



Florida Association of Management Information Systems (FAMIS)

Summer Database Conference June 2025



Assessing Data Quality Using DQ2

Presented by: Dana Causey

Agenda

- Introduction
- Housekeeping
- Communication
- Process Overview
- Data Quality
- Statistics
- Contact Us
- Questions



Introduction



Session Audience:

This session is intended to introduce attendees to the Data Quality 2 (DQ2) application and processing. This is a great opportunity for new users to review basic and introductory topics related to the DQ2 process. The session can also serve as a refresher course to existing DQ2 users. We will not discuss advanced topics in this session. Join us in the DQ2 advanced session to see a live demo and discuss enhancements changes, complex scenarios and upcoming implementation.



General Session Information:

The DQ2 system is a state reporting processing tool that allows school districts to submit survey data to the Florida Department of Education (FDOE) electronically via user-friendly technology in a web-based environment. Today we will dive into daily processing, helpful tips, terminology, statistics, scenarios and data quality.



Presentation Questions:

We ask that questions are held until the end of the session. We can clarify content covered during the session but will reserve questions until the end of the presentation to ensure that we are able to cover all the content. We will also be available to take additional questions in the FDOE lab room.

Housekeeping



❖ FAMIS Sessions

- There is an advanced session.
- Handouts are available online.
- Meet us at the FDOE Lab.
 - FDOE Lab appointment times.
 - Help us pick the new DQ2 requestable reports for students.



❖ Presentation Parameters

We can assist with the following:

- DQ2 File Submissions
- DQ2 Student Piloting
- DQ2 Staff Processing
- DQ2 Edits/Validations
- DQ2 Resources/Training



❖ FAMIS Survey Feedback

- Provide helpful/constructive feedback.
- Provide the presenter's name in the feedback.
- We would like to hear from all presentation attendees.



❖ Contact List Updates

- Reminder: send contact updates to DQ2Project@fldoe.org.
- The current contact lists are available in the FDOE lab room to validate your contact information.

Introductory Cheat Sheet

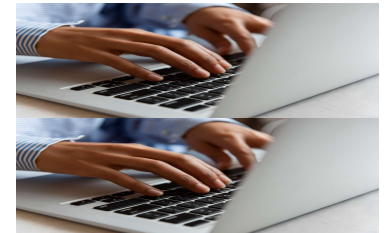
DQ2 is utilized by local district public schools (PK12) and Workforce Development Information Systems (WDIS) staff to process student and staff information.

Preflight

- The DQ2 Preflight system is used to check data quality in advance of production survey file processing. Data residing in Preflight is **not** used by FDOE in official reporting.
- DQ2 Preflight is generally available one month before the official survey state processing window opens and it remains open throughout the school year.

Production

- PK12 staff and WDIS data is processed in production.
- PK12 student data is currently being reported on the mainframe.
- Production data is used by FDOE for data quality and reporting.
- Transitioning to DQ2 student data processing in production is actively in progress.
- DQ2 production is open on the first day of the official survey state processing window and closes at 11:59:59 pm (Eastern Time) on the final update/amendment date.



Family Educational Rights and Privacy Act

Family Educational Rights and Privacy Act (FERPA)

- According to Section 501.171, Florida Statutes (F.S.), “username or email address with password and/or security question/answer” is considered Personally Identifiable Information (PII), even if it is not paired with an individual’s first name (or first initial) and last name.
- Examples of PII: An individual’s first name (or first initial) and last name in combination with any one or more of the following:
 - Identification card number
 - Passport number
 - Military identification
 - Health insurance policy number and other identifier
 - Security code
 - Social Security number (SSN)
 - Date of Birth (DOB)
 - Credit card number
 - Medical history record
 - Debit card number
 - Driver’s license number
- **Do not email screenshots containing PII data.**



Communication

- Ensure e-mails are sent to DQ2project@fldoe.org.
- Refrain from sending direct emails to agents.
- The appropriate agent will respond and follow-up.
- Do not send or share PII in emails or phone calls.
- We will request additional information as needed.
- Allow 1-3 business days for request follow-up.

