WEBINAR

Maximizing math instruction: How to use assessment data for differentiation and growth

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Before we begin

- 45-minute presentation, 15 minutes for Q&A
- Listen mode only
- Submit questions via the Q&A box
- Recorded and sharable
- Short survey at the end

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Today’s Topics

- Reflecting on educators’ own relationship with math content
- Key strategies for effective classroom differentiation
- Understanding and utilizing student data
- Improving teacher-student connections in math education
- Addressing achievement gaps with data-driven insights

How would you describe yourself in relation to math?

1. I am **TOTALLY** a math person
2. I'm on my way to becoming a math person
3. I want to be a math person, but not sure how
4. I am **NOT** a math person

What's your "Math Story"?

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Quick Write Self Reflection

How did you become a Math educator?

Were you always a "Math person"?

Teaching Practice Reflection

What is your approach to data in planning your Math lessons?

What is DIFFERENTIATION?

"...a variety of ways teachers can tailor instruction to provide all kids the optimal chance to be successful."

— me in a Teach. Learn. Grow blog

"a habitual, evergreen best practice that employs a variety of creative tools and strategies to reach each student at their individual potential."

— me to a colleague over coffee

"the connective tissue that fuses content, products, processes, and the individual for access to and the advancement of learning."

— me in my car to no one

Three Non-Negotiables of Differentiation

Complete understanding of your students.

Complete understanding of your content.

Complete understanding of your data.

Know Your Students

Well-being

Learner context*

Academic information

Social and behavioral evidence

Demographics

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Know Your Content

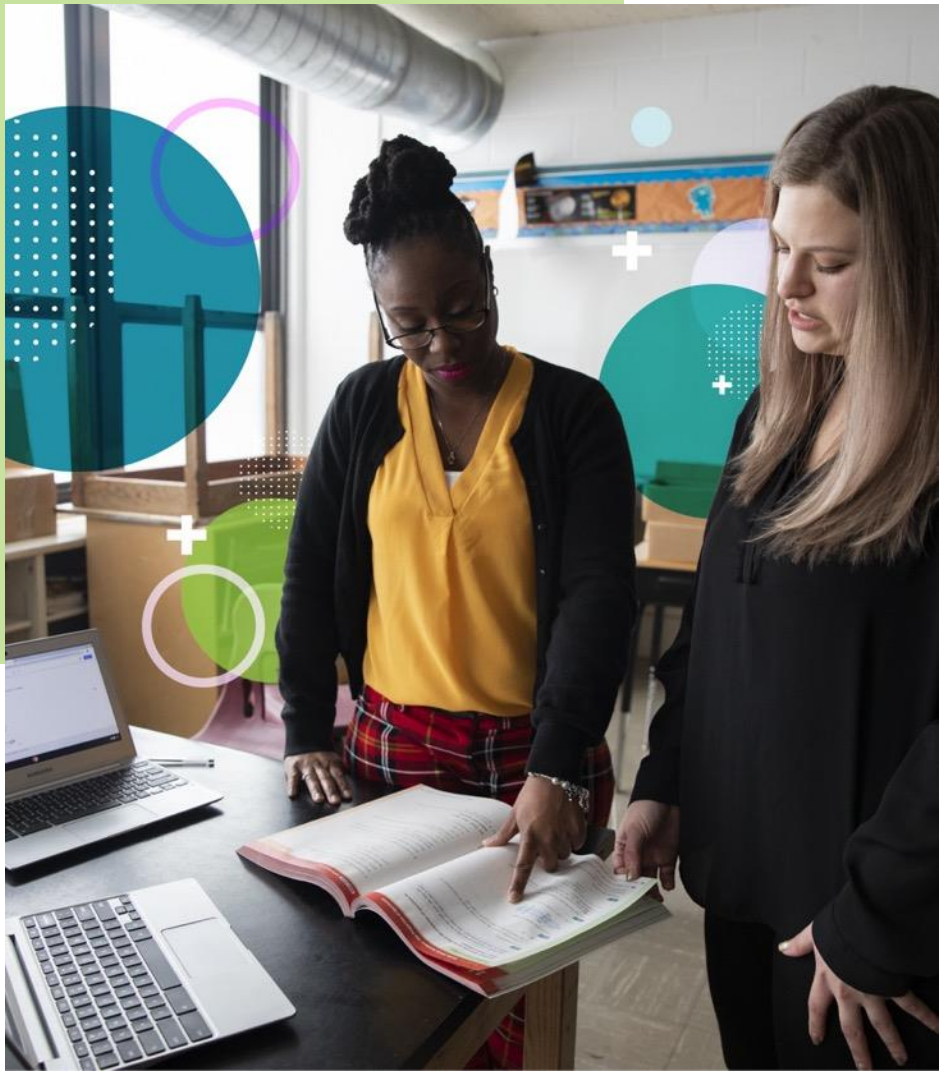
Knowing your content so that you understand a student's **trajectory of success** from skill to skill.

