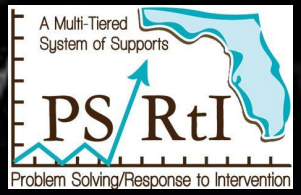
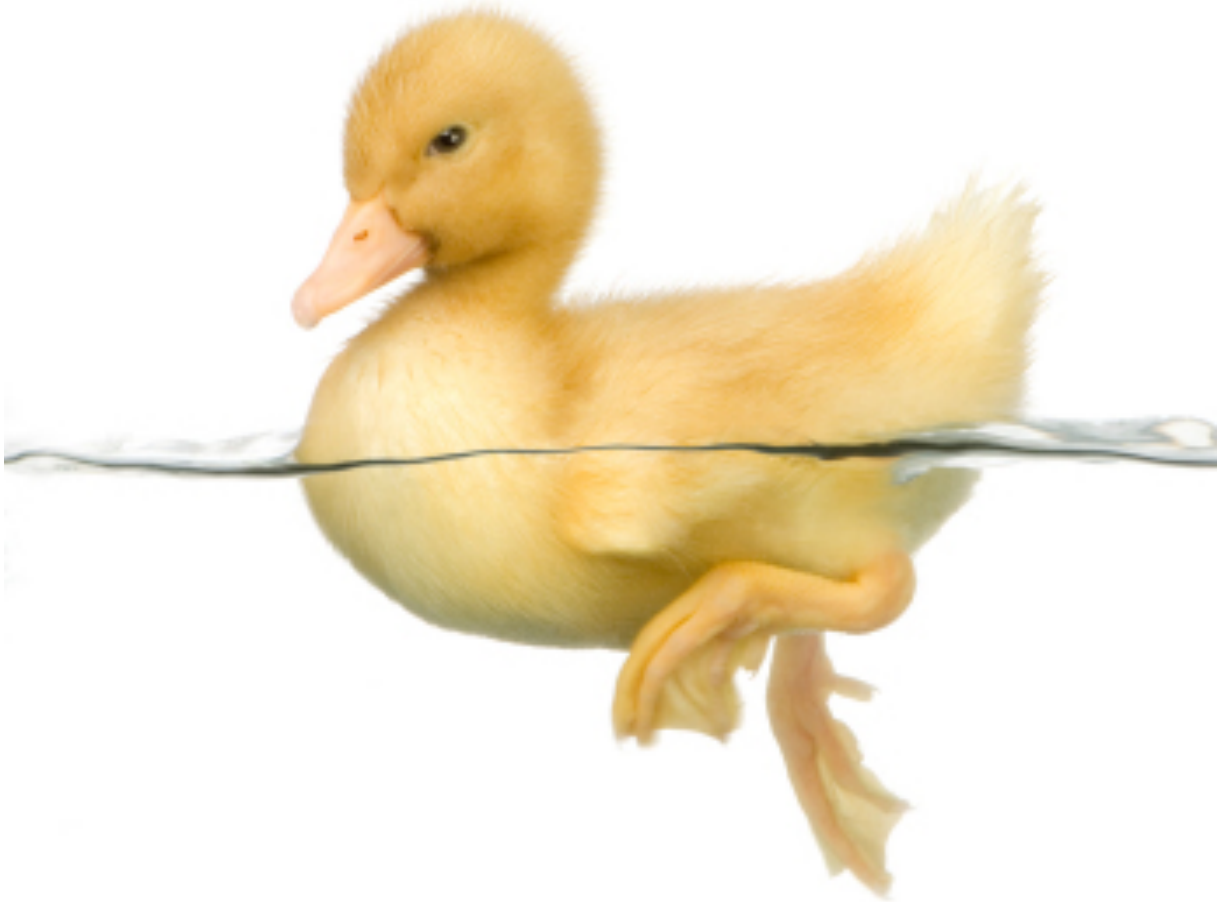
Wednesday Webbies