IENHELP@fldoe.org

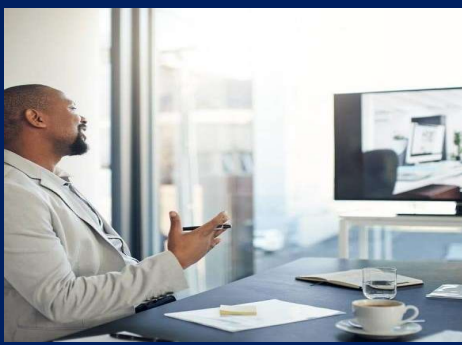
- For questions regarding Single Sign-On (SSO)/TIBCO®.

ASKEIAS@fldoe.org

- For PK12 survey questions contact the Education Information Services (EIS) team.

WEDSTeam@fldoe.org

- For WDIS survey questions contact the Workforce Education Data Systems (WEDS) team.





DQ2 Processing

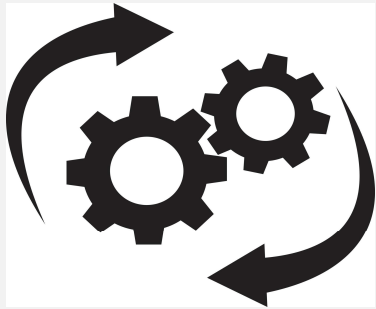


LET'S WALK THROUGH THE
PROCESS

DQ2 Terminology

PROCESSING	TIBCO® Transfers	NWRDC	SFTP	Reject Edits	Batch Records	FERPA
DATA QUALITY	UI	D-Files	Gateway	Preflight	Production	SSO
EDITS/REJECTS	Error Reports	Validations	Exceptions	Reports Menu	Search Screen	Delete Requests

Processing Overview



- **File Processing**
- TIBCO® IN/OUT Folder
- File Naming Conventions
- Error Reports
- Validations/Exceptions
- D-Files



- **Accessing DQ2**
- User Interface (UI)
- Dashboards
- Survey Submission Files
- Reports
- System Screens



DQ2 Technologies & Processing



<https://xfiles.fldoe.org>



File Submissions

TIBCO® - FDOE's Secure File Transfer Protocol (SFTP) server.

DQ2 checks TIBCO® every 5 mins for input files.

Input from Districts:

DQ2\IN

Output to Districts:

DQ2\OUT



Data Loading

1) Data is loaded, file naming conventions are checked and format information is validated prior to loading.