Being able to **predict obstacles** as well as **opportunities** in the learning.

Possessing an **ongoing interest** and **curiosity** in your content.

Being able to articulate no only the **depth**, but also the **breadth**, of your standards.

Understanding the **relationship** among standards and the evolution of **domains-** the way they **build** upon and **enhance** each other within and across grade levels.



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Know Your Content

Formative assessment is a process of assessing and reflecting, often and with intention. The assessments you administer- unit exams, class tests, exit tickets- provide the opportunities for reflection, change, and the evidence of success or need.

Knowing not only **what to assess**, but **when** and **how** so that you get the data most appropriate for your desired outcome.

Being able to **speak to**, with **fluency**, your students complex and varied **metrics: interim assessment data, state proficiency “cut” scores, informal observations.**

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How does MAP Growth Data Inform Math Differentiation?

FLEXIBLE GROUPING

- Temporary working groups
- Focus on specific skill or activity
- Heterogeneous or homogenous
- Change often based on learning objective

PERSONALIZED SUPPORT

- Identify strengths and areas of focus
- Better understand student needs
- Provide tailored supplemental support connected to core instruction

Three **ESSENTIAL** Reports For Math

CLASS PROFILE INSTRUCTIONAL AREA

Quickly identify the academic diversity of a class in each math instructional area.

Can be used to support whole group instruction or forming flexible groups.

STUDENT PROFILE REPORT

Brings together all the data needed to advise each student and support their growth.

Helps teachers track growth over time and spot trends in instructional readiness.

LEARNING CONTINUUM

Improve your understanding of what class or group trends in areas of relative strength and need mean for your term or unit planning.

Provides starting point for formative assessments.

