing, you are ready to click the “Run Now” button for the next category.



Error-Resolution Tips

- ↴ LEVEL DATA LEVEL DATA LEVEL DATA
- ↴ See the Ed-Fi Known Errors and Dependencies via the [SCDE Ed-Fi page](#).
- ↴ Look at an individual student or staff member's publishing.
- ↴ Compare what published to what didn't.