

# **MISD Handbook: Hot Topics and Where to Start**

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## **Data Ownership and Storage**

When establishing an information services department, there are three fundamental questions to consider: Where is the data stored? How is institutional knowledge being documented? And where is the source code being recorded? These three aspects should be addressed before delving into full-time equivalent (FTE) and survey data.

First, determine the location of the data and identify its respective business owner. Depending on the system in place, there may be separate systems for storing different types of data. For instance, student data might be stored separately from staff data, while multiple systems could be employed to hold professional development data, years of experience data, and evaluation data for the staff. It is important to map out the data sources and understand who inputs the data and where it goes. While some data may be stored in a central data warehouse, not all crucial data elements are consolidated in a single repository. It is necessary to consider who has access to the data across different platforms and evaluate the stability of the platform housing the information. If the data is held by a vendor or stored in the cloud, potential risks of data compromise should be assessed.

Secondly, it is imperative to address the institutional knowledge concerning the data and how it is documented. This encompasses capturing knowledge related to retirements and personnel movements within the school district. Each data source within the information services department should be thoroughly documented, including the data owner, ongoing projects, enhancements, and the responsible individuals for each aspect. Documenting the institutional knowledge about the business owners of data sources, data usage, and data priorities within the district serves as the foundation for establishing an information repository to navigate personnel changes effectively. Without comprehensive documentation on how IS systems, platforms, and warehouses are managed, the departure of a key individual can lead to difficulties in understanding and operating the system or reporting accurately.

Thirdly, there should be a designated repository for source code documentation to accommodate personnel changes. Centralizing the source code allows multiple individuals to access, review, and maintain it, facilitating a smooth transition or retirement process. When

source codes are dispersed across various locations within a department, maintaining a consistent flow of data for stakeholders becomes challenging during personnel transitions.

Similarly, documenting the queries used, their storage locations, the platforms they are designed for, and the methods by which they are written is crucial. This documentation aids in understanding the data sources and provides valuable insights into the data being utilized. It is also essential to note which department requested a particular query and its frequency of usage—whether it is a one-time, annual, monthly, or daily occurrence.

### **Establishing Data Monitoring and Usage Systems**

Setting up effective systems for monitoring and housing data is crucial for both cyber safety and data stability. If such systems are not already in place within a Management Information Systems (MIS) department, working towards their implementation can significantly assist in monitoring and utilizing the data stored in different warehouses while also facilitating problem-solving and project management.

Project management serves as a valuable framework for handling information and projects, providing updates, and incorporating feedback loops. It can be employed to track data usage, generate reports, and manage various projects.

To initiate this process, creating an ongoing and updated list of business owners responsible for processes and data is a fundamental starting point. This list should encompass individuals at the district level who hold accountability for key data points, including survey data and any other essential information necessary for maintenance and reporting.

Additionally, a data management calendar should be established to ensure that all business owners are aware of crucial reporting deadlines for the data. Regular meetings—weekly, bi-weekly, or monthly—can be conducted to discuss the business owners, the calendar, and any other concerns or issues related to the data, warehouses, data integration, or the calendar itself. It is important to involve not only the curriculum department but also all other departments with data business owners.

Implementing a change management group consisting of members from multiple departments can further enhance data monitoring and reporting, particularly when it comes to changes made to the data, data warehouses, and data reporting. The change management process provides an additional layer of security, as any modifications require approval from designated individuals. The change management committee should comprise administrators, programmers, data analysts, project managers, and other relevant members of the technology teams. This committee will oversee change requests and updates to platforms, ensuring appropriate approval and monitoring.

These systems introduce structure and processes to determine data ownership, identify when new data elements are added, and manage necessary changes. By implementing these measures, the organization can foster a well-organized and accountable approach to data management and utilization throughout the district.