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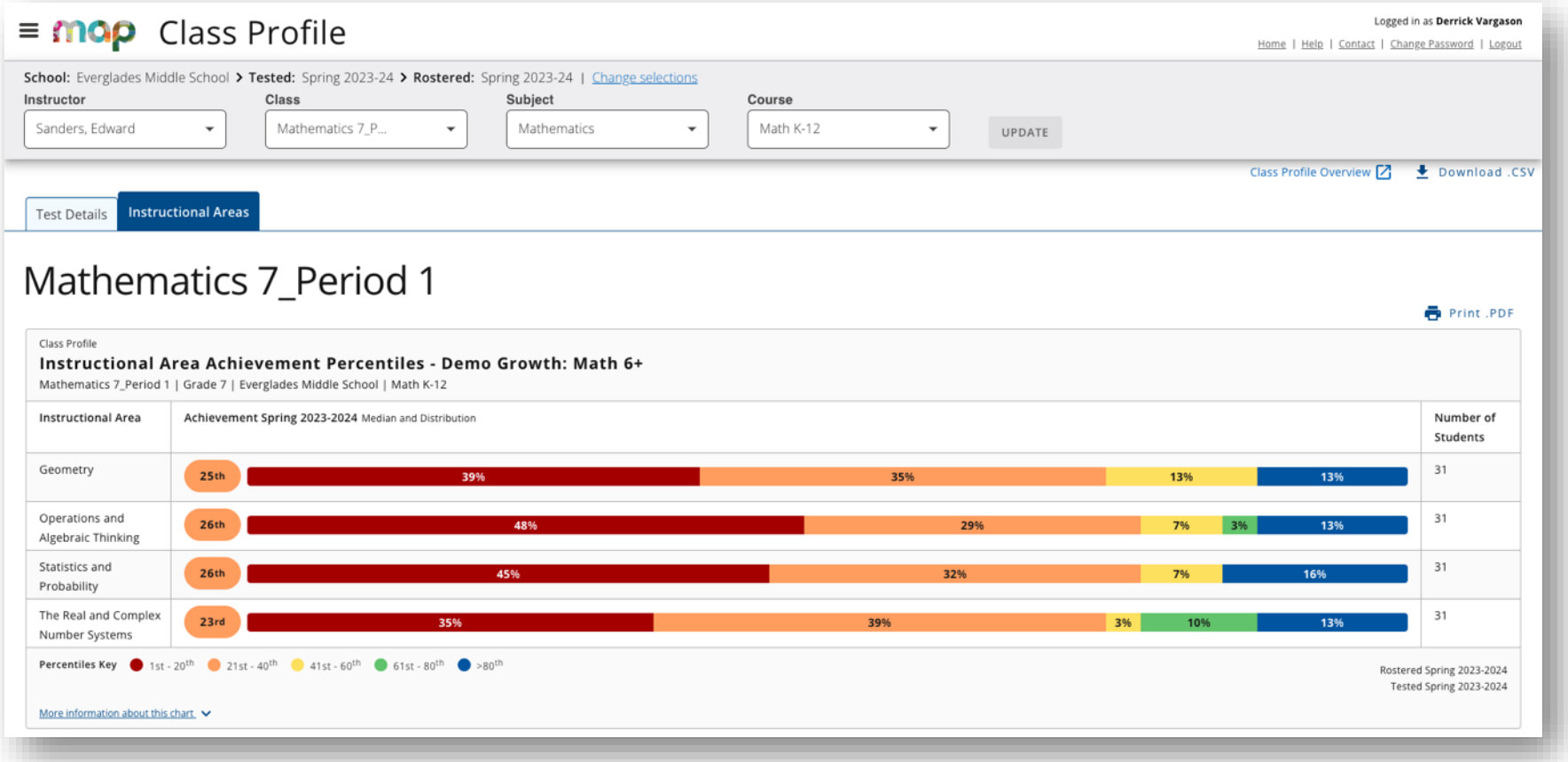
Class Profile



Class Profile

Students Grouped by Instructional Area Scores - Demo Growth: Math 6+

Mathematics 7_Period 1 | Grade 7 | Everglades Middle School | Math K-12

Instructional Areas

Geometry

181-190 (1 student)	191-200 (2 students)	201-210 (7 students)	211-220 (11 students)	221-230 (5 students)	231-240 (1 student)	241-250 (1 student)	251-260 (0 students)	261-270 (2 students)	271-280 (1 student)
Mitchell, Kathy 188	Guerrero, Sherry 194	Scott, Elizabeth 208	Carr, Marion 218	Alvarado, Chelsea 225	Ward, Brandon 231	Haller, Altagracia 247		Kelly, Frank 266	Adams, Paul 272
	Jones, Cheryl 194	Griffin, Scott 207	Moran, Kim 216	Roberts, Jason 225				Sanchez, Joan 264	
		Maldonado, Brendan 207	Watson, William 216	Chu, Jamey 223					
		Barton, Bernadette 203	Harris, Christopher 215	Fletcher, Agnes 222					
		Davis, Philip 203	Lewis, Robert 215	Lee, Jesse 222					
		Mcdaniel, Cathy 202	Hodges, Denise 214						
		Wood, Gerald 202	Paul, Hugo 213						
			Powell, Jessica 213						
			Jenkins, Christine 212						
			Lowe, Andrew 211						
			Reed, Cheryl 211						

