



**ed-fi**<sup>®</sup>  
ALLIANCE

# Interoperability: A Re-Volusia-nary Approach to Driving Impact from Data!

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# Welcome! What we'll discuss today...

- Interoperability fosters a healthy tech ecosystem & learning environment
- Connected systems allow data to flow out of all systems, platforms, and applications your district uses
- Access to data in a single, secure platform gives teachers a complete view of student progress
- Combining ed-tech solutions drives evidence-backed learning decisions and student success
- Get Back to Why -why this is a priority for Volusia County Schools

# But First, Let's Talk Reality.

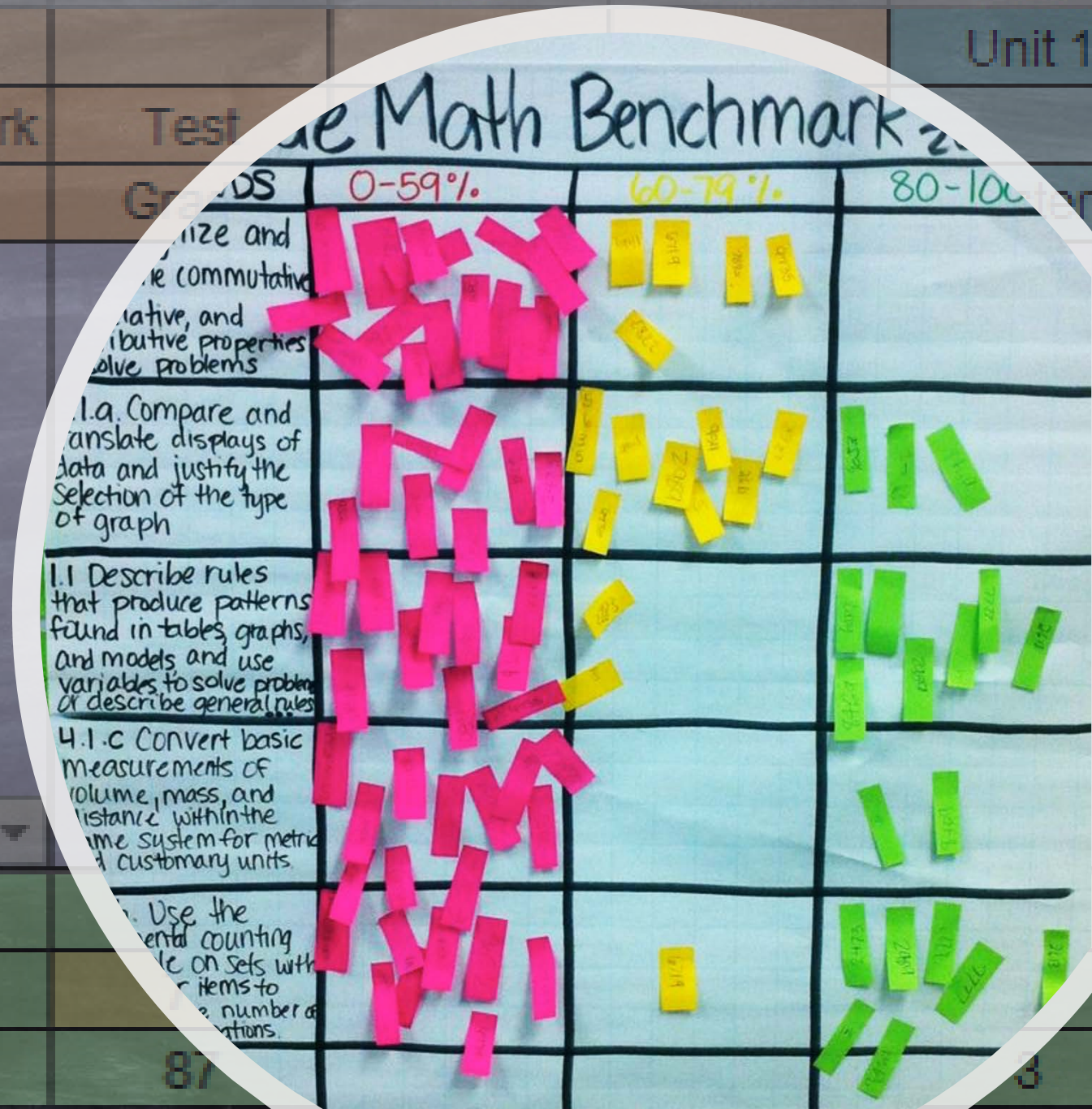
## Who are you (to your learners)?

- Teachers and those who directly serve specific learners every day
- Campus roles who support entire campuses of learners
- Administrators, over campuses or programs & districts
- Technologists
- Vendors and providers

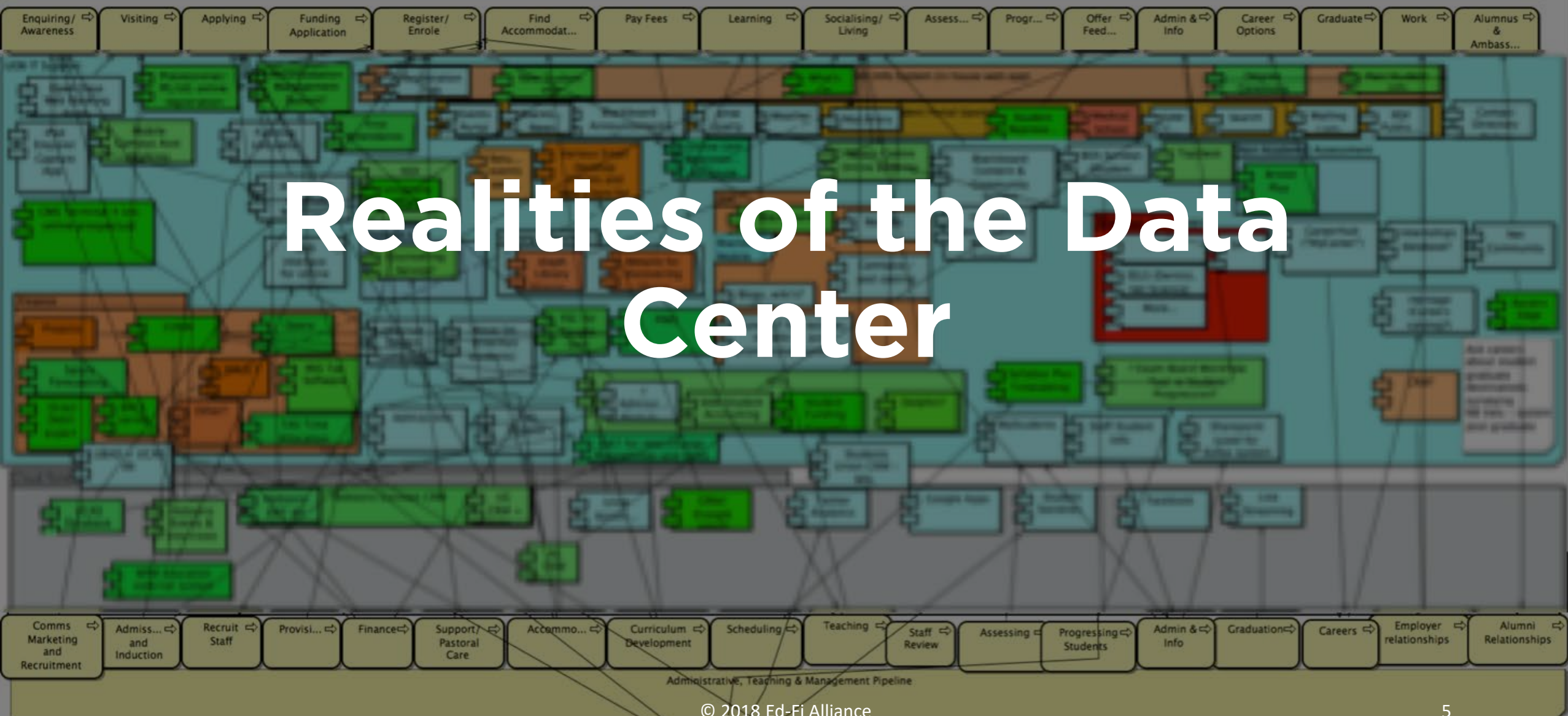
## Challenges serving them?

- What's the hard work in truly personalizing learning?
- How well do you know your learners? How long does it take to really know them?
- How do you know where & how to personalize instruction/paths?
- What kind of insights help you do your job and reach your learners as soon as they need it?

# Realities of Data Use in the Classroom



Student Experience



# Realities of the Data Center



**Ed-Fi seamlessly and  
securely connects  
educational data  
systems.**

[Watch Video](#)

# Who Cares About and Is Impacted by This?

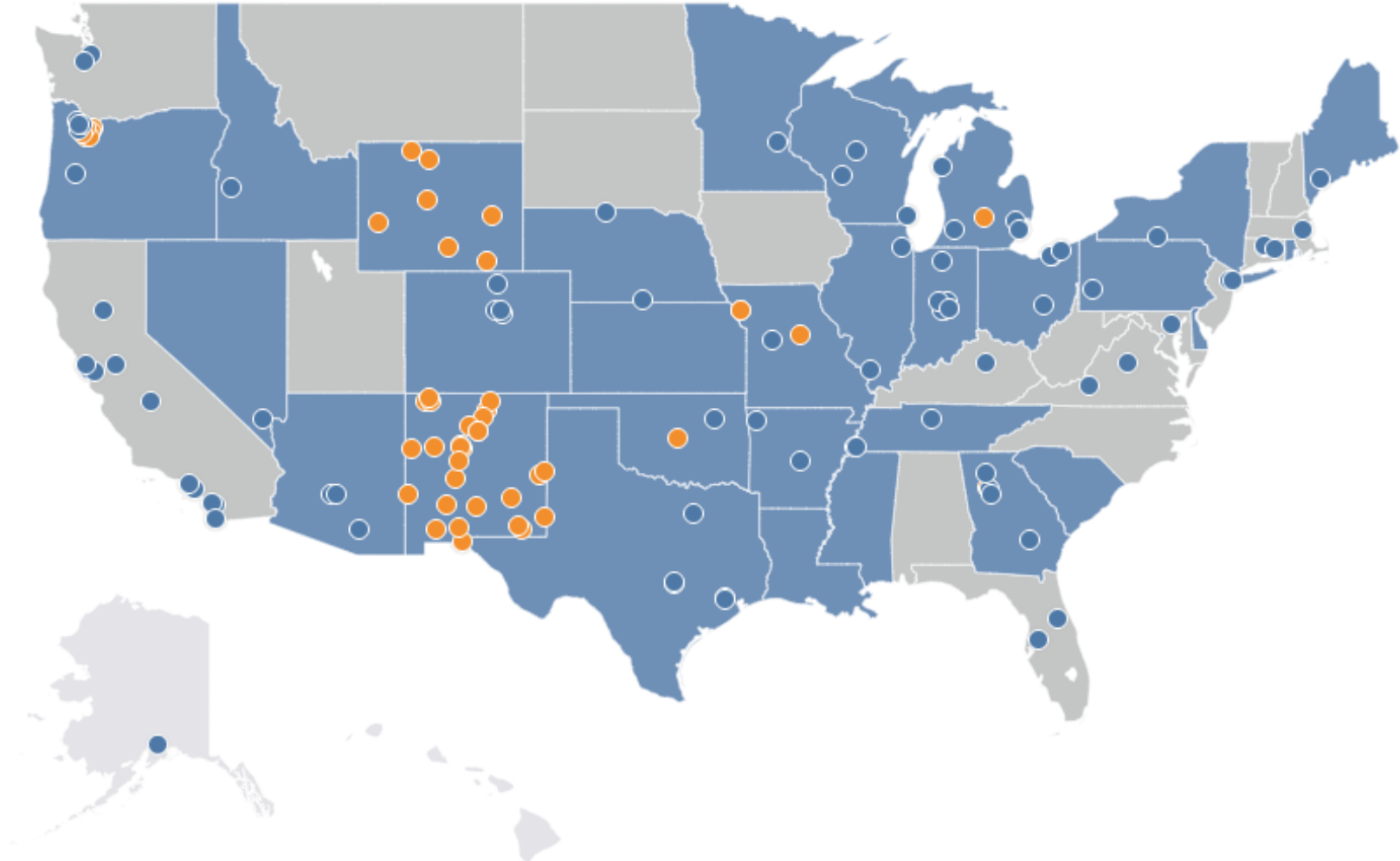
1. LEARNERS!
2. Educators
3. Administrators
4. Parents
5. College, Community College, post-graduation
6. Employers, Career Pathways
7. State & National Depts of Ed
8. Vendors and Solution Providers

# Who Else Is Working on This?

1. Ed-Fi Alliance (data standards)
2. Common Education Data Standards (common data dictionary)
3. IMS Global (content/tools standards)
4. Project Unicorn (interoperability pledge)
5. Other professional groups (e.g. Teacher Preparation Programs, iNacol, Digital Promise, CoSN)
6. Philanthropic Organizations (e.g. Michael and Susan Dell Foundation)
7. Visionary vendors (e.g. SIS, assessment, analytics vendors)



# Where is the Ed-Fi Community Addressing Interoperability?



**30.8M** (61%)  
students

**1.9M** (62%)  
teachers

**30** (59%)  
states (+DC)

**11.5K** (69%)  
districts

**237**  
licensed vendors

Total students in US: 50.0M  
Total teachers in US: 3.0M

## Common Language

Ed-Fi surfaces all of your school's systems, tools, and software onto a single platform.

## Know Everything

Ed-Fi finally delivers the comprehensive insights teachers need to deliver personalized learning.

## Zero Fees

The Ed-Fi data standard is offered with no fees from Ed-Fi —making data integration affordable.

## Secure & Protected

At every step, and at all moments, your data is safe and in your control.

## Nonstop Improvement

An active community of educators and technologists advance Ed-Fi every day.

## Teacher's Choice

Ed-Fi powers the finest technology on the market. Choose your favorite tools.

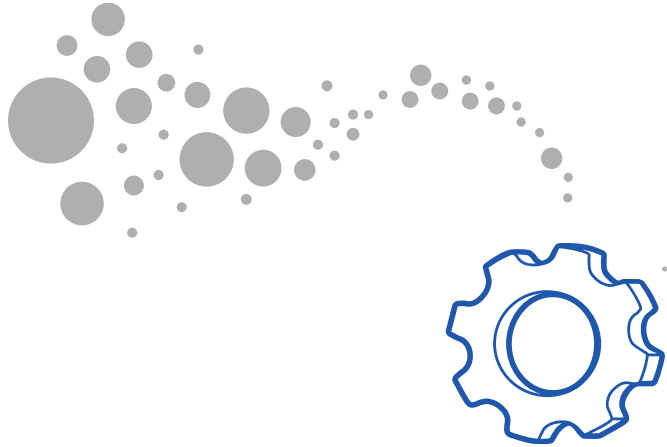


# How Interoperable Data Flows in a Learning Environment

2-way data exchange to roster teaching & learning apps, + return results/outcomes data to ODS via API

## Transactional Data (JSON)

- SIS/LMS
- Content Management
- Instructional Apps
- Financial/HR
- Operations (food, transport, library)



Operational Data Store



Attendance

Behavior/Intervention

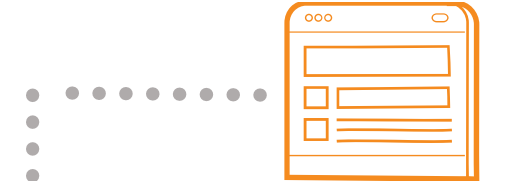
Course Grades

Roster & Program Data

SAT/ACT/PSAT/State Test Data

Teacher Certification & Teacher Prep

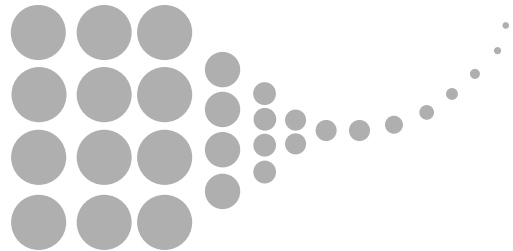
Formative, Interim, Summative Assessments



Data Visualizations & Dashboards

## Bulk Data (XML)

- State Assessments
- National Assessments
- Other?



Data Warehouses & Marts

BI Platforms, Reports/Analytics

# The Power of Data: Insights, Patterns

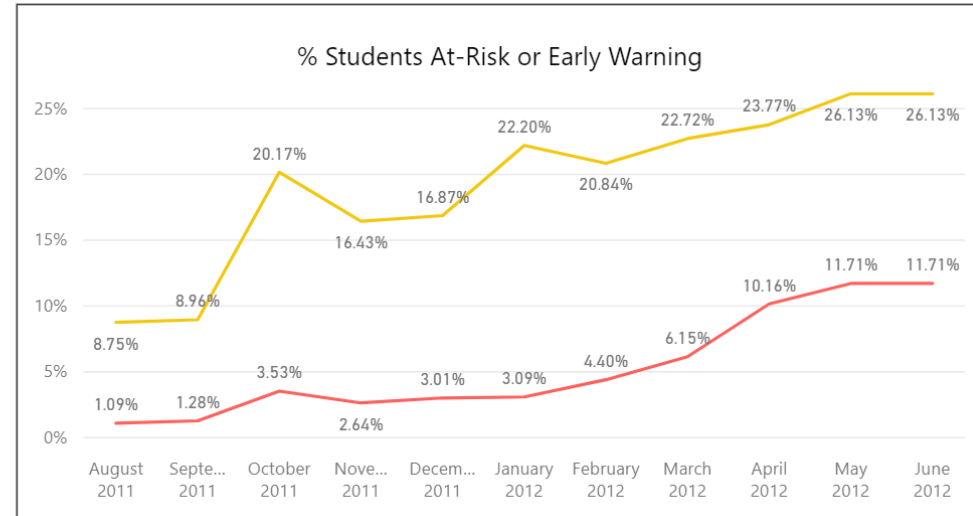
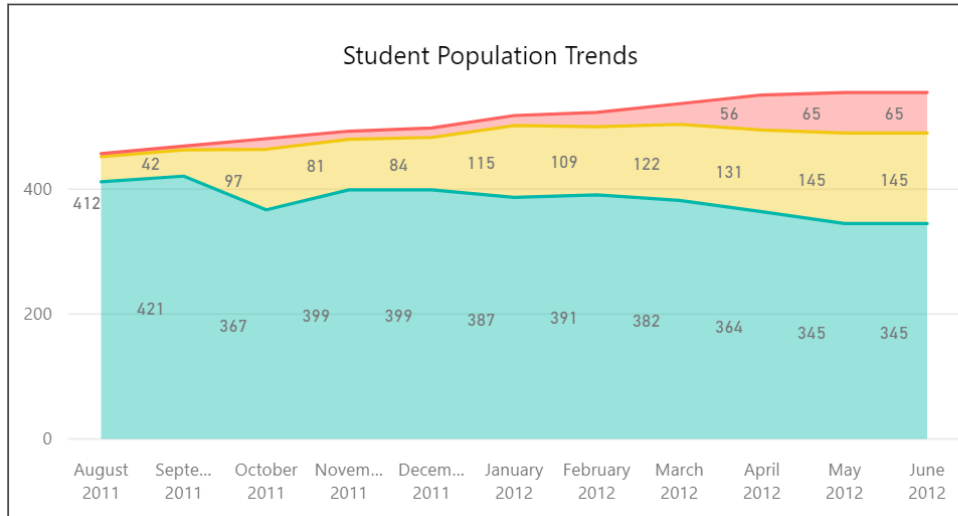


School Name

Anderson Middle School

Early Warning Metrics

<b>On Track</b>	<b>Early Warning</b>	<b>At-Risk</b>
344 62.16%	146 26.13%	65 11.71%



Year-To-Date Metrics

<p>Enrollment</p> <p><b>555</b></p>	<p>Average Overall Grade</p> <p><b>84.39</b></p>
<p>Average Attendance Rate</p> <p><b>89.12%</b></p>	<p>Average English Grade</p> <p><b>83.68</b></p>
	<p>Average Math Grade</p> <p><b>80.24</b></p>

Overall Indicator ...	Student Name	Grade Level	Attendance ...	Overall Grade ...	Math Grade ...	English Grade ...
At-Risk	Alicia Mcdaniels	Sixth grade	81.61 %	71.00	61.50	
At-Risk	Altorriyo Lopez	Seventh grade	66.39 %	89.83	76.00	
At-Risk	Amanda Xiong	Eighth grade	28.57 %	81.78	76.00	85.00
At-Risk	Amber Mcdaniels	Seventh grade	51.85 %	72.50	70.00	
At-Risk	Armando Ridge	Eighth grade	81.14 %	70.17	50.00	
At-Risk	Arvin Norton	Sixth grade	78.86 %	72.00	64.00	
At-Risk	Ashlie Foster	Seventh grade	36.36 %	74.43	73.00	
At-Risk	Brandy Keefe	Eighth grade	76.92 %	68.73	75.00	83.00
At-Risk	Brett Garay	Sixth grade	84.71 %	81.50	64.00	
At-Risk	Charred Dillard	Eighth grade	57.75 %	69.12	62.00	52.00

# The Power of Data: Actionable



Teacher Name

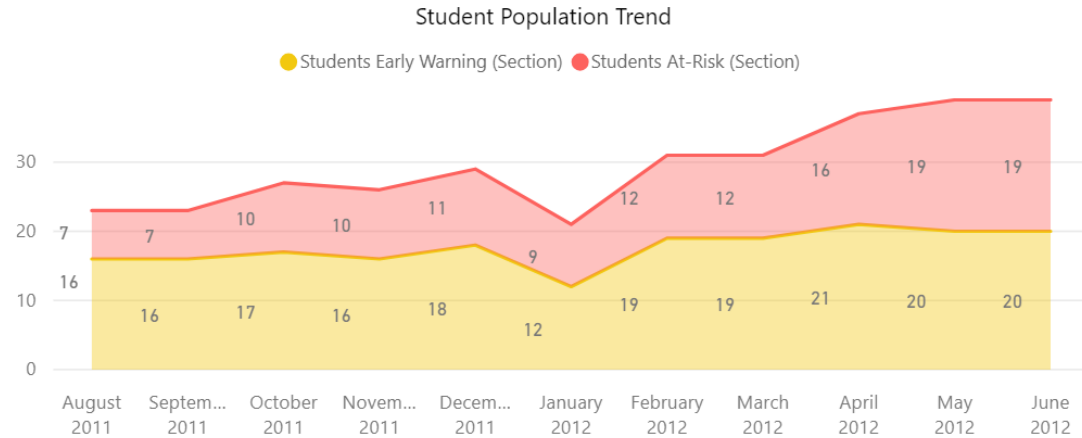
## Sections

LocalCourse...	Course Title
GYMR31	Aerobic Activities
GYMR32	Aerobic Activities
PEDR50	Aerobic Activities
PEDR60	Aerobic Activities
YRMR11	Agribusiness Management and Ma...
YRBR11	Agricultural Facilities Design and F...
YRRR11	Agricultural Mechanics and Metal ...
MALR11	Algebra I (1 Unit)
MALZ11	Algebra I (1 Unit)
MAPH8A	Algebra I (1 Unit)
OALR11	Algebra I (1 Unit)
QALR11	Algebra I (1 Unit)
XMCT11	Algebra I (1 Unit)
XMSF11	Algebra I (1 Unit)
XLTM11	Algebra I Alternate
XSMP11	Algebra I Alternate
<b>XAAL11</b>	<b>Algebra I Modified</b>
XVMP11	Algebra I Modified
MALH31	Algebra li (1 Unit)
MALR31	Algebra li (1 Unit)
MALZ31	Algebra li (1 Unit)
QALR31	Algebra li (1 Unit)

## Early Warning Metrics

**Students At-Risk**  
**19**

**Students Early Warning**  
**20**



## Enrolled Students

Overall Indicator ...	Student Name	LocalCourseCode	Course Title	Last Section Gra...
At-Risk	Victor Trevino	XAAL11	Algebra I Modified	73.00
On Track	Rex Loper	XAAL11	Algebra I Modified	84.00
Early Warning	Curtis Aysien	XAAL11	Algebra I Modified	85.00
At-Risk	Alejandro Mayfield	XAAL11	Algebra I Modified	86.00
On Track	Landon Guerrero	XAAL11	Algebra I Modified	87.00
At-Risk	Kathryn Kerns	XAAL11	Algebra I Modified	90.00
Early Warning	Michael Moore	XAAL11	Algebra I Modified	90.00
Early Warning	Tracey Lamar	XAAL11	Algebra I Modified	90.00
On Track	Kelley Hostetler	XAAL11	Algebra I Modified	91.00
On Track	Kirk Alban	XAAL11	Algebra I Modified	91.00
Early Warning	Jonathan Cotton	XAAL11	Algebra I Modified	93.00
On Track	Michael Brickey	XAAL11	Algebra I Modified	93.00
On Track	Marcos Ochoa	XAAL11	Algebra I Modified	94.00



# Top 10 Considerations for How to Begin

## General Considerations

1. Not just IT
2. Define/align your strategic priorities
3. Take a Thin Slice approach
4. Rapid return on value
5. Think agile
  - Analytics
  - Data visualization

## Practical Steps

1. Use standards-based, certified solutions
2. Use cloud-based options
3. Join industry communities (like Project Unicorn)
4. Join district collaboratives
5. Communicate interoperability requirements early with key vendors



# Working with Ed-Tech Vendors

Help vendors justify the work and make the business case.

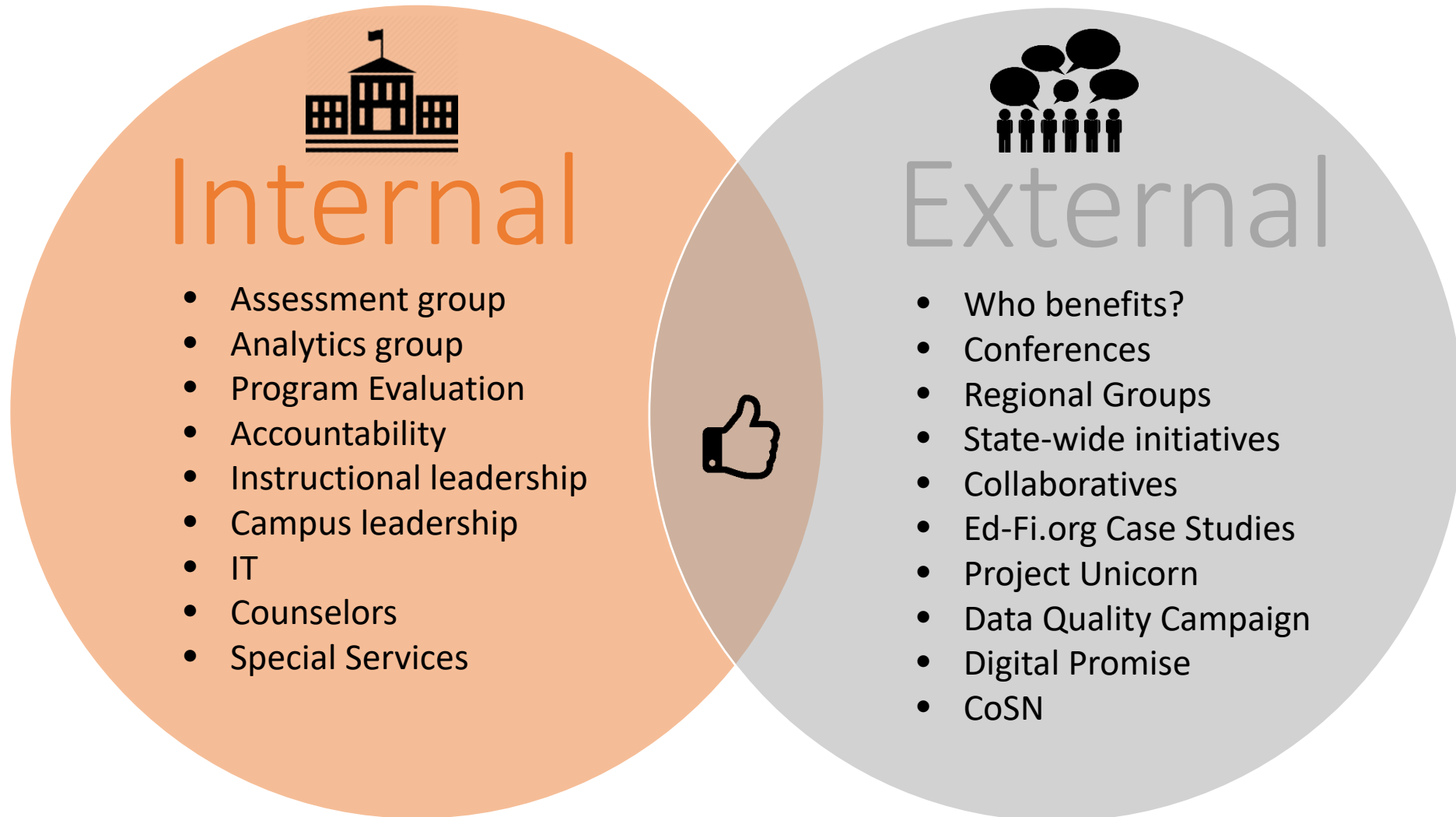
## What can you (as an agency – the demand side) do?

- You hold the cards
- Community: power in numbers
- Make your needs and requirements known through:
  - your vendor support channel
  - your vendor account leadership channels
- Customer requests become roadmap priorities.

## How it Benefits Vendors (the supply side)...

- Aggregated demand = common requirements across agencies (reduced risk)
- Portable, replicable, reusable code (reduced costs)
- A standard way to implement a solution
- Secure, real time data exchange improves user experience & data value
- Opens markets for vendors (increased revenue)
- More standard/structured data improves analytics (product) insights + customer offerings
- Unlocks innovation through specialization and complementary solutions

# Build Support, Leverage MOMENTUM





# Resources to Engage

## ed-fi CONNECT

NEWS + UPDATES FROM THE ED-FI ALLIANCE

Unlock the Power of Ed-Fi in 4 Simple Steps

STEP 1



Make the Case

STEP 2



Complete the Checklist

STEP 3



Request Your License

STEP 4



Join the Community

### Newsletter Signup

FIRST NAME \*

LAST NAME \*

EMAIL \*

COMPANY \*

Submit

Ed-Fi Tech Docs Spaces Glossaries

Ed-Fi Tech Docs

SPACE SHORTCUTS

- Request a Login
- Ed-Fi Alliance Website
- Ed-Fi Community
- Ed-Fi Certification
- Ed-Fi Data Standard RFC Home
- 2017 Boot Camp
- Ed-Fi Events
- Ed-Fi Issue Tracker
- Ed-Fi GitHub Repository

PAGE TREE

- Tech Community
- Ed-Fi Training
- Ed-Fi Data Standard
- Ed-Fi Operational Data Store and API
- Ed-Fi Cloud ODS and API
- Ed-Fi Dashboards
- Ed-Fi Tools
- Ed-Fi Technology Version Index

Pages

## ED-FI TECH DOCS

### Welcome

Welcome to the Ed-Fi Technical Documentation home page. This site provides links to documentation and technical information for the Ed-Fi Data Standard and the Ed-Fi Implementation Suite as well as information and resources for the Ed-Fi Tech Community.

#### New Releases

On behalf of the Ed-Fi community, we are pleased to announce the following releases:

- February 16th, 2018: MetaEd IDE v1.1.1
- February 1st, 2018: Ed-Fi ODS / API v3.0 - Technical Preview (b)
- December 20th, 2017: Ed-Fi ODS / API v2.3.1

#### Ed-Fi Data Standard

The Ed-Fi Data Standard is the widely adopted, CEFS-aligned, open-source data standard developed by the educational community for the betterment of the community. The Ed-Fi Data Standard serves as the foundation for enabling interoperability among secure data systems and contains a Unifying Data Model designed to capture the meaning and inherent structure in the most important information in the K-12 education enterprise. (Current Version (v2.0) | Latest Version (v3.0) - RFC | All Versions)

#### Ed-Fi Implementation Suite

#### Ed-Fi ODS / API

The Ed-Fi Operational Data Store (ODS) provides a secure, transactional information store that integrates data from multiple source systems and applications. The Ed-Fi

Ed-Fi Alliance

carolinek512

All Threads

Channels

- # general
- # random
- # triage
- # users-implementations

Direct Messages

- slackbot
- carolinek512 (you)
- markwalls
- skerlick-edfi

Apps

#general

290 | 1 | Company-wide announcements and work-based matters

Sireesha Reddy Konyala 11:58 AM  
joined #general along with Jesus Flores.

jamiemartinez 7:52 AM  
perusing tickets to see if anyone else was getting confusing

jamiemartinez 7:52 AM  
added this Plain Text snippet: **Untitled**

```
1 SELECT rc.DisplayName, a.ActionName, COALESCE(ast.
2 FROM ResourceClaims rc
3 CROSS JOIN Actions a
4 LEFT OUTER JOIN ResourceClaims parent
5 ON rc.ParentResourceClaimId = parent.ResourceClaim
```

jamiemartinez 8:50 AM  
never mind, it was just the name of one of the tables that ch

kimikorife 2:46 PM  
Feedback requested. How are various implementations repre  
feedback. -- kimiko

2 replies Last reply 16 days ago

# Where to find us



And... many national & regional conferences and convenings  
Do you know of an event that would help support your district & your peers?

# Questions and Next Steps

Thank you to Jamie & Matt for their vision & leadership @ Volusia!

Contact Sean Casey [sean.casey@ed-fi.org](mailto:sean.casey@ed-fi.org) to learn more...

## Next steps and calls to action

1. Talk with your teams/leadership & share your learnings
2. Join Project Unicorn (district pledge) and Ed-Fi (license & join the Community)
3. Just start – there are ways to start small and deliver for your learners - now!

Remember... there is power in numbers, and many of your peers are a part of this community and this movement. Your learners and educators need this to get the most of their learning and opportunities!



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