Master Data Management



DQ2 Edits

File Validations/Edits **[OLD]**

- Rejects
- Validations
- Exceptions



Microsoft®
SQL Server™



DQ2 Edits

File Validations/Edits **[NEW]**

- Rejects
- Validations
- Exceptions



ASP.NET

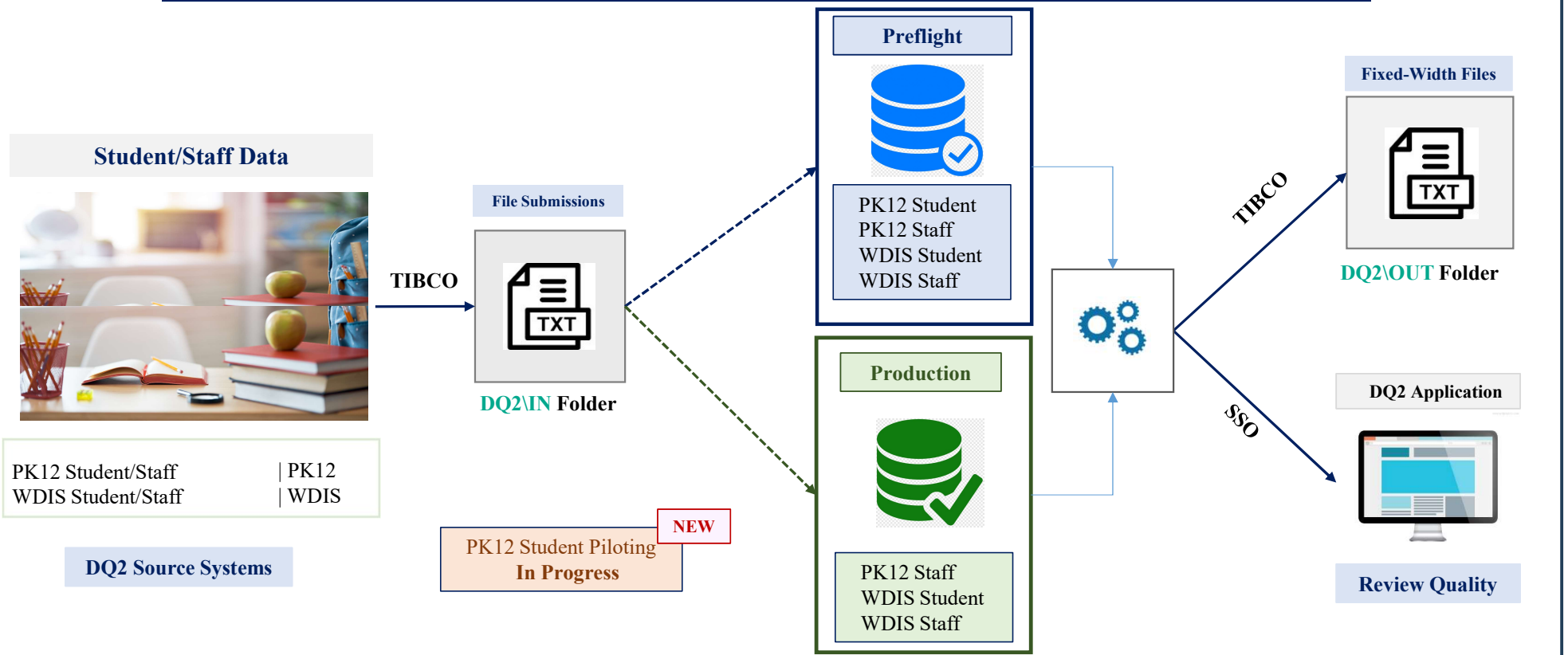


DQ2 Application

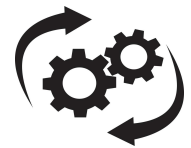
DQ2 Application

Users can view resources, processing statistics and reports.

DQ2 Processing Overview



File Processing



File Submission & Reject Edits

- Districts send predefined formatted data files.
- Files are processed in the order they are received.
- When files are uploaded, edits for the formats submitted will be validated against the data for each record received.
- All records that fail one or more reject edits will not be accepted into the database as an add, change or delete.
- When applicable, districts must review the “Batch Records In Error” report, correct the records containing reject edit errors by fixing data in their local system and then send an updated file.
- To delete or correct records or a file, a file with the Transaction code “D” or “C” can be submitted to DQ2.

File Naming Conventions: (dd = district number | yyyy = year | s = survey)

Districts must follow the correct naming convention (shown below) and the file must have a .txt extension.

▪ DPSdd.GQ.Fxxxx.Yyyyys.txt	[Student]	Fxxxx = File ID number (Student)
▪ DPSdd.GU.Fxxxx.Yyyyys.txt	[Staff]	Fxxxx = File ID number (Staff)
▪ DPSdd.JU.Fxxxx.Yyyyys.txt	[WDIS]	Fxxxx = File ID number (WDIS)

Reports

Batch Records in Error

The **Batch Records in Error** reports are generated after files submitted to DQ2 are successfully processed. The results can be reviewed in the DQ2 UI and in the district's DQ2-OUT folder in TIBCO® the next morning. Reports are generated overnight.

- DPSdd.GQ.Fxxxx.Yyyys.YmddHHmmssfff.txt
- DPSdd.GU.Fxxxx.Yyyys.YmddHHmmssfff.txt
- DPSdd.JU.Fxxxx.Yyyys.YmddHHmmssfff.txt

Validations/Exceptions

The **Validation and Exception** reports are generated after the district requests the reports and the reports are processed. The results can be reviewed in the DQ2 UI and in the district's DQ2-OUT folder in TIBCO® on the same day as the report was requested. Reports are generated on the same day.

- DPSdd.JU.Fxxxx.Yyyys_ValidationReportOutputFile.txt
- DPSdd.GU.Fxxxx.Yyyys_ValidationReportOutputFile.txt
- DPSdd.GQ.Fxxxx.Yyyys_ValidationReportOutputFile.txt

.YYYYmmdd.HHmss - The date/timestamp information in **red** will be at the end of each file.