View standards for this instructional area in the Learning Continuum

More information about this chart

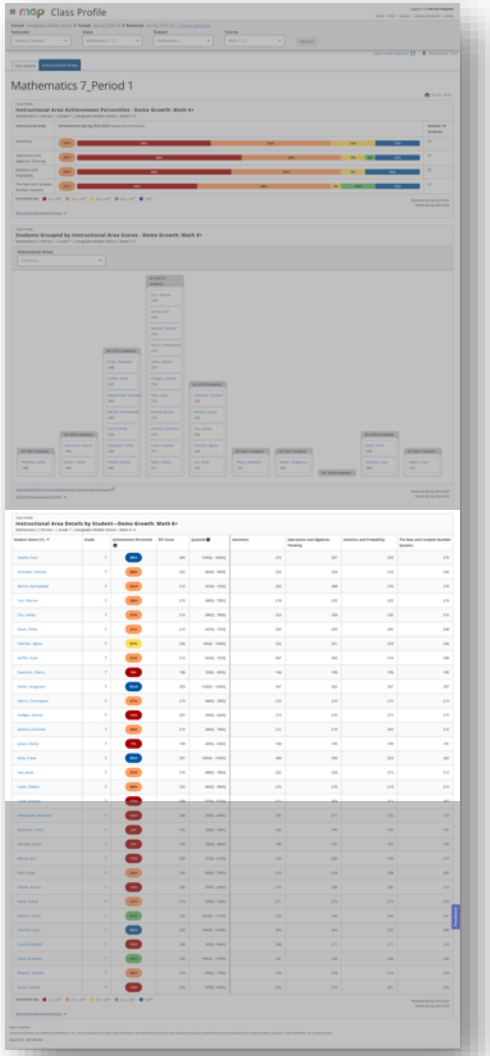
Rostered Spring 2023-2024
Tested Spring 2023-2024

Class Profile

Instructional Area Details by Student—Demo Growth: Math 6+

Mathematics 7_Period 1 | Grade 7 | Everglades Middle School | Math K-12

Student Name (31) ↑	Grade	Achievement Percentile	RIT Score	Quantile	Geometry	Operations and Algebraic Thinking	Statistics and Probability	The Real and Complex Number Systems
Adams, Paul	7	98th	265	1545Q - 1645Q	272	267	259	275
Alvarado, Chelsea	7	40th	222	800Q - 900Q	225	229	216	230
Barton, Bernadette	7	22nd	212	625Q - 725Q	203	208	216	210
Carr, Marion	7	26th	215	680Q - 780Q	218	220	222	216
Chu, Jamey	7	27th	215	680Q - 780Q	223	208	206	215
Davis, Philip	7	21st	212	625Q - 725Q	203	205	205	208
Fletcher, Agnes	7	57th	230	940Q - 1040Q	222	221	229	234
Griffin, Scott	7	21st	212	625Q - 725Q	207	205	216	206
Guerrero, Sherry	7	5th	196	350Q - 450Q	194	199	199	190
Haller, Altagracia	7	92nd	253	1335Q - 1435Q	247	262	247	257
Harris, Christopher	7	27th	215	680Q - 780Q	215	216	210	213
Hodges, Denise	7	14th	207	540Q - 640Q	214	210	215	215
Jenkins, Christine	7	26th	215	680Q - 780Q	212	219	205	212
Jones, Cheryl	7	7th	199	405Q - 505Q	194	195	199	191
Kelly, Frank	7	95th	257	1405Q - 1505Q	266	256	253	262
Lee, Jesse	7	27th	215	680Q - 780Q	222	220	215	212
Lewis, Robert	7	40th	222	800Q - 900Q	215	216	219	213



Student Profile

COMPARISONS

GROWTH & ACHIEVEMENT MEASURES

Norms Percentile		Quadrant Chart
GROWTH Above Mean 89TH	ACHIEVEMENT Above Mean 61ST	High Growth High Achievement

PROJECTIONS

	Projected result for tests
Below Proficient	MAP Growth Reading & Mathematics If taken in the spring
Not On Track	ACT College Readiness If taken in the spring
Not On Track	SAT If taken in the spring