### **Troubleshoot Issues from the Start**

When starting a new position in the Information Services (IS) department, it is crucial to gain a comprehensive understanding not only of the district's chosen information services platform but also any existing issues affecting the platform or data warehouse. It is important to identify any outstanding issues that other departments have encountered with the platforms responsible for delivering data. This can be done by exploring existing ticketing systems or other channels through which departments share technology-related problems that require resolution or address issues with data or platform integration.

Understanding the integrations running between platforms and how they function is another vital aspect. Some integrations may not utilize systems like Clever or One Roster, and there might be overrides within these systems depending on the integration process. If there is no existing documentation or record of the integration process, it is advisable to start there when troubleshooting integration issues. Establishing systems and procedures for departments to follow when integrating platforms and providing them with specifications, security information, and vendor expectations should be a shared practice across all departments requiring platform integration.

Often, there can be bugs, fixes, process changes, updates, and enhancements on platforms. When dealing with reported issues or requests from other departments, it is essential to discern the differences between an issue that needs to be resolved within the platform, an update to the platform, and an enhancement on the vendor's end. Departments may not be familiar with or understand the distinctions among these types of requests.

### **Managing Data Warehouses and Ensuring Data Integrity**

Data warehouses in school districts come in various types and versions. There are vendor-based data warehouses that store both student-level and teacher-level data. Some districts have built their own warehouses, incorporating tables fed by multiple vendors.

Additionally, there are Enterprise Resource Planning (ERP) systems and Information Systems (IS) with teacher-level and student-level data specifically for survey information.

It is crucial to actively monitor, load, and document the information within the data warehouse, especially in light of leadership changes due to retirements or personnel turnover. The usage of the warehouse, as well as the configuration of reports within the warehouse, also need to be monitored and documented. Comprehensive documentation should cover the data sources feeding into the warehouse and the individuals responsible for maintaining it. It is important to assess the stability of the warehouse and determine who has access to it, particularly in relation to the platforms that rely on the warehouse for data retrieval.

### **Student Level Data**

When discussing student-level data, we must prioritize the survey data that is submitted to the state, as it plays a crucial role in various funding determinations. This data, typically transmitted from the Information Systems (IS) system, encompasses demographic information necessary for different funding sources. Monitoring and overseeing this information requires collaboration between the IS department and the finance team, as both parties need to understand Full-Time Equivalent (FTE) funding and ensure accurate student enrollment data. Specific administrators involved in unique funding sources, such as dual enrollment, virtual programs, exceptional student education (ESE), and English language learner (ELL) programs, should actively participate in the monitoring process for survey-level data. These individuals play a vital role in ensuring compliance and accuracy in funding allocations related to their respective programs.

### **Staff Level Data**

Staff-level data encompasses various sources within a school district, including payroll, healthcare, HR data, teacher evaluations, professional development, and retirement data. Monitoring the ERP system that houses this data is crucial to ensure accuracy and reliability.

One key area of focus is payroll. Regular monitoring and review of payroll cycles are necessary. Data points such as payroll, teacher attendance, and teacher absences are monitored at the local school level. Accurate reporting in these areas is essential to avoiding potential funding losses for school districts. Establishing robust systems for monitoring payroll helps identify and rectify errors promptly. It is vital to ensure that payroll is maintained regularly so that staff members who have quit or retired are promptly removed from the payroll, and any overtime payments are accurate. Timely and accurate recording of staff absences across different platforms is also important for precise payroll processing.

Professional development, teacher evaluation, and teacher certification data are additional staff-level data points that impact teacher placement, renewal, and pay. Although these data points may reside within the same platform or system, they may be distributed across different vendor platforms, making it challenging to maintain accuracy in staff survey data files. Depending on the platform and integrations, monitoring these data points for accuracy can be time-consuming.

The ERP system storing staff data must be overseen to maintain accuracy and facilitate seamless movement to the appropriate locations. It is beneficial to map out the ERP data for different users, allowing them to effectively access and organize the data.

### **School Level Data**

In Florida, the MSID file serves as the foundation for school-level data. Assigned by the state and following a specific form from the FL DOE, the MSID file plays a vital role in various aspects, including food service, the FISH file, student enrollment data, payroll, HR files, and accountability files. Ensuring accurate completion and ongoing monitoring of the MSID file requires collaboration among multiple departments. The business owner of the MSID file, even if not the MIS department, must establish effective communication channels with the MIS department. This ensures that all relevant departments have access to the necessary information for their respective areas, such as technology infrastructure, student information, food services, facilities, and safety and security. Mapping out the departments that require MSID information helps guarantee comprehensive coverage and an understanding of its utilization throughout the district. To maintain consistency and accuracy, it is crucial to establish an agreed-upon MSID application process that involves all relevant departments. Regular updates to the MSID file should be made annually, ensuring the data remains up to date.

### **Monitoring the Warehouse and Data**

The MIS administrator plays a crucial role in overseeing access to the data warehouse, data usage, reporting activities, and data stability. Monitoring these aspects is essential to ensuring the integrity and reliability of the data.

One key responsibility is monitoring and controlling access to the data warehouse. This includes tracking who has access to the warehouse and the queries and reports being generated from it. Additionally, visualization tools connected to the data should be regularly monitored to ensure they function properly. An effective system should be in place to manage updates to the data warehouse and integrations that rely on its data. This helps maintain the accuracy and relevance of stored and utilized information.

To facilitate efficient monitoring, it is beneficial to maintain a centralized database or repository that includes comprehensive information about reports. This should include details such as the purpose of the report, the department that requested it, and the frequency of updates, if applicable. Additionally, it is essential to ensure the stability of the warehouse, its tables, and the queries associated with them. Breaks or instability in these components can lead to significant issues and disruptions.

### **Survey Data Requirements and Fields**

The Florida Department of Education (DOE) website provides comprehensive database manuals and information regarding the data required in surveys and the specific surveys in which they are submitted. Understanding the location of the data, the responsible party for monitoring it, and the data entry process into the LIS system are key components in managing survey data effectively.

First, we must comprehend the specific pieces of information that are transferred to the state through different surveys and the diverse purposes for which the data is used. Survey data serves multiple functions, including funding, testing, and accountability. Various departments rely on accurate survey data. Therefore, it is essential for the actual data owners and schools to be aware of the data being entered for students and to review it for accuracy. This distribution of ownership ensures that survey accuracy is not solely dependent on the Management Information Systems (MIS) department.

Survey 2 covers critical aspects such as class size, transportation, allocations, funding for students, testing and accountability, payroll information, and discipline information.

Survey 3 encompasses funding, accountability, and facility-related data.

Survey 4 is specifically linked to funding for virtual providers.

Survey 5 includes bonus Full-Time Equivalent (FTE), student transcripts, student testing, staff evaluation data, graduation data, and other end-of-year information.

In survey data management, the information must remain static. After submitting the initial file, schools and data analysts should review the data for any necessary edits or errors. Oversight of survey data can result in a significant loss of funding for a school; therefore, multiple individuals should review the data being sent. When discussing Full-Time Equivalent (FTE), the involvement of finance and facilities personnel is essential to ensure the accurate capturing of all funding. Schools should actively monitor student schedules for accuracy.

Additionally, there are WDIS surveys, which pertain to adult education and technical college information for students and can impact funding for those programs. Once again, data owners and school-based administrators must oversee the accuracy of the information entered

and transmitted to the state. During the summer, the WDIS survey must be monitored for transfer students from K–12 to adult education programs.

A new addition to student-level data is Family Empowerment student information. Although no specific school owns this student-level data, it is important to designate a department or administrator as the business owner responsible for monitoring and managing the Family Empowerment students' data within the school district.

By ensuring accuracy, active oversight, and ownership of survey data, school districts can secure appropriate funding, meet accountability requirements, and make informed decisions to support student success.

Data management is key to success as a MIS coordinator. Having checks and balances with a strong monitoring system ensures that the data is accurate.