NOTE: dd = District number | Fxxxxx = Batch File ID Number | yyyy = Year | s = Survey
YYYYmmdd(.)HHmss(fff) = Date/Timestamp | GQ = Student | GU = Staff | JU = WDIS

Validations/Exceptions

Once the district has corrected all reject edit errors, the district requests validation and exception reports:



Validations - State validations are written to check relationships between different records of the same reporting format or records of different reporting formats and are performed after the records have been loaded to the database. It is essential that these errors be corrected before the window closes.



Exceptions - The exception reports show records with data that look suspicious. That is, the records do not reflect what is expected. However, because of exceptions to the general rule, the records may not be in error.



- Validation errors **must be corrected**.
- Exception errors **must be investigated** further to determine if a correction is necessary.
- Report requests will be put in a queue and be processed in the order they are received.
- The district retrieves and reviews reports.
- If necessary, the district corrects errors by fixing data in their local system and sending new submission files.

D-Files

Once the district has corrected the validation and exception errors, the district can request D-Files:

- D-Files are a dump of clean data that has been loaded into the database.
- Clean data means the records did not have any reject errors.
- D-Files are identical to the layout of the format files the district sent to FDOE.
- D-Files for Student and Staff are generated the day after the district requests the file.
- D-Files for WDIS are generated the same day that the district requests the file.
- The files will be found in the district's DQ2\OUT folder.

Example D-File Names:

- DPSdd.JU.FxxxxxD.Yyyys.txt.YYYYmmdd.HHmmss
- DPSdd.GU.FxxxxxD.Yyyys.txt.YYYYmmdd.HHmmss
- DPSdd.GQ.FxxxxxD.Yyyys.txt.YYYYmmdd.HHmmss





DQ2 Application



LET'S TAKE A TOUR OF THE
SYSTEM AND SCREENS

Accessing DQ2

The DQ2 application is accessible via FDOE's Single Sign-On (SSO), www.fldoe.org/sso.



Contact your district's SSO Administrator to obtain access to DQ2 and they will determine your user roles.

Role Name	All /Internal FDOE/ External District	Description
User	All	The User role is required for all users to access DQ2 User Interface (UI)
DOE	Internal FDOE	DOE users access Admin reports and view clean survey data for Student, Staff and WDIS districts
Admin	Internal FDOE	Admin users can access all districts and schools survey data for Student, Staff and WDIS
K12	External District	The K12 role must be assigned along with both the Student and Staff role
Student	External District	Student users can access Student survey data for their district in Preflight
Staff	External District	Staff users can access Staff survey data for their district in both Preflight and Production
WDIS	External District	WDIS users can access WDIS survey data for their district in both Preflight and Production
Deletefile	External District	Delete users can delete survey data/ reports in both Preflight and Production
Schooluser	External District	School users can view survey data for their assigned school

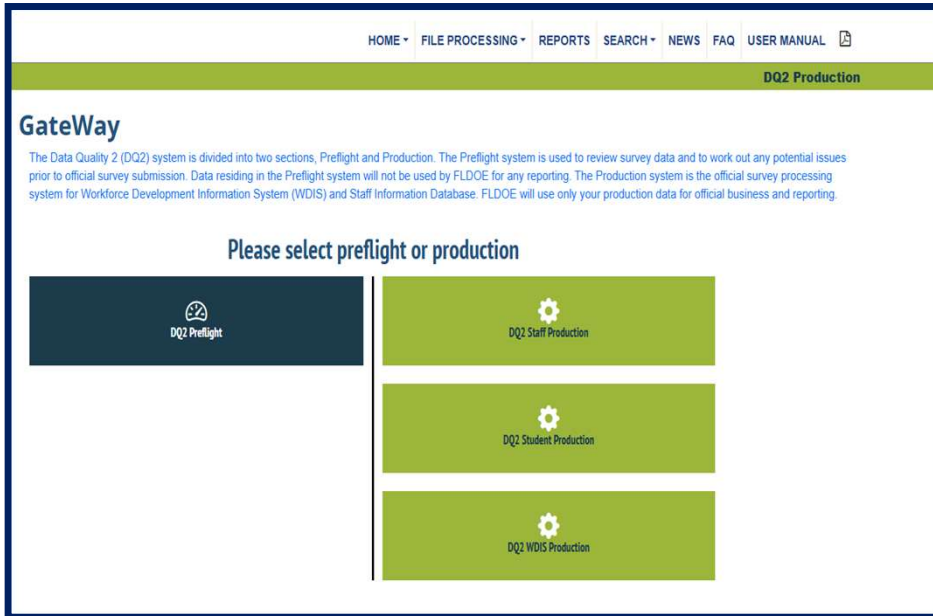
Once authorized by the district SSO Administrator, users can access the DQ2 UI by logging into the SSO portal.

- Select the “EDUCATORS” tile as shown above.
- Users can then select the “DQ2” tile.
- Users can also access the UI directly at <https://dq2.fldoe.org/>.

Gateway & Dashboard

To view files submitted through TIBCO®:

- 1) Click the **blue** tile to see the Preflight files.
- 2) Click the **green** tile(s) to see the Production files.



The screenshot shows the Gateway interface with a navigation bar at the top containing links: HOME, FILE PROCESSING, REPORTS, SEARCH, NEWS, FAQ, and USER MANUAL. Below the navigation bar is a green header labeled "DQ2 Production". The main content area is titled "GateWay" and includes a description: "The Data Quality 2 (DQ2) system is divided into two sections, Preflight and Production. The Preflight system is used to review survey data and to work out any potential issues prior to official survey submission. Data residing in the Preflight system will not be used by FLDOE for any reporting. The Production system is the official survey processing system for Workforce Development Information System (WDIS) and Staff Information Database. FLDOE will use only your production data for official business and reporting." Below this description is a prompt: "Please select preflight or production". There are four tiles: a blue tile labeled "DQ2 Preflight" and three green tiles labeled "DQ2 Staff Production", "DQ2 Student Production", and "DQ2 WDIS Production".

Source specific dashboards (PK12 & WDIS):

The dashboards display differently depending on whether you are in Preflight or Production.



Survey Submission files are accessed through the “File Processing” menu.

[HOME](#) [FILE PROCESSING](#) [REPORTS](#) [NEWS](#) [FAQ](#) [USER MANUAL](#) 

DQ2 Preflight

Survey Submissions

School Year:
2024-2025

Survey Type:
--Select All--
Student
Staff
WDIS

Survey:
--Select All--
Survey 1
Survey 2
Survey 3
Survey 4

SUBMIT

Survey Year	Type	Survey
2024-2025	Student	1

- Select the Survey Year to access detailed information about the file formats processed for that year.
- Narrow down the search by specifying the survey criteria (ex. survey type and survey).
- If no files are listed under the blue bar:
 - a) no files have been submitted, or
 - b) the submitted files encountered a processing issue (ex. inaccurate file names).

District users can review reject records and error codes by file format.

 Gateway

[HOME](#) | [FILE PROCESSING ▾](#) | [REPORTS](#) | [NEWS](#) | [FAQ](#) | [USER MANUAL](#) 

DQ2 Preflight

Student Uploaded Files ?

Filter by Format

--Select All Format--
▾

Year : 2024-2025
Survey: 1

 DELETE

Format	Total Records	Records Clean	Records Rejected	Upload Date	Status	Reports
Student Demographic Information (F60775)	100	100	0	07-10-2024 02:03:58 PM	Processed	≡
Student Transportation (F70496)	100	100	0	07-10-2024 12:18:57 PM	Processed	≡
Exceptional Student (F61096)	100	2	98	07-10-2024 12:18:38 PM	Processed	≡
Teacher Course (F60777)	100	23	77	07-10-2024 11:50:37 AM	Processed	≡

All error codes, associated descriptions and counts for each error can be viewed on this screen.

Batch Records in Error ?

Teacher Course

Selected School:
Select all

DUPLICATE REPORT

BACK TO UPLOADED FILES

Batch Records in Error Details i Save to Excel

rownum	ErrorCode	DistrictInstruction	SchoolInstruction	Survey	YearFiscal	Course	Section	Period	FacilityType	DaysInTerm	TIIFundSource	File
1	14,15		6653	1	2425	5012070	00520	0707	19	090	Z	

Batch Records in Error Description i Save to Excel

EditCode	ERROR_DESCRIPTION
14	If Survey Period Code is 1-4, the Term/Survey Indicator must be Y or N.
15	If Survey Period Code is 1-4 and Term is 3, the Term/Survey Indicator must be Y.

District Error Count i

EditCode	Count
14	77
15	46

BACK TO UPLOADED FILES

The Duplicate Report allows users to view the duplicate records within the file and the outcome.

Duplicate Report ?

Student Transportation

Selected School:

Select all

BACK TO BATCH RECORDS IN ERROR

Duplicate Report Details i Save to Excel

BusNumber	BusRouteNumber	TransactionCode	DistrictEnrollment	HazardousWalking	Filler	StudentIDLocal	FLEID	Filler	Filler	Duplicate Description
113	.A03	A								Duplicate

Duplicate Report Error Details i Save to Excel

EditCode	ERROR_DESCRIPTION
13	Each Student Transportation record must be unique based on District Number, Current Instruction/Service; Florida Education Identifier; Survey Period Code, Fiscal Year and Year-Round/Extended School Year FTE Indicator.

District Error Count

Total Accepted	Total Duplicate
0	1

The “Reports” menu shows the reports available in the application.

[HOME](#)
[FILE PROCESSING ▾](#)
[REPORTS](#)
[NEWS](#)
[FAQ](#)
[USER MANUAL](#)


DQ2 Preflight

REPORTS 

	Report Name	Description
	D - FILES	THIS IS A BATCH REPORT OF ALL CLEAN DATA BY FORMAT
	EDIT STATUS	THIS REPORT LISTS ALL ACTIVITIES PERFORMED BY THE DISTRICT
	K12 ERROR CODE REPORT	THIS REPORT LISTS K12 ERROR CODE AND DESCRIPTION
	VALIDATION / EXCEPTION	THIS REPORT LISTS ALL VALIDATIONS / EXCEPTIONS FOR THE SELECTED FORMAT



Validation/Exception Reports

Report shows the validations and exceptions for each database format selected.



[HOME](#)
[FILE PROCESSING](#)
[REPORTS](#)
[SEARCH](#)
[NEWS](#)
[FAQ](#)
[USER MANUAL](#)


DQ2 Production

Validation / Exception Report

School Year:

2024-2025

Survey Type:

Student

Survey:

Survey 2

SUBMIT

	Format	Report Format	Report Number	Requested Date	Completed Date	Processed	Records Failed	Report	Status
☐	Student Demographic Information	Validation Report	F62584	2024-10-04 15:03:10	2024-10-04 15:03:20	0	0	≡	Ready
☐	Student Demographic Information	Exception Report	F62584	2024-10-04 15:03:10	2024-10-04 15:03:41	0	0	≡	Ready

Survey Data Report

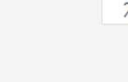
Report shows the count of clean rows in the database for each format based on the selected year and survey.

Year

Survey Type

Survey

⏪ < 1 of 1 > ⏩
↺ ↻
100% ▾
💾 ▾
🖨
 Find | Next



FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Survey Data Report -2425

3/19/2025 1:30:51 PM

DISTRICT	Survey 2						
	Addti Job	Benefit	Demo	Exp	Multi Dist	Payroll	Addti Comp
	25	100	100	58	101	100	100

D-File Reports & Requests

Gateway

[HOME](#) • [FILE PROCESSING](#) • [REPORTS](#) • [SEARCH](#) • [NEWS](#) • [FAQ](#) • [USER MANUAL](#)

DQ2 Production

Generate "D" Files

District:

Survey:

School Year:

Survey Type:

Filter by Format:

- ☐ Teacher Course
- ☐ Student Demographic Information
- ☐ Student Transportation
- ☐ Student Course Schedule
- ☐ Exceptional Student

Year : 2425
Survey: 1

	Report Format	Request Status	Requested Date	Completed Date
☐	Student Demographic Information	Ready	2024-07-11 07:04:10	2024-07-11 07:04:35
☐	Student Course Schedule	Ready	2024-07-11 07:04:10	2024-07-11 07:04:42
☐	Teacher Course	Ready	2024-07-11 07:04:10	2024-07-11 07:04:49
☐	Exceptional Student	Ready	2024-07-11 07:04:10	2024-07-11 07:04:57
☐	Student Transportation	Ready	2024-07-11 07:04:10	2024-07-11 07:05:04

Report shows all clean data by format.

The Search Screen allows users to search for a person and view their clean records for all formats.

Staff Search Screen

Last Name: First Name:
 SSN: Staff ID, Local:
 Fiscal Year: Survey:
 District No: School No:
 SUBMIT

Click on the name link to view detailed survey data for the selected staff member.

District Number	School Number	Name	Social Security Number	Survey Period Code	Fiscal Year	Florida Education Identifier	Staff Number Identifier Local
	0125	DOE JOHN	XXX-XX	2	2425	FL000000001234	0000001234

Staff Demographic Information

Staff Format
 Demographic Information
 Additional Compensation
 Additional Job Assignments
 Benefits
 Experience
 MultiDistrict Employee
 Payroll Information

District: Year: 2425 Survey: 2 School:
 First Name: JOHN Last Name: DOE Staff Number Identifier: 000001234

Staff Information
 Social Security Number: XXX- Florida Education Identifier: FL000000001234
 First Name: JOHN Middle Name: Last Name: DOE
 Ethnicity: N Race: W Sex: F Birth Date:
 Staff Mailing Address:
 City: State: Zip:

Searching

1. To search for a person's information, populate the required fields then click the SUBMIT button.
2. A grid will be populated containing search results.
3. Click on the desired person's name to be routed to the Demographic tab.
4. From the Demographic Information screen, users have the option of viewing clean data for the other formats by clicking on the format name link.

Delete Files



District:
 School Year: 2024-2025
 Survey Type: --Select All--
 Student
 Staff
 WDIS
 Survey: Survey 2
 SUBMIT

☐ Select All

	Format	FileCount	Request Status	Requested Date
☐	Federal/State Indicator Status	1		
☐	Student Course Schedule	1		

DELETE REQUEST

Delete Files History

Filter by Format:

--Select Format--

Requester	RequesterEmail	FormatName	Status	Requested	Completed
Kilisha Peterson	Kilisha.Peterson@fldoe.org	Federal/State Indicator Status	Completed	2024-09-05 07:12:52	2024-09-05 07:13:03

DELETE REQUEST

Delete Requests

IMPORTANT: Performing a DELETE of a format in DQ2 removes all data, reports and any references to the data having ever existed. The username of the person who deleted it and what they deleted will go in the Edit Status report.

The option to delete a file format can be found under the “File Processing” menu item. Click on Survey Deletion, then select the criteria and click SUBMIT.

A historical list of delete requests for the selected year and survey for all formats sorted by Requested Date is displayed at the bottom of the screen.

Note: If a red X appears in the check box or the Request button is not available, this means the user does not have the authority.

Helpful Information

GATEWAY

CONTACT DOE

NEWS

FAQ

USER MANUAL



Dana Causey (Administrator) ▾



| Gateway |

DQ2 Preflight / DQ2 Production

DQ2 Application Access Reminders:

- Adding or removing users must be done via your local SSO administrator.
- As users leave the district, it is your responsibility to request removal of those users.
- Complete user access reviews annually to ensure user access is up to date for your district.
- To locate your local SSO administrator, contact your district Help Desk or search using the SSO Support page.

DQ2 Resource Links

- DQ2 News: The screen informs users which surveys are available in Preflight and Production.
- DQ2 FAQ's: The screen provides responses to frequently asked questions (FAQ).
- DQ2 Manual: The manual captures the introductory information reviewed throughout this session.

DQ2 Quiz Time

PROCESSING	TIBCO® Transfers	NWRDC	SFTP	Reject Edits	Batch Records	FERPA
DATA QUALITY	UI	D-Files	Gateway	Preflight	Production	SSO
EDITS/REJECTS	Error Reports	Validations	Exceptions	Reports Menu	Search Screen	Delete Requests



Contact Us

DQ2 Team
DQ2Project@fldoe.org

Division of Technology & Innovation



FDOE Lab Sessions

Please come meet us in the FDOE Lab Sessions!

We are available to answer questions and provide assistance.





www.FLDOE.org