

# Bridging the Data Divide: Building a Sustainable Tech Culture to Engage Data Driven Instruction

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The bottom of the slide features a decorative graphic consisting of several overlapping, wavy lines in various shades of blue and white, creating a sense of movement and depth.

# The Future is Now!

"We won't experience 100 years of progress in the 21st century – it will be more like 20,000 years of progress (at today's rate)"

~Ray Kurzweil



# The New “Reality”



# re·al·i·ty

## re·al·i·ty

1. the world or the state of things as they actually exist, as opposed to an idealistic or notional idea of them
2. the state or quality of having existence or substance

# re·al·i·ty

## Origin



late 15th century: via French from medieval Latin *realitas*, from late Latin *realis* 'relating to things'

# Tech Trends in Education

- ★ Long-Term Trends for Five or More Years
  - Redesigning Learning Spaces
  - Rethinking How Schools Work
- ★ Mid-Term Trends for Three to Five Years
  - Collaborative Learning
  - Deeper Learning Approaches
- ★ Short Term Trends for the Next One to Two Years
  - Coding as a Literacy
  - Students as Creators



Think, Pair, Share

What trends are your district seeing?

Share your plan to implement state of the art tech.

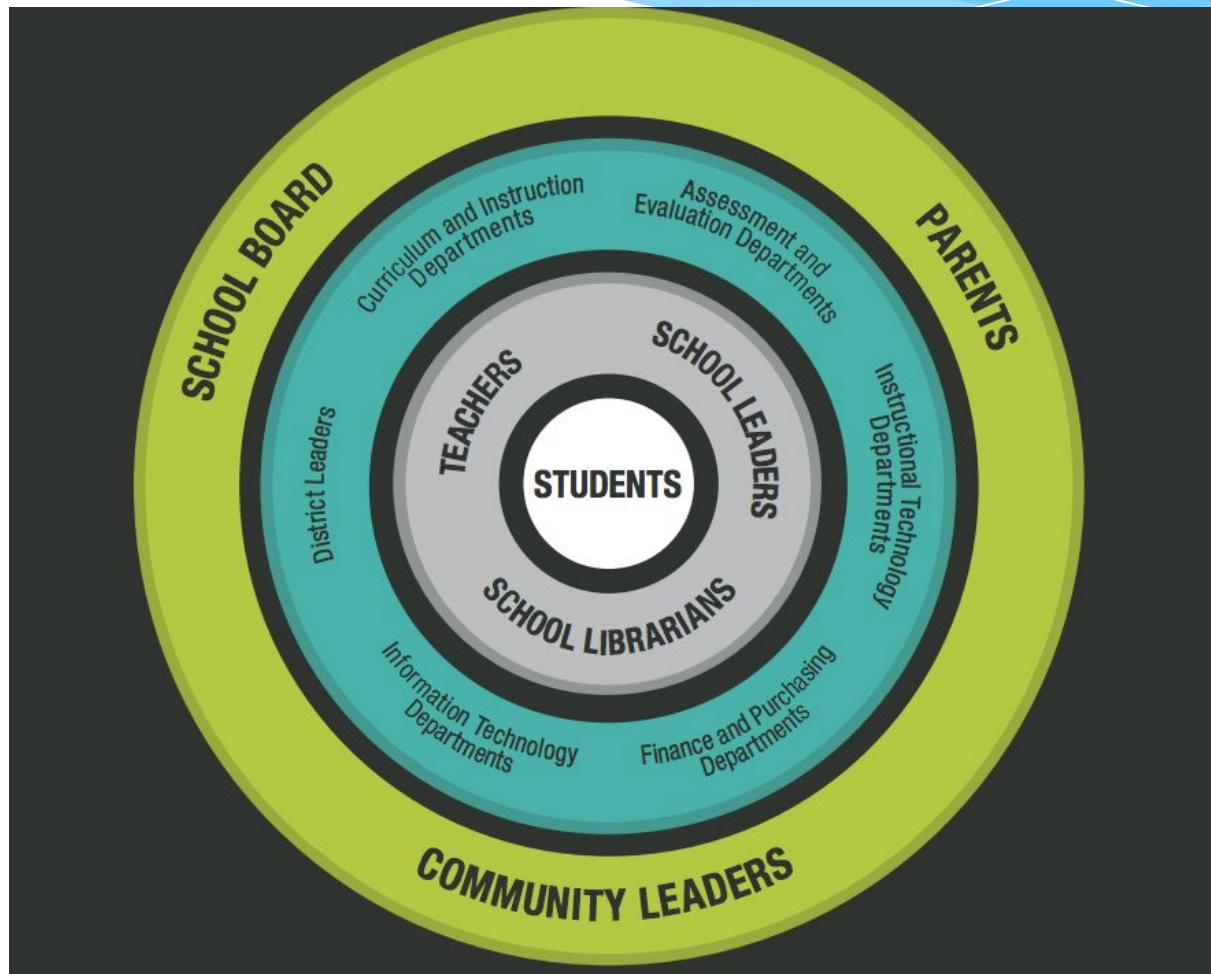
Share a success or a challenge.

# Implementation

- ★ Putting Students First
- ★ Creativity Over Consumption
- ★ Ensuring Teacher Readiness



# Communicating to Stakeholders



# Building the Backbone (and making it sing)

★ Physical Network

★ Professional  
Development

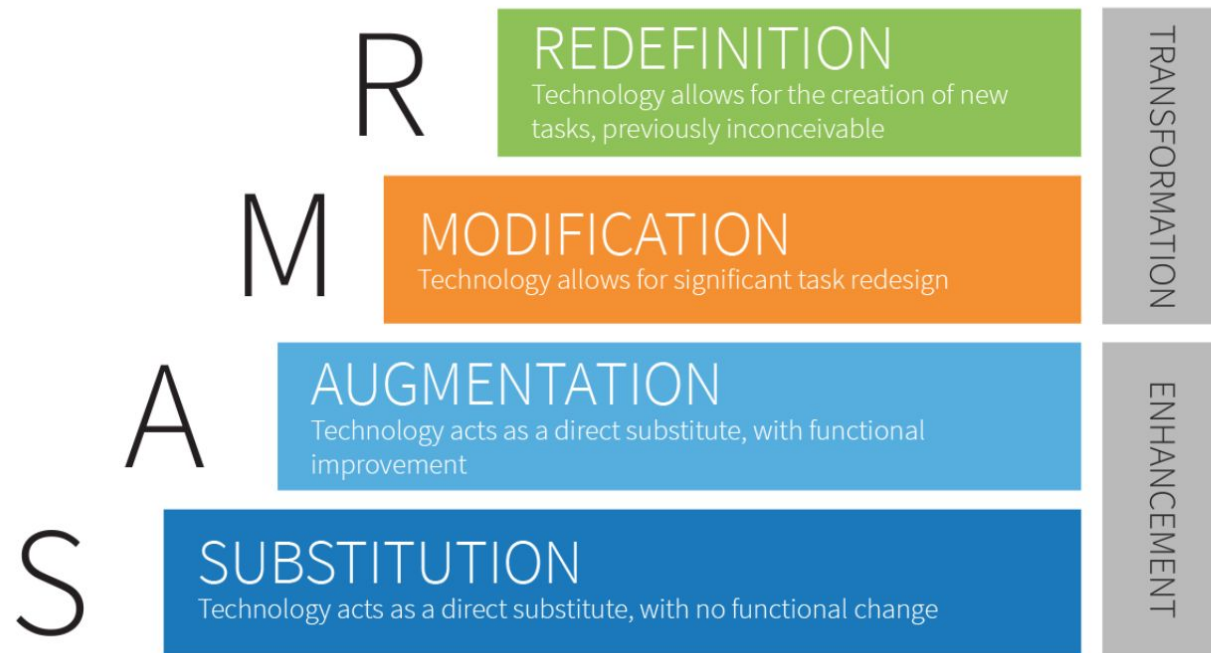


# Developing a Measurable and Understandable Framework (SAMR)