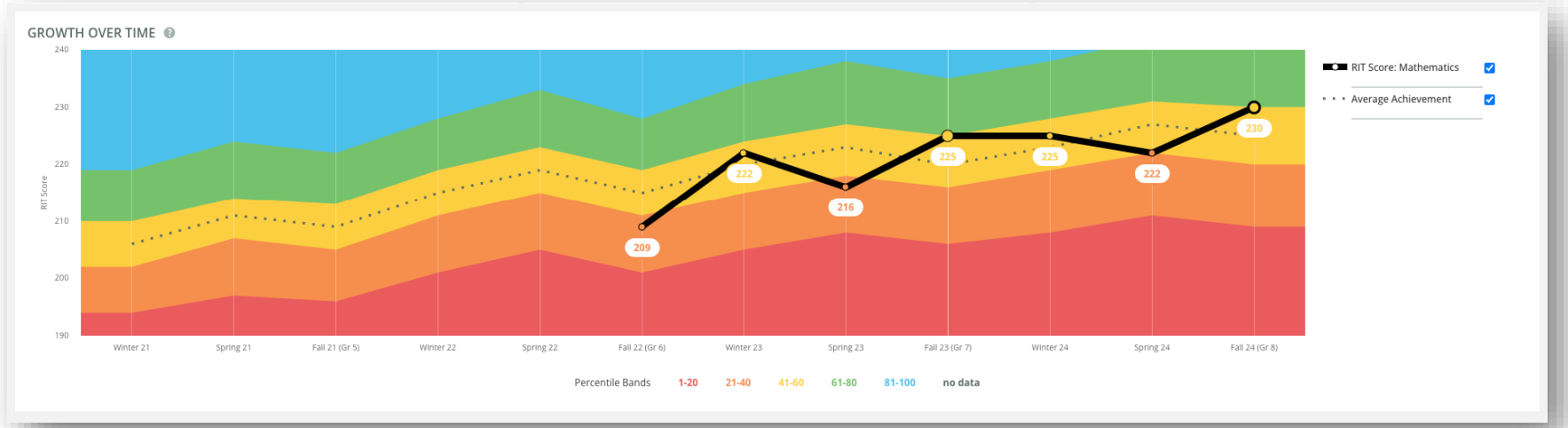
QUANTILE MEASURES

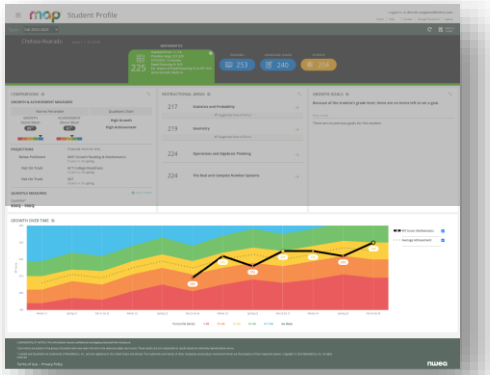
About ranges

Quantile*
850Q - 950Q

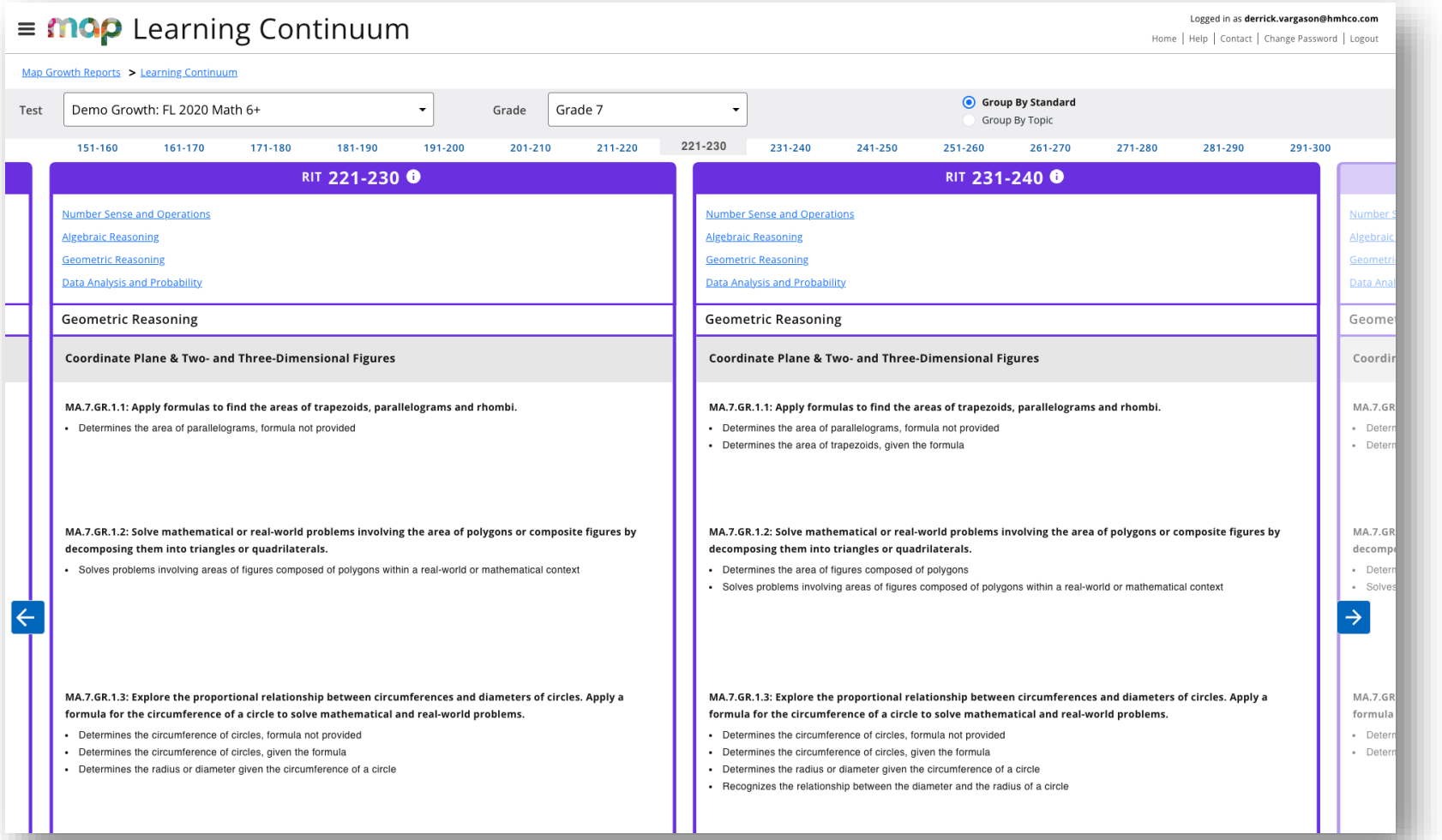
INSTRUCTIONAL AREAS

217	**Statistics and Probability**	*Suggested Area of Focus*
219	**Geometry**	*Suggested Area of Focus*
224	**Operations and Algebraic Thinking**	
224	**The Real and Complex Number Systems**	


GROWTH OVER TIME
240
230
220
210
200
190
RIT Score
Winter 21
Spring 21
Fall 21 (Gr 5)
Winter 22
Spring 22
Fall 22 (Gr 6)
Winter 23
Spring 23
Fall 23 (Gr 7)
Winter 24
Spring 24
Fall 24 (Gr 8)
209
222
216
225
225
222
230
RIT Score: Mathematics
Average Achievement
Percentile Bands
1-20
21-40
41-60
61-80
81-100
no data



Learning Continuum



MAP Growth lives with all of your **Math** assessments, observations, and data to **enhance** the practice of **differentiation** and provide you with a clear, holistic **understanding** of who **your learners** are.