Data Dig

November 18, 2020



Just keep paddling…

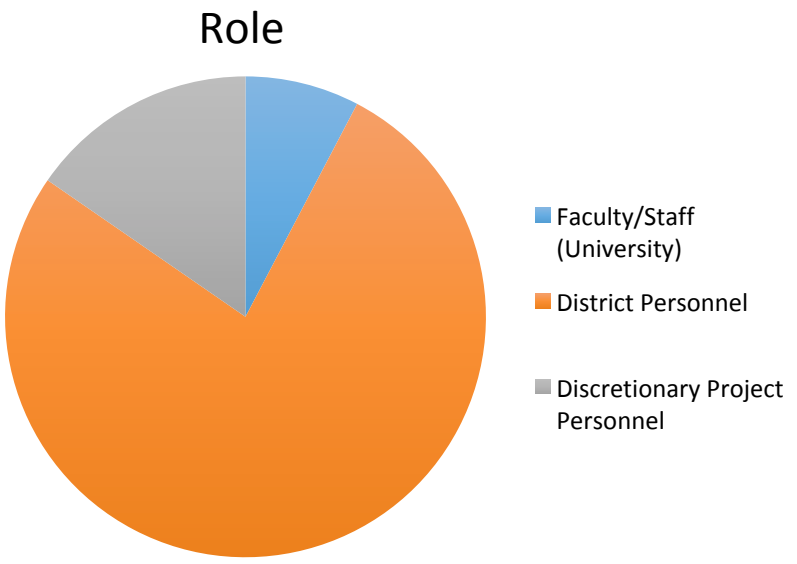


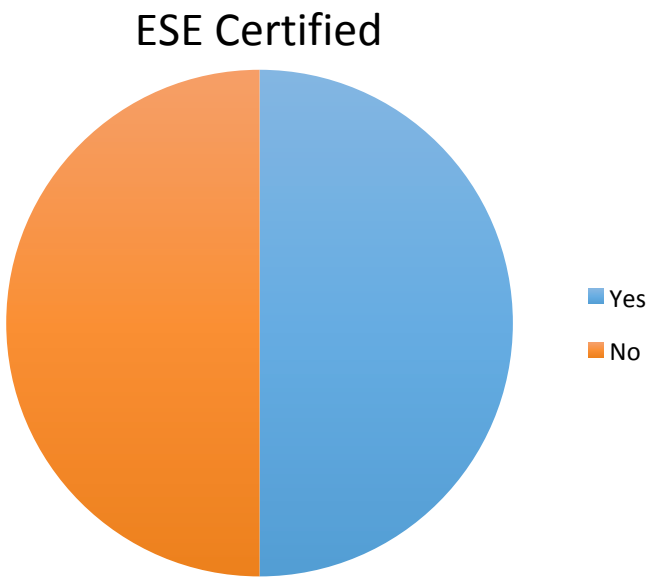
Welcome

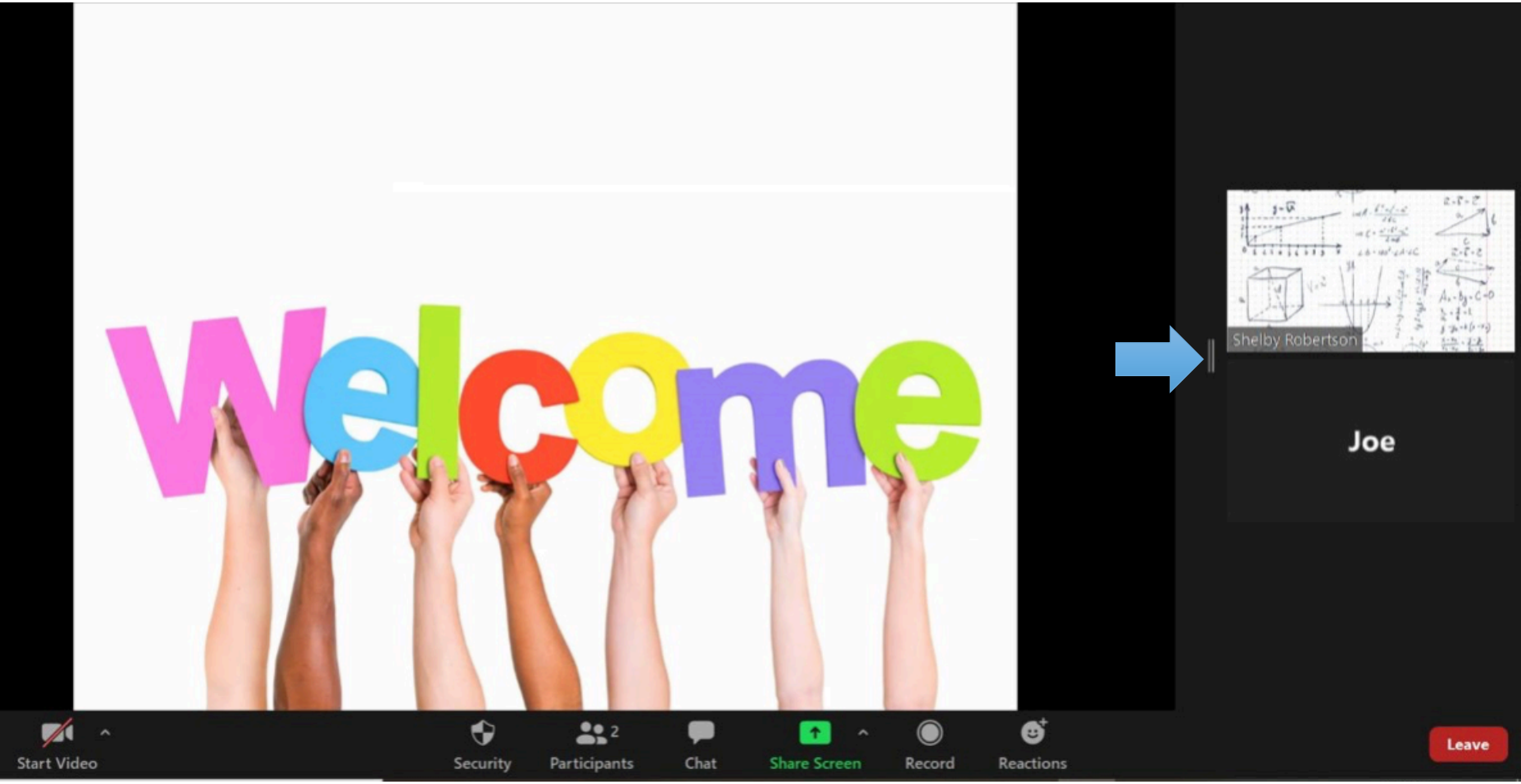
Who Is Here to Support You?

- FL Department of Education
  - Bureau of Exceptional Education and Student Services
  - Bureau of Standards and Instructional Support
- FL Diagnostic & Learning Resources System (FDLRS)
- FL Inclusion Network (FIN)
- Problem Solving/Response to Intervention Project (PS/RtI)
  - Student Support and Academic Achievement Unit
  - Technology Learning Connections Unit

Who are you?


Role
Faculty/Staff (University)
District Personnel
Discretionary Project Personnel


ESE Certified
Yes
No


Welcome
Shelby Robertson
Joe
Start Video
Security
Participants
2
Chat
Share Screen
Record
Reactions
Leave

Use the chat to quack away!

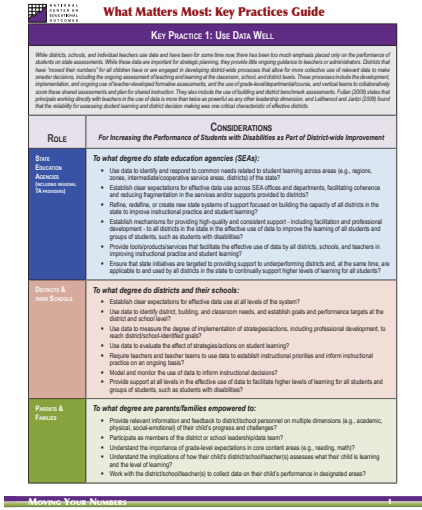
Objectives

Understand the components of Key Practice 1 from the *What Matters Most: Key Practices Guide*

Learn from colleagues how data is used for course placement (elementary to middle, middle to high, high to post-secondary) and how it can affect a student's math pathway K-20

Use FDOE data resources to identifying trends to facilitate conversations about successes and barriers to assist in problem-solving areas of need.

Key Practices


What Matters Most: Key Practices Guide

KEY PRACTICE 1: USE DATA WELL

While districts, schools, and individual teachers use data and have been for some time now, there has been too much emphasis placed only on the performance of students on state assessments. While these data are important for strategic planning, they provide little ongoing guidance to teachers or administrators. Districts that have "moved their numbers" for all children have or are engaged in developing district-wide processes that allow for more collective use of relevant data to make smarter decisions, including the ongoing assessment of teaching and learning at the classroom, school, and district levels. These processes include the development, implementation, and ongoing use of teacher-developed formative assessments, and the use of grade-level/departmental/course, and vertical teams to collaboratively score these shared assessments and plan for shared instruction. They also include the use of building and district benchmark assessments. Fullan (2009) states that principals working directly with teachers in the use of data is more than twice as powerful as any other leadership dimension, and Leithwood and Jantzi (2008) found that the reliability for assessing student learning and district decision making was one critical characteristic of effective districts.

ROLE	CONSIDERATIONS *For Increasing the Performance of Students with Disabilities as Part of District-wide Improvement*
STATE EDUCATION AGENCIES (INCLUDING REGIONAL TA PROVIDERS)	***To what degree do state education agencies (SEAs):*** • Use data to identify and respond to common needs related to student learning across areas (e.g., regions, zones, intermediate/cooperative service areas, districts) of the state? • Establish clear expectations for effective data use across SEA offices and departments, facilitating coherence and reducing fragmentation in the services and/or supports provided to districts? • Refine, redefine, or create new state systems of support focused on building the capacity of all districts in the state to improve instructional practice and student learning? • Establish mechanisms for providing high-quality and consistent support - including facilitation and professional development - to all districts in the state in the effective use of data to improve the learning of all students and groups of students, such as students with disabilities? • Provide tools/products/services that facilitate the effective use of data by all districts, schools, and teachers in improving instructional practice and student learning? • Ensure that state initiatives are targeted to providing support to underperforming districts and, at the same time, are applicable to and used by all districts in the state to continually support higher levels of learning for all students?
DISTRICTS & THEIR SCHOOLS	***To what degree do districts and their schools:*** • Establish clear expectations for effective data use at all levels of the system? • Use data to identify district, building, and classroom needs, and establish goals and performance targets at the district and school level? • Use data to measure the degree of implementation of strategies/actions, including professional development, to reach district/school-identified goals? • Use data to evaluate the effect of strategies/actions on student learning? • Require teachers and teacher teams to use data to establish instructional priorities and inform instructional practice on an ongoing basis? • Model and monitor the use of data to inform instructional decisions? • Provide support at all levels in the effective use of data to facilitate higher levels of learning for all students and groups of students, such as students with disabilities?
PARENTS & FAMILIES	***To what degree are parents/families empowered to:*** • Provide relevant information and feedback to district/school personnel on multiple dimensions (e.g., academic, physical, social-emotional) of their child's progress and challenges? • Participate as members of the district or school leadership/data team? • Understand the importance of grade-level expectations in core content areas (e.g., reading, math)? • Understand the implications of how their child's district/school/teacher(s) assesses what their child is learning and the level of learning? • Work with the district/school/teacher(s) to collect data on their child's performance in designated areas?

MOVING YOUR NUMBERS 1

"**Districts making the most significant, systemic improvements in teacher instruction and student performance** are those implementing practices evidenced by research to be essential and effective in not only generating gains, but in sustaining them."

Efforts to maintain focus on teaching and learning, align actions across the district, and continuously monitor the degree of implementation of such actions to assess impact on student learning can be organized around the following (6) key practices:

1 **Use data well**
2 Focus your goals
3 Select and implement shared instructional practices
4 Implement deeply
5 Monitor and provide feedback and support
6 Inquire and learn

NATIONAL CENTER ON EDUCATIONAL OUTCOMES

moving your numbers

NATIONAL CENTER ON EDUCATIONAL OUTCOMES

What Matters Most: Key Practices Guide

Key Practice 1: Use Data Well

While districts, schools, and individual teachers use data and have been for some time now, there has been too much emphasis placed only on the performance of students on state assessments. While these data are important for strategic planning, they provide little ongoing guidance to teachers or administrators. Districts that have "moved their numbers" for all children have or are engaged in developing district-wide processes that allow for more collective use of relevant data to make smarter decisions, including the ongoing assessment of teaching and learning at the classroom, school, and district levels. These processes include the development, implementation, and ongoing use of teacher-developed formative assessments, and the use of grade-level/departmental/course, and vertical teams to collaboratively score these shared assessments and plan for shared instruction. They also include the use of building and district benchmark assessments. Fullan (2008) states that principals working directly with teachers in the use of data is more than twice as powerful as any other leadership dimension, and Leithwood and Jantzi (2008) found that the reliability for assessing student learning and district decision making was one critical characteristic of effective districts.

Webinar 1 – Use Data Well

Webinar 2 – Parents as Partners

Webinar 3 – Data Dig

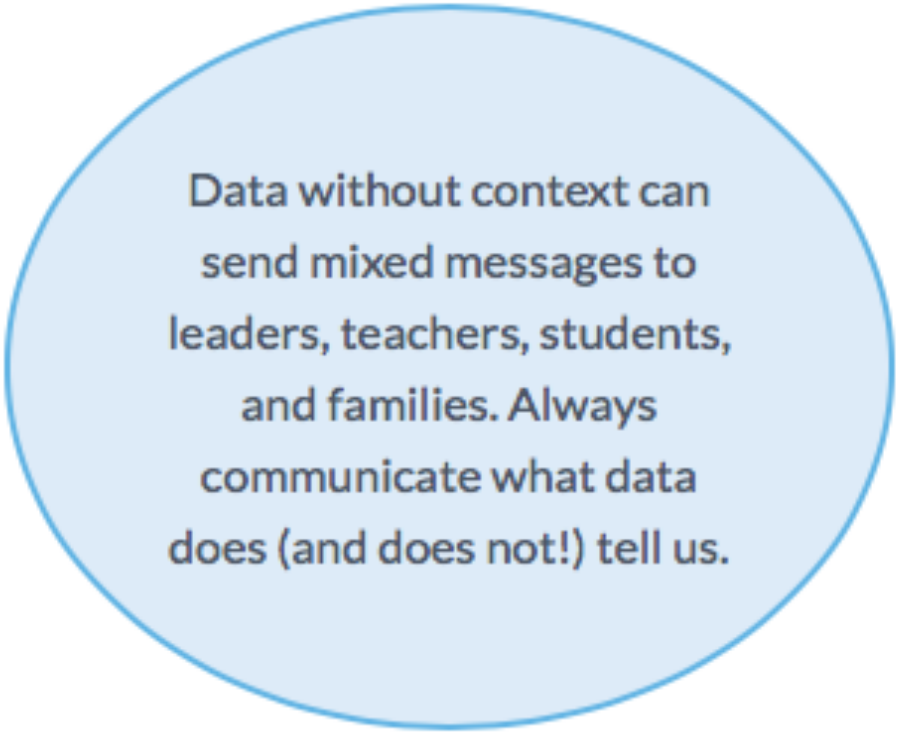
WEBINAR 3 – 11/18/2020		
	During Webinar – Key Points: **Participate and take notes during the session here…** **What are your take-aways pertaining to data use and maximizing the potential for all students?**	**Planning: What do I/we want this to look like in my/our plan?**

Slide 15: Guiding Questions
• **How are course placement decisions made in your district *(from elementary to middle, middle to high, and to postsecondary)*?**
  ○ **Who is involved in making those decisions? How can we hold them accountable from elementary to postsecondary?**
• **How do student data drive course placement decisions?**
  ○ **What is the impact of course placement on student success in middle grades, secondary, and postsecondary?**
• **How can we use data to ensure our pathways maximize student potential *for all students*?**
  ○ **What data are essential to determining the effectiveness of your district's math pathways?**
• **How do you look at data: individually or holistically?**
  ○ **How will comparing individual data to the larger group help improve mathematics instruction *for all students*?**		

Any time you share data with families, it is critical to clarify the *purpose* of the data.

What, precisely, is this data telling us?

That way, we all have a better understanding of how to use that data.



What road do I take?
Well where are you going?
I don't know
Then it doesn't matter. If you don't know where you are going, any road will get you there.

FLORIDA DEPARTMENT OF EDUCATION
fldoe.org

Plotting the Math Path

Guiding Questions

- How are course placement decisions made in your district *(from elementary to middle, middle to high, and to postsecondary)*?
  - Who is involved in making those decisions? How can we hold them accountable from elementary to postsecondary?
- How do student data drive course placement decisions?
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  - What data are essential to determining the effectiveness of your district's math pathways?
- How do you look at data: individually or holistically?
  - How will comparing individual data to the larger group help improve mathematics instruction *for all students*?

Plotting the Math Path

Math is the most **significant academic barrier** to postsecondary attainment.

- Examining the alignment of courses from kindergarten through postsecondary
- Analyzing student success based on previous math courses
- Envisioning pathways based on postsecondary opportunities

Source: Dana Center Mathematics Pathways

SCAN ME

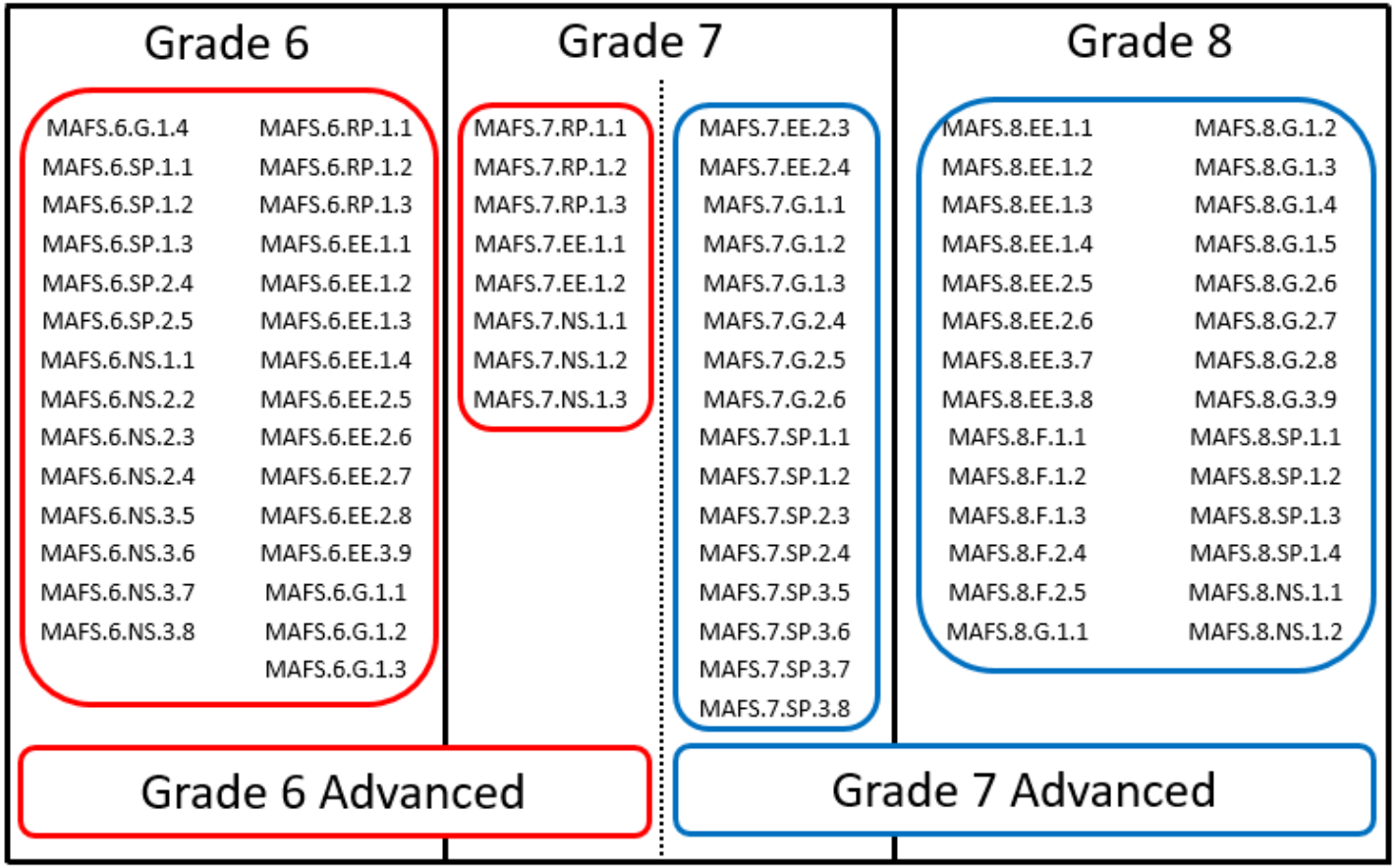
How do results in grades 3-5 impact future math paths?

Statewide FSA Results	2014-2015	2015-2016	2016-2017	2017-2018
Third Grade	58.3%	60.9%	61.5%	61.7%
Fourth Grade	59.1%	58.8%	63.6%	62.1%
Fifth Grade	54.5%	55.4%	57.1%	60.7%

Percentages refer to students scoring a level 3 or above on the indicated FSA.

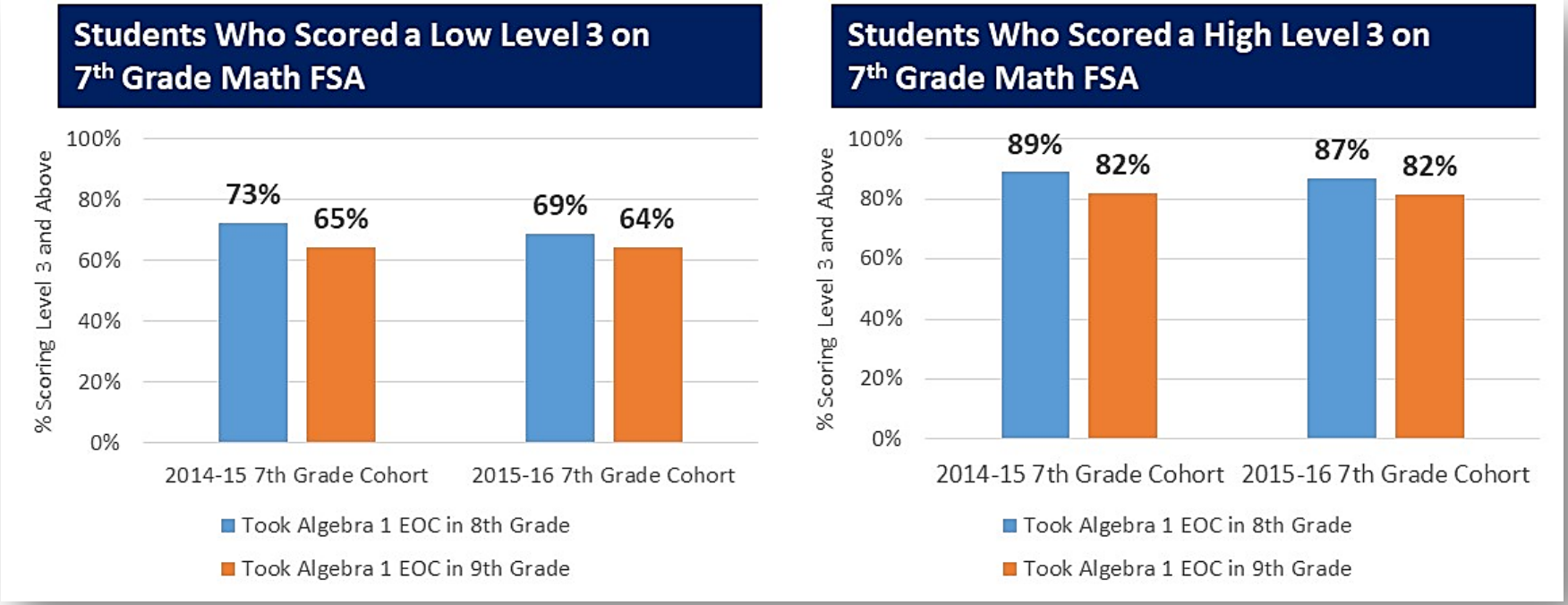
SCAN ME

How is grade 6 and grade 7 course placement determined?



SCAN ME

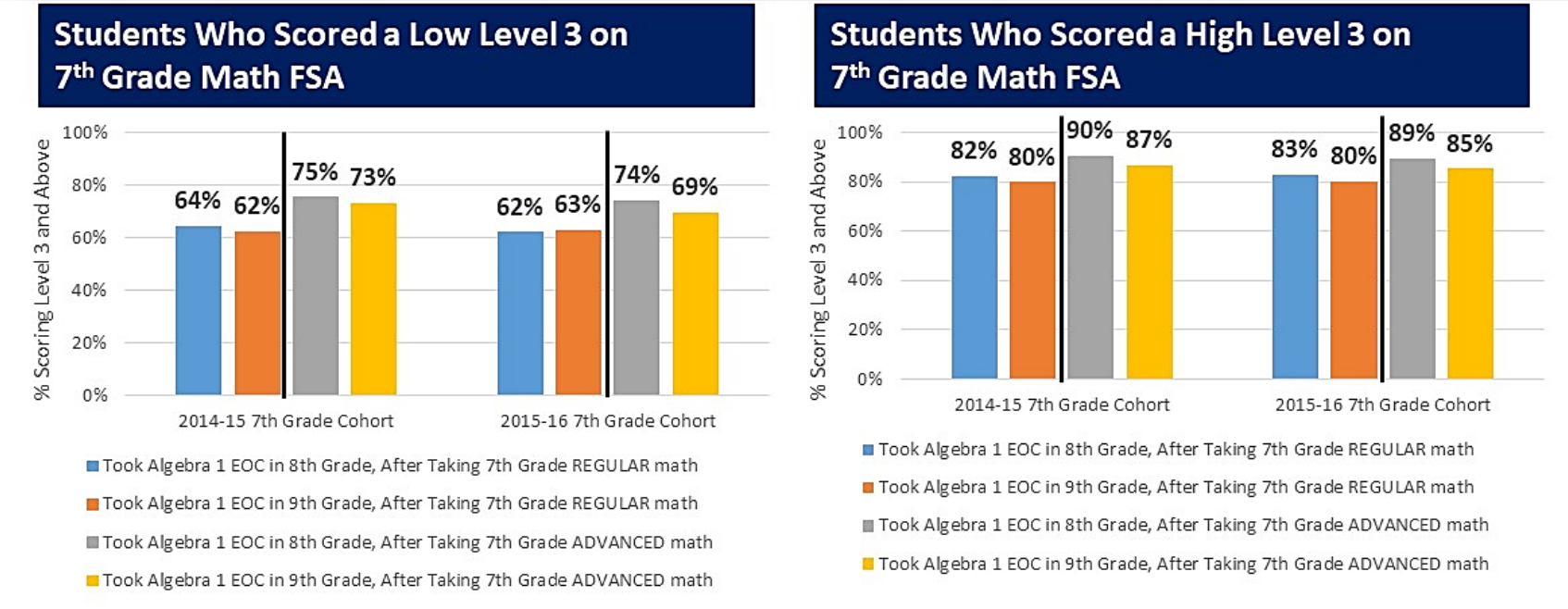
How does access to Algebra 1 in middle grades impact success for all students?



Low Level 3: 330-337
High Level 3: 338-345

SCAN ME

How does having access to an advanced middle grade math path effect success in Algebra 1?

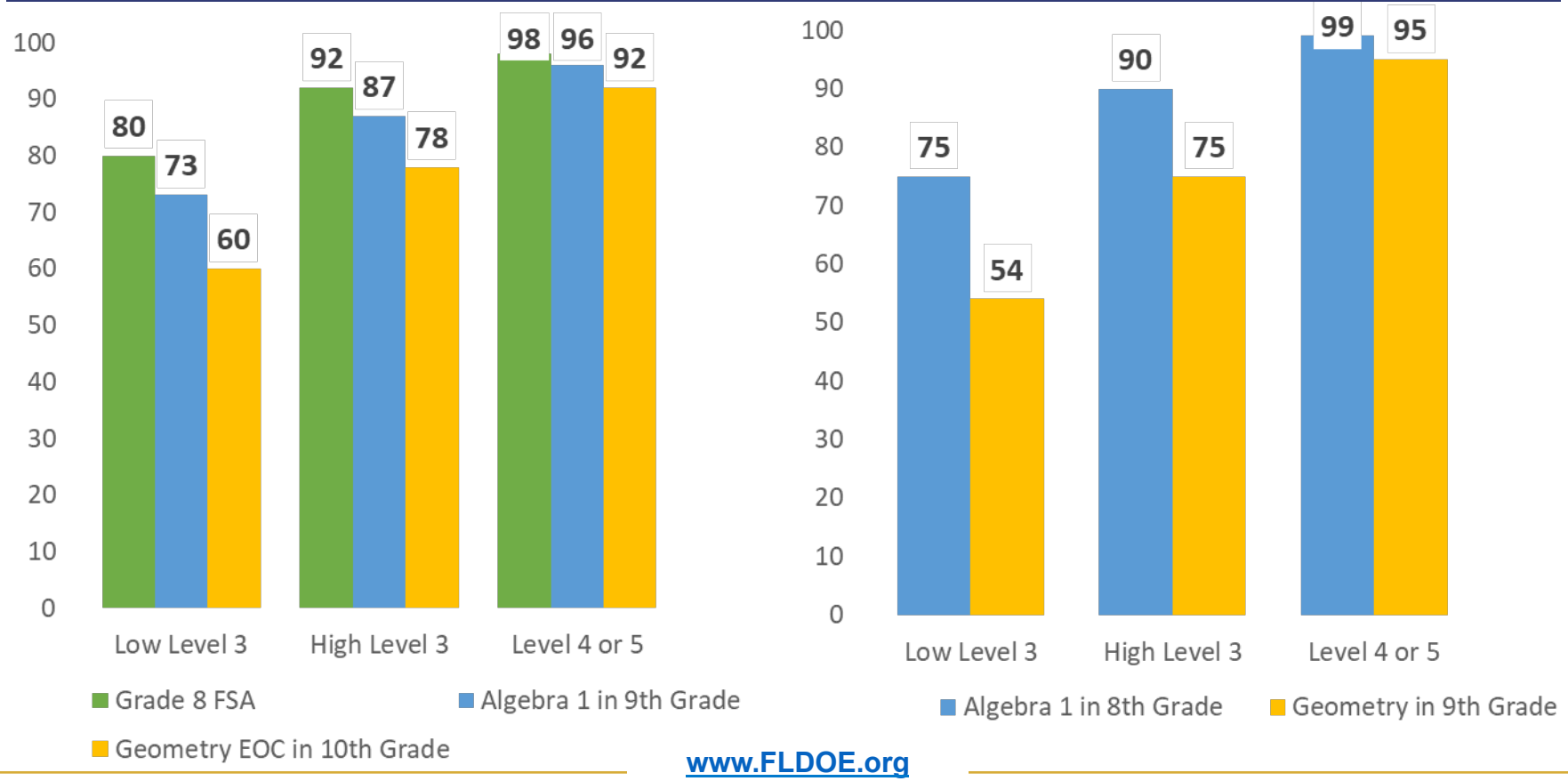


Low Level 3: 330-337
High Level 3: 338-345

SCAN ME

How does middle grade acceleration impact student success in future math courses?

Comparison of Math Path for Students after Grade 7 Advanced in 14-15



SCAN ME

How do high school math courses prepare students for postsecondary?

COLLEGE ALGEBRA PROFILE DESCRIPTION	1207310: LIBERAL ARTS MATHEMATICS 2	1200700: MATH FOR COLLEGE READINESS	1200330: ALGEBRA 2
FUNCTIONS & FUNCTION NOTATION		X	
DOMAINS & RANGES OF FUNCTIONS		X	X
GRAPHS OF FUNCTIONS AND RELATIONS	X	X	X
OPERATIONS ON FUNCTIONS		X	X
INVERSE FUNCTIONS			X
LINEAR, QUADRATIC, AND RATIONAL FUNCTIONS	X	X	X
ABSOLUTE VALUE AND RADICAL FUNCTIONS	X	X	X
EXPONENTIAL AND LOGARITHMIC PROPERTIES, FUNCTIONS, AND EQUATIONS	X	X	X
SYSTEMS OF EQUATIONS AND INEQUALITIES	X	X	X

SCAN ME

How do high school math courses prepare students for postsecondary?

COLLEGE STATISTICS PROFILE DESCRIPTION	1207310: LIBERAL ARTS MATHEMATICS 2	1210300: PROBABILITY & STATISTICS WITH APPLICATIONS HONORS	1200330: ALGEBRA 2
RANDOM VARIABLES		X	
PROBABILITY	X	X	X
HYPOTHESE TESTING			
CONFIDENCE INTERVAL ESTIMATION			
SMALL SAMPLE METHODS			
CORRELATION		X	
SIMPLE LINEAR REGRESSION		X	
NONPARAMETRIC STATISTICS			

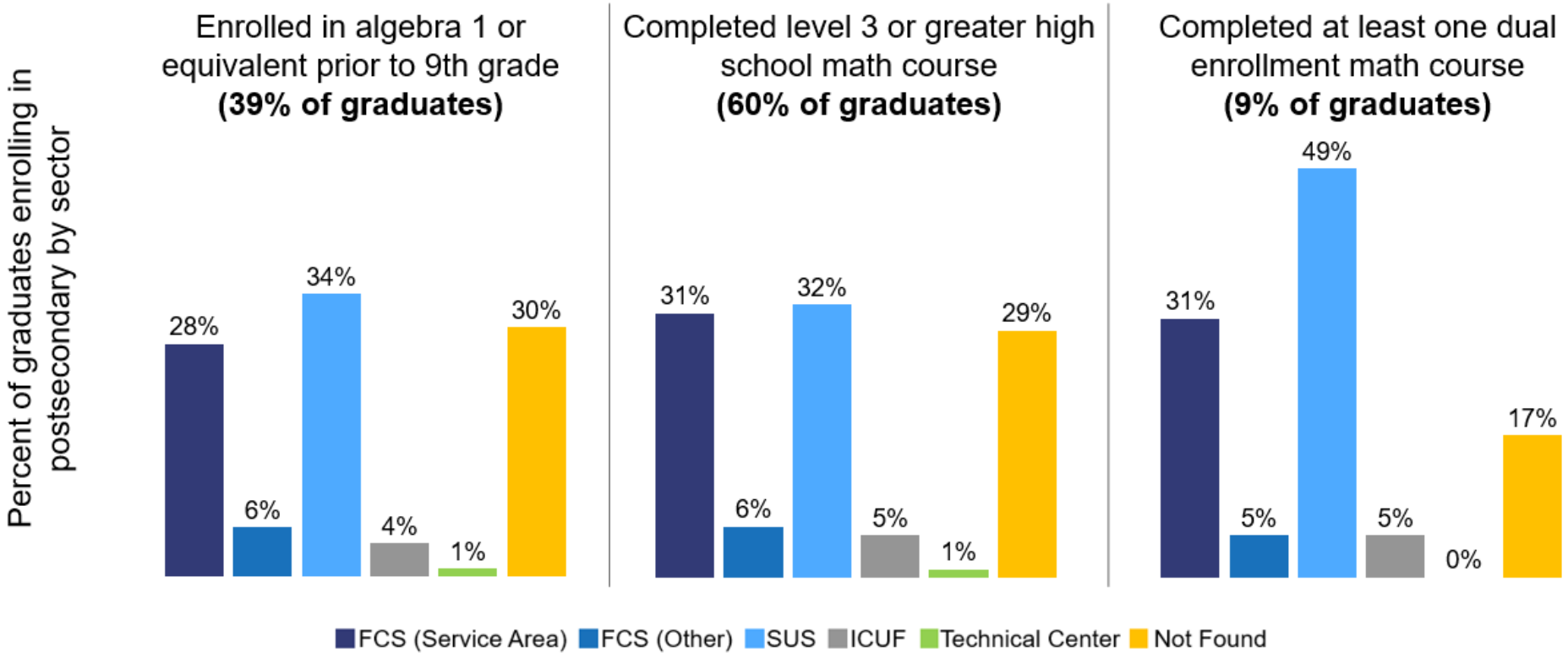
SCAN ME

How can grade 12 course placement develop successful K-20 math paths?

GRADE 12 MATH COURSE GROUP	PERCENTAGE OF 12TH GRADERS IN 17-18	PASSED ALGEBRA 1	Did Not Pass Algebra 1 but Passed PERT	Did Not Pass Either Algebra 1 or PERT	Did Not Take an Algebra 1 EOC or Math PERT Placement
No Math Course	18%	66%	12%	9%	13%
Level 2 Math Course(s) Only – Excludes Algebra College Readiness	24%	43%	32%	23%	2%
Level 2 Algebra College Readiness Math Course	27%	46%	32%	21%	1%
Level 3 Math Course(s) or CTE or Dual Enrollment Math Course	31%	89%	6%	3%	2%
Had a mix of Level 2 & Level 3 (CTE, DE) Math Courses	1%	66%	22%	11%	1%
Total (198,021 students)	**100%**	**62%**	**22%**	**14%**	**4%**

SCAN ME

How does a student's K-12 math path lead to enrollment in postsecondary institutions?



2016 Florida high school graduates with standard high school diploma (n=159,494)

Charge, Values & Deliverables

Charge

Explore complex issues surrounding mathematics pathways to prepare: high school students for transition into postsecondary; Florida College System students for success in gateway courses aligned to their programs; and Florida College System students for transition into four-year universities.

Guiding Values

Transparency, collaboration, respect, diversity, evidence-based inquiry

Deliverables

1) Cataloging evidence-based practices designed for scale
2) Developing recommendations for state policy and institutional policy and practice around mathematics re-design

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Mathematics Workgroups

High School to Postsecondary Alignment

Explore how high school curriculum in mathematics aligns with postsecondary expectations

- Clarify college entrance-requirements alignment with high school assessments and courses
- Examine longitudinal student data on mathematics sequencing and student success rates
- Engage high school and college mathematics faculty in dialogue about postsecondary expectations
- Identify strategies that promote greater alignment

FCS Mathematics Sequences

Examine multiple pathways for students to enter based on programs of study as well as the re-design of course structures to maximize support for students

- Identify course and institutional structures that promote and deter success
- Encourage the modernization of mathematics content
- Review data on student success across algebra and non-algebra pathways
- Identify a sequence of courses in the context of a student's intended transfer major/meta-major

FCS to University Alignment

Examine how FCS curriculum in mathematics aligns with university expectations, particularly for students in transfer programs

- Clarify university mathematics requirements
- Examine the longitudinal student data on mathematics sequencing and student success rates
- Engage FCS and SUS mathematics faculty in dialogue about postsecondary expectations
- Identify strategies that promote greater alignment

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AN INITIATIVE OF THE FLORIDA COLLEGE SYSTEM

Recommendations

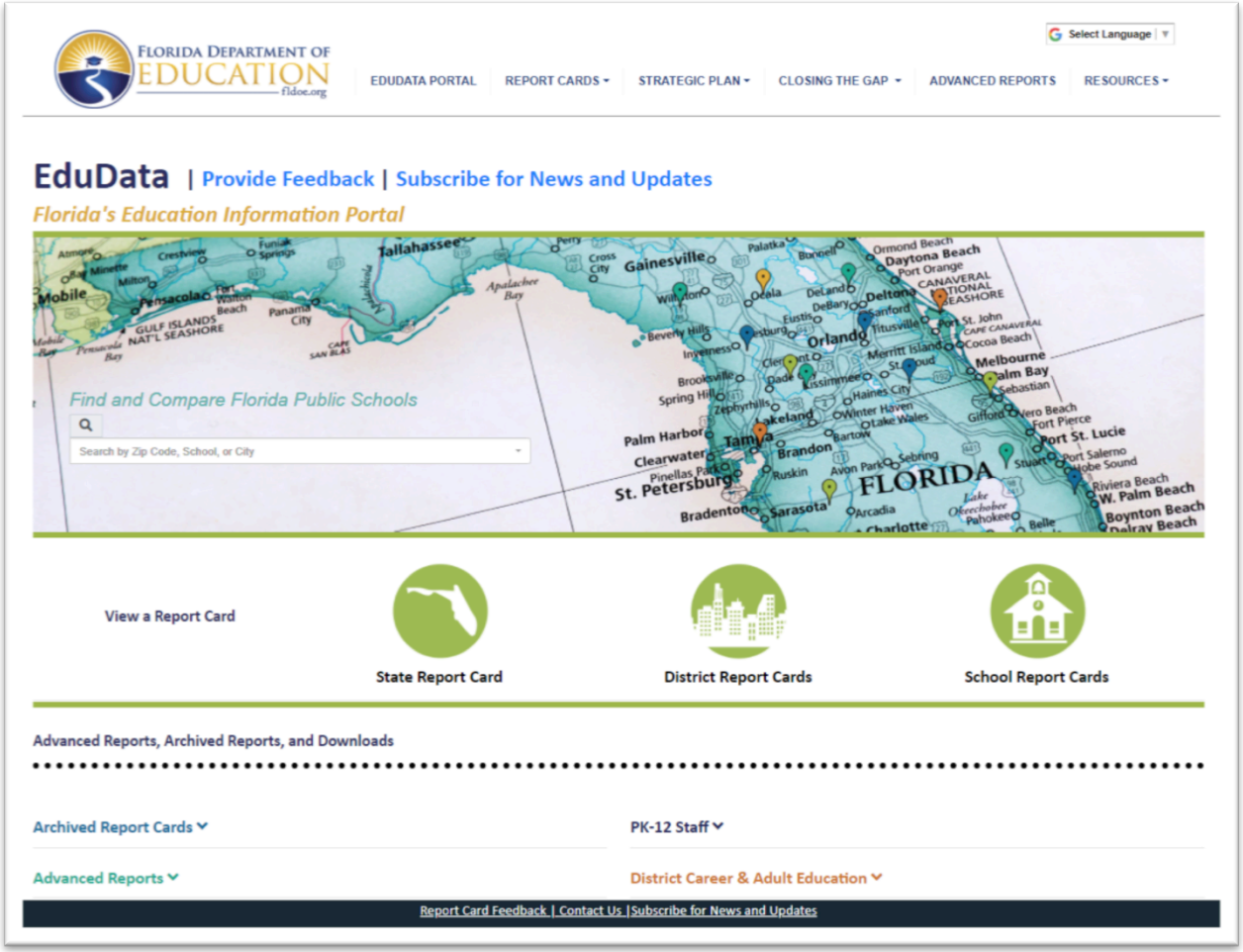
1. Common math pathways
2. Use “multiple measures” to improve placement
3. Ensure prerequisites align with pathways
4. Revise college statewide learning outcomes
5. Encourage colleges and universities to implement instructional models
6. Create recurring opportunities for K-20 stakeholders to promote mathematics collaboration
7. Determine K-12 standards alignment to postsecondary courses
8. Professional development
9. Foundational skills modules for high school and postsecondary students
10. Increase availability of advising resources
11. Ensure parents/guardians are informed of how to support and advise high school students into mathematics pathways.

https://www.floridacollegesystemfoundation.org/fssc-math-redesign

FDOE Data Resources

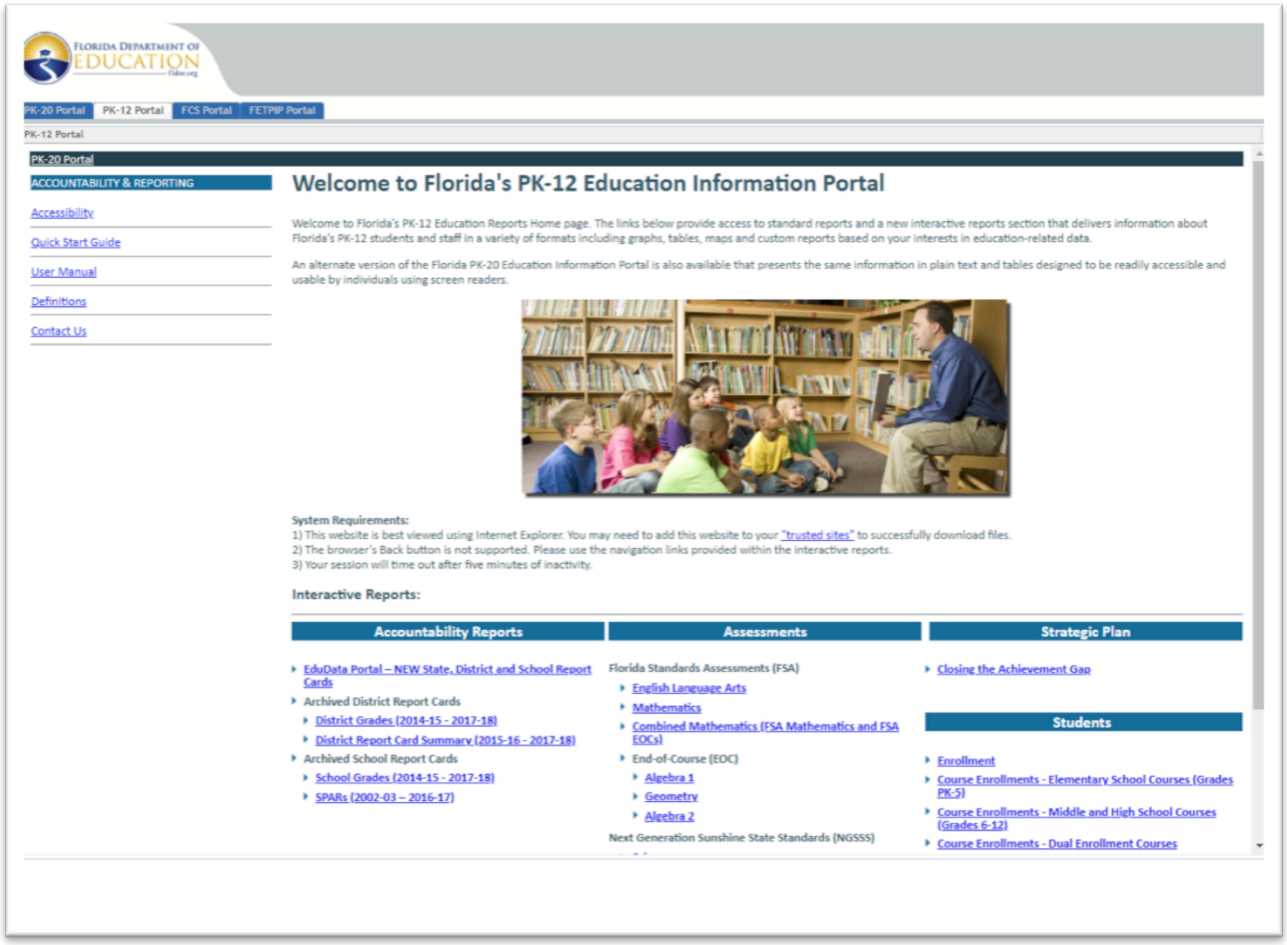
EduData Portal

https://edudata.fldoe.org/



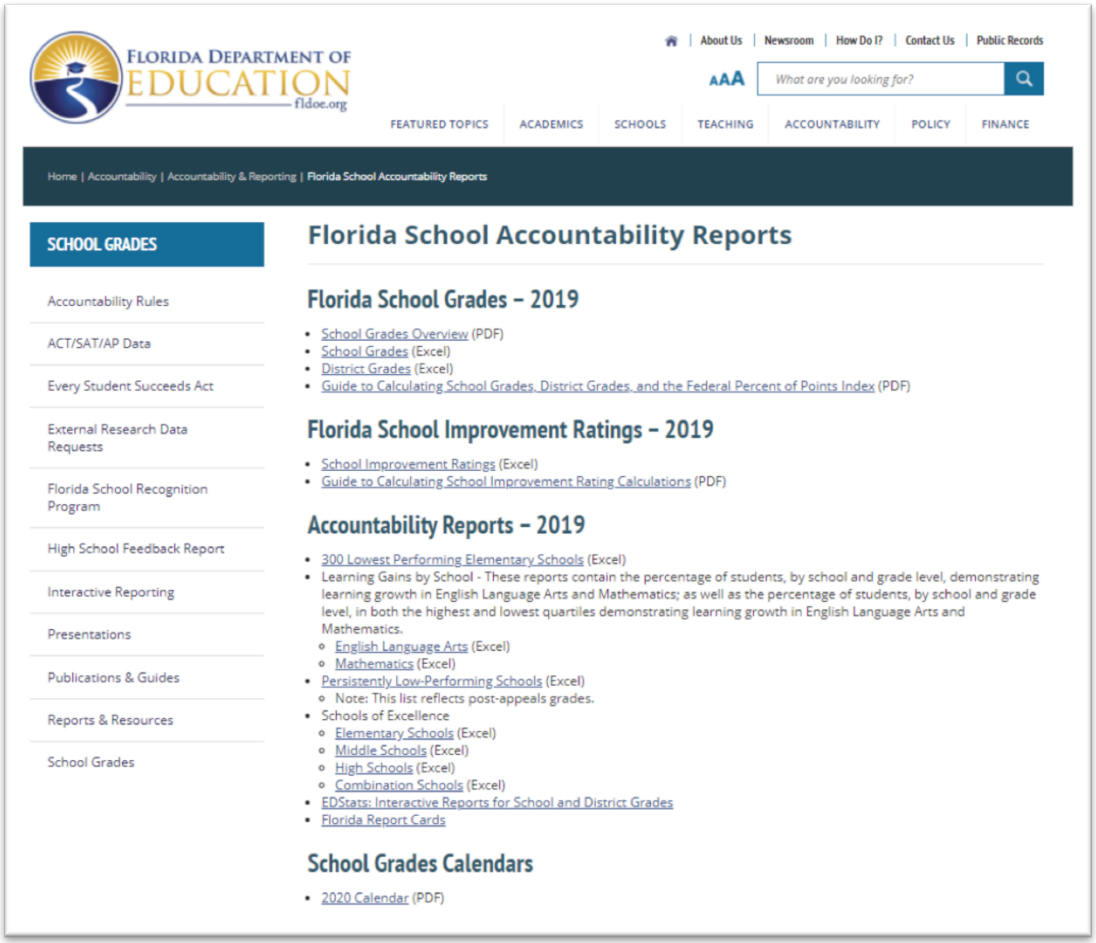
EDStats

https://edstats.fldoe.org/SASPortal/public

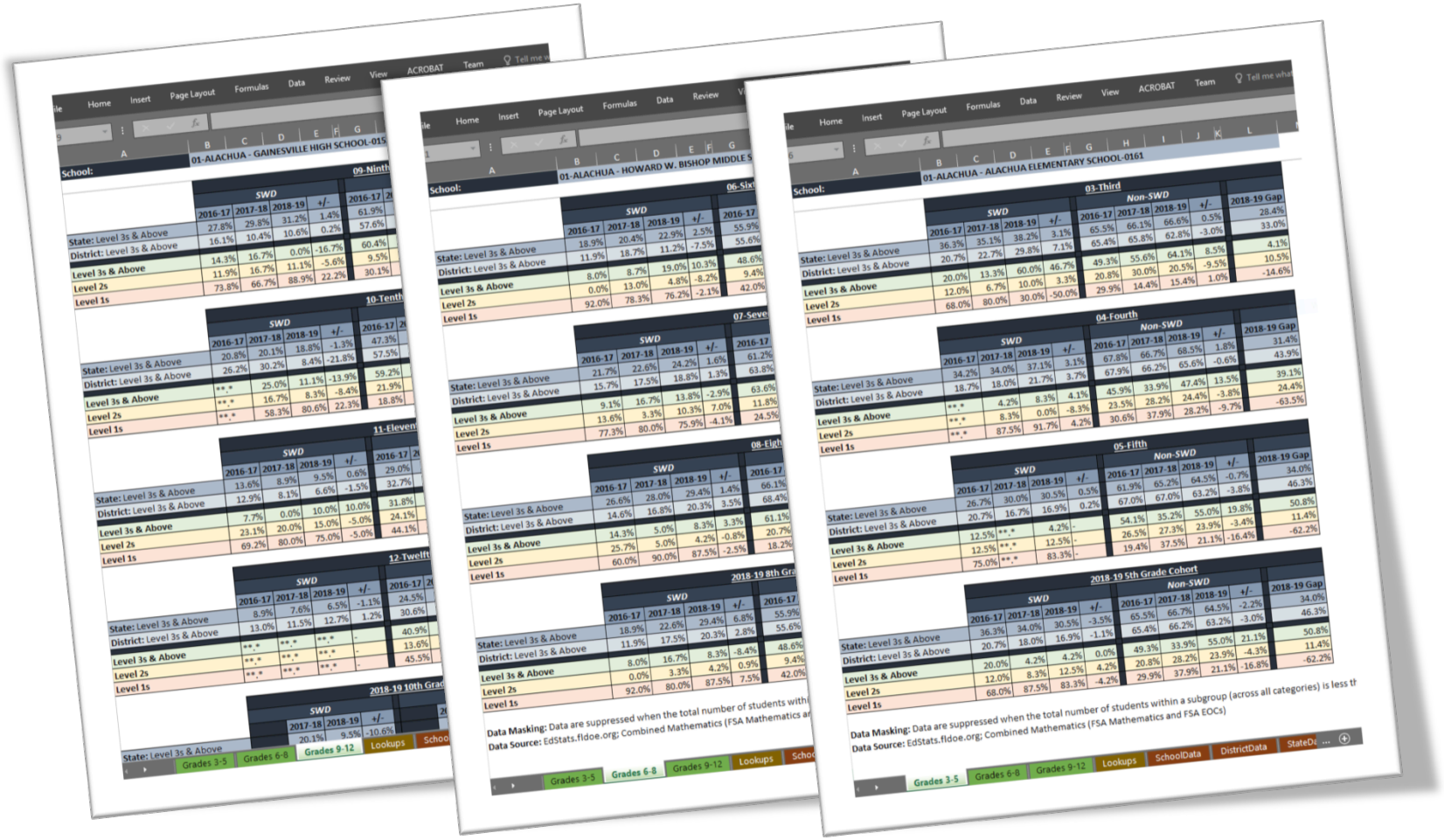


Florida School Grades

http://www.fldoe.org/accountability/accountability-reporting/school-grades/



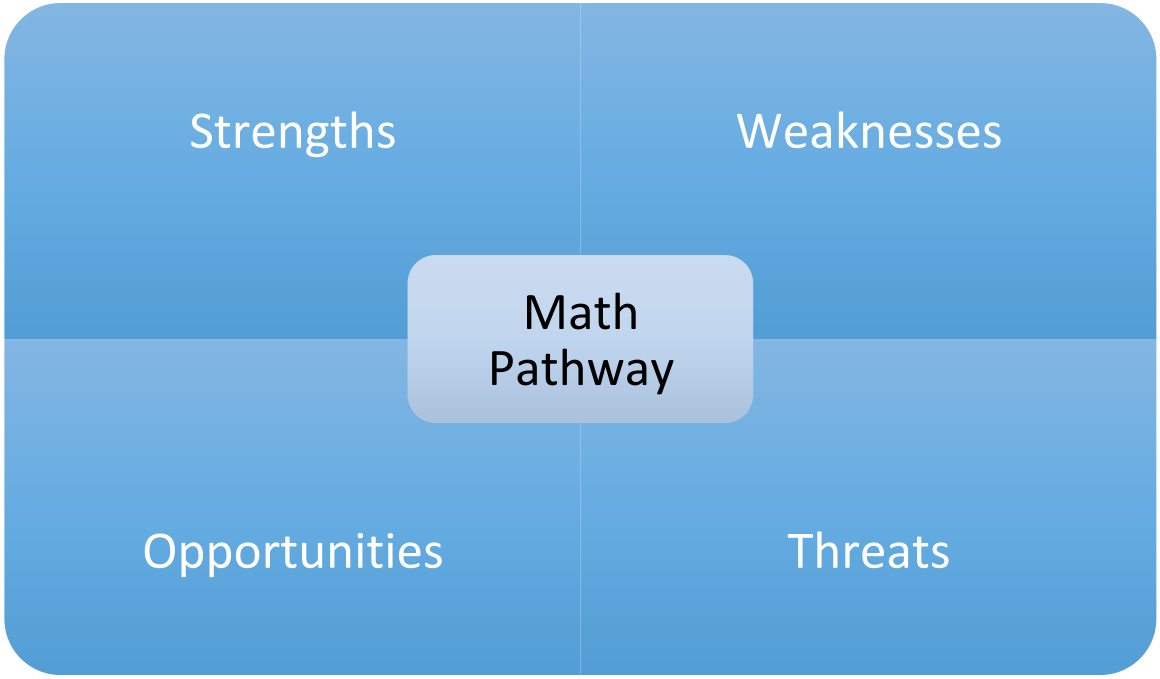
School Report Card (Excel workbook)



Closing

Tween Work

- Create your SWOT with your data team.
- Reflect on your SWOT with your data team.
  - What changes would you consider to strengthen the weaknesses within your math pathways?
  - How can you capitalize on the opportunities and eliminate the threats?



- https://www.floridacollegesystemfoundation.org/fssc-math-redesign
- https://edudata.fldoe.org/
- https://edstats.fldoe.org/SASPortal/public
- http://www.fldoe.org/accountability/accountability-reporting/school-grades/
- https://ies.ed.gov/ncee/edlabs/regions/midatlantic/app/Docs/technicalassistance/Data_Use_Infographic.pdf

zoom

Wednesday Webbie #4

January 20th (3:30 - 4:30pm EST)

“Focus Your Goals”

SCAN ME

Earn 10 CEUs

Math Action Plan

Collaborative Team Members:				Data Resources:			
	Frequency of Review	Person(s) Responsible (include the individual that is responsible for follow-up)	Sharing Data with Parents	Analysis			
				Strength	Need to Work On	Focused Goal	Parent Role
District Level Data							
School Level Data							
Grade Level Data							
Classroom Level Data							
Student Level Data							

Supervisor Signature: _____ Date: _____

- FL Department of Education
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  - Bureau of Standards and Instructional Support
    - Courtney.Starling@fldoe.org
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    - schmitgesh@duvalschools.org (Henry Schmitges)
- FL Inclusion Network (FIN)
    - Caren.prichard@paec.org
- FL State Personnel Development Grant (SPDG)
    - medicic@pcsb.org (Cindy Medici)
- Problem Solving/Response to Intervention Project (PS/RtI)
  - Student Support and Academic Achievement Unit
    - srobertson@usf.edu (Shelby Robertson)
  - Technology Learning Connections Unit
    - tjeffs@usf.edu (Tara Jeffs)

Objectives

- Understand the components of Key Practice 1 from the *What Matters Most: Key Practices Guide*
- Learn from colleagues how data is used for course placement (elementary to middle, middle to high, high to post-secondary) and how it can affect a student's math pathway K-20
- Use FDOE data resources to identifying trends to facilitate conversations about successes and barriers to assist in problem-solving areas of need.

Evaluation

- If there are any questions that were rated less than (4), please offer suggestions on how we could improve.
- Your thoughts matter to us. What additional comments or suggestions do you have?

The recording link will be available at:

https://bit.ly/2RsYEz1

Thank you!