Homework

Student conferences

Social observations

Quizzes

Unit exams

Exit tickets

Student conferences

Scope and sequence

Learning style

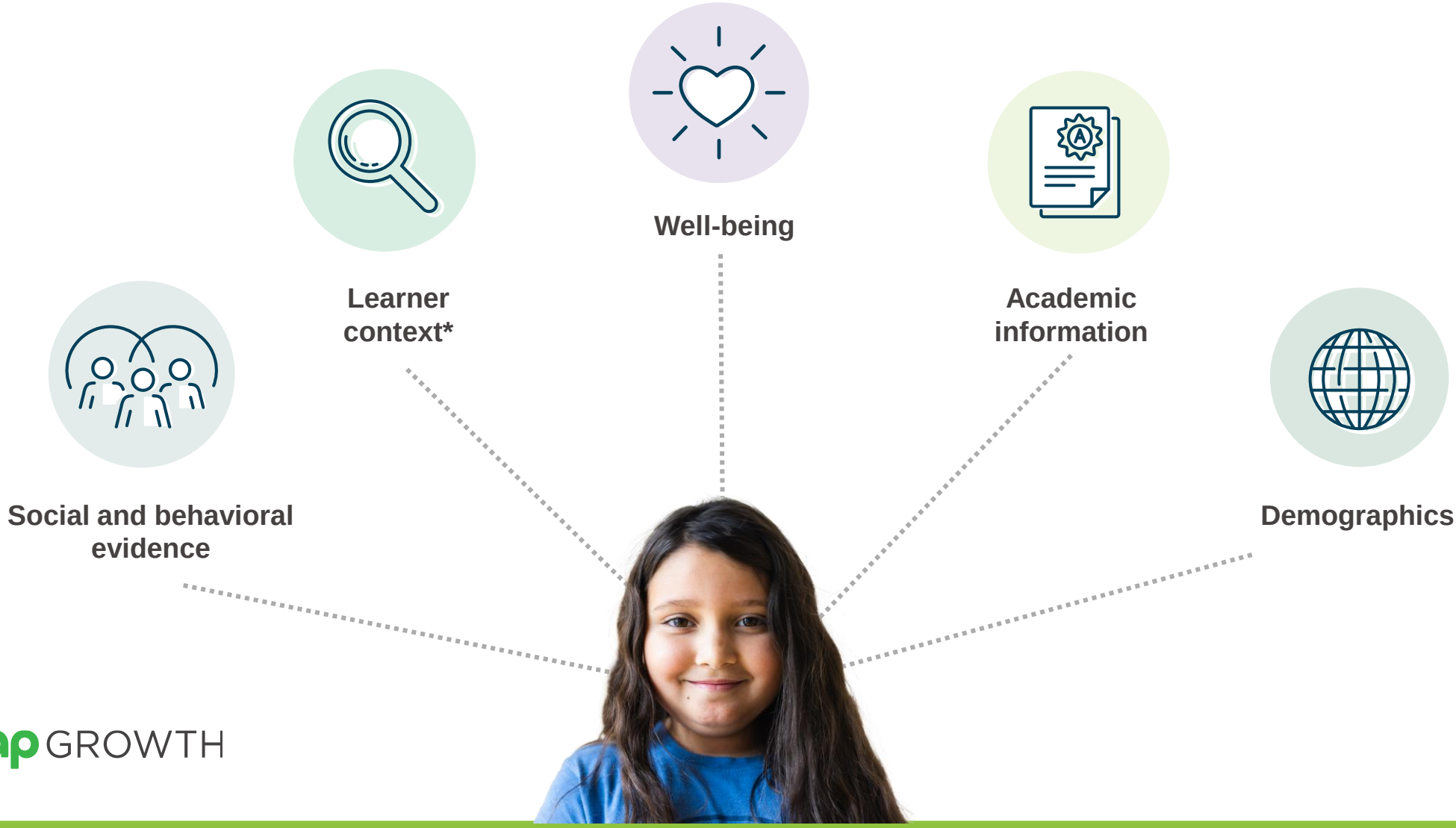
Next Steps for Best Practices

- **Differentiation** is an **evergreen best practice**. A lifelong skill worth developing **for** both **school leaders** and **teachers**.

- The more we embrace differentiation, the more confident and inspired our Math classrooms will be.

- Eventually, it will become a **habitual** best practice and **manifest seamlessly** and instinctually in your planning, instead of feeling like an overwhelming must-do.

Let’s come back to the students…



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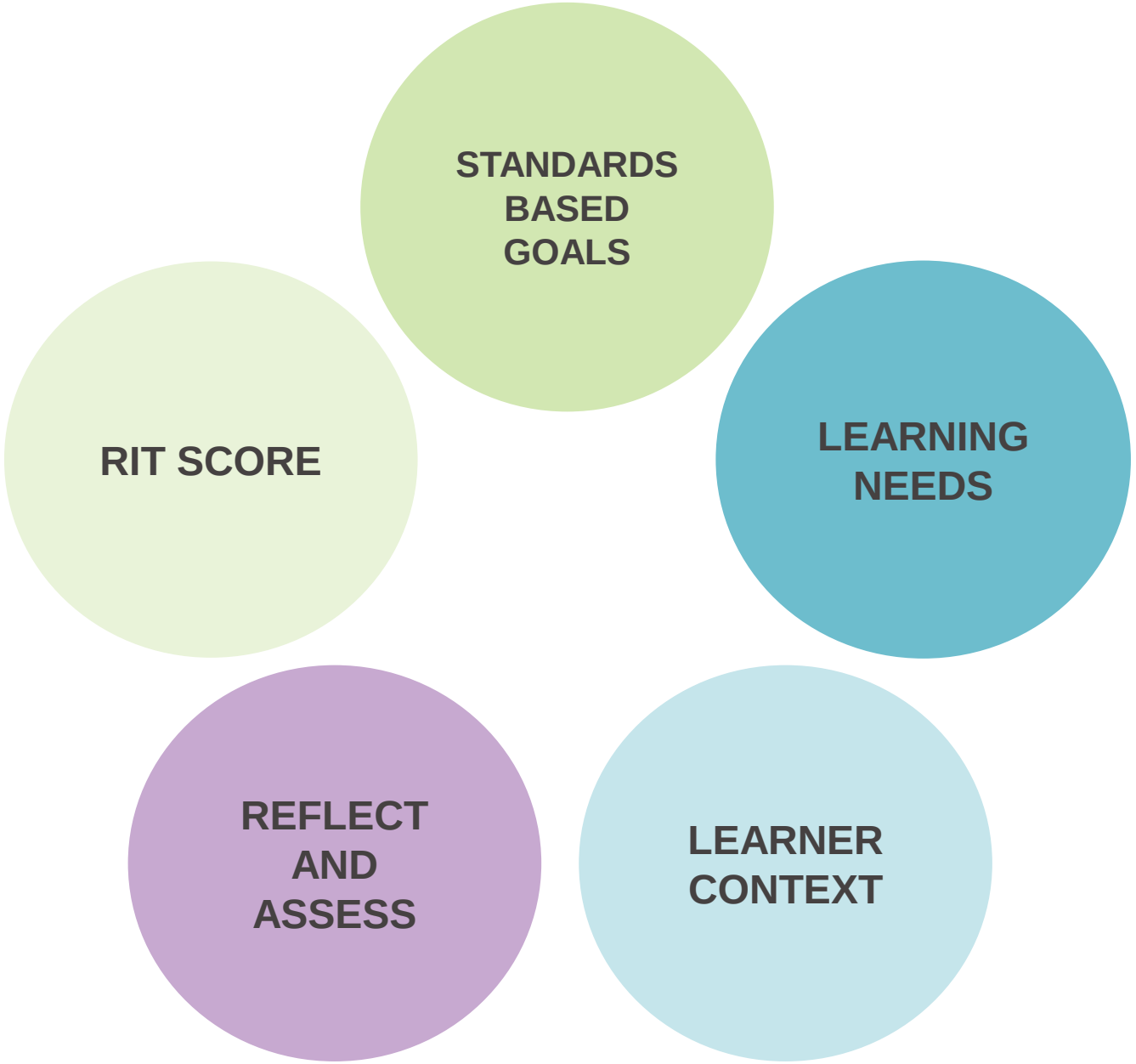
STANDARDS BASED GOALS
LEARNING NEEDS
LEARNER CONTEXT
REFLECT AND ASSESS
RIT SCORE

Get started.

Keep going.

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- Don’t be afraid to lean into the unique, colorful identities of your students.
- Meet them where they’re at in authenticity and bring your full self to the classroom. Students benefit from seeing problem solving, metacognition, productive struggle modeled. Break through the fourth wall.
- Data in small doses.
- Genuine, authentic relationships with students.
- Confidence in content.


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Questions?

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Thank you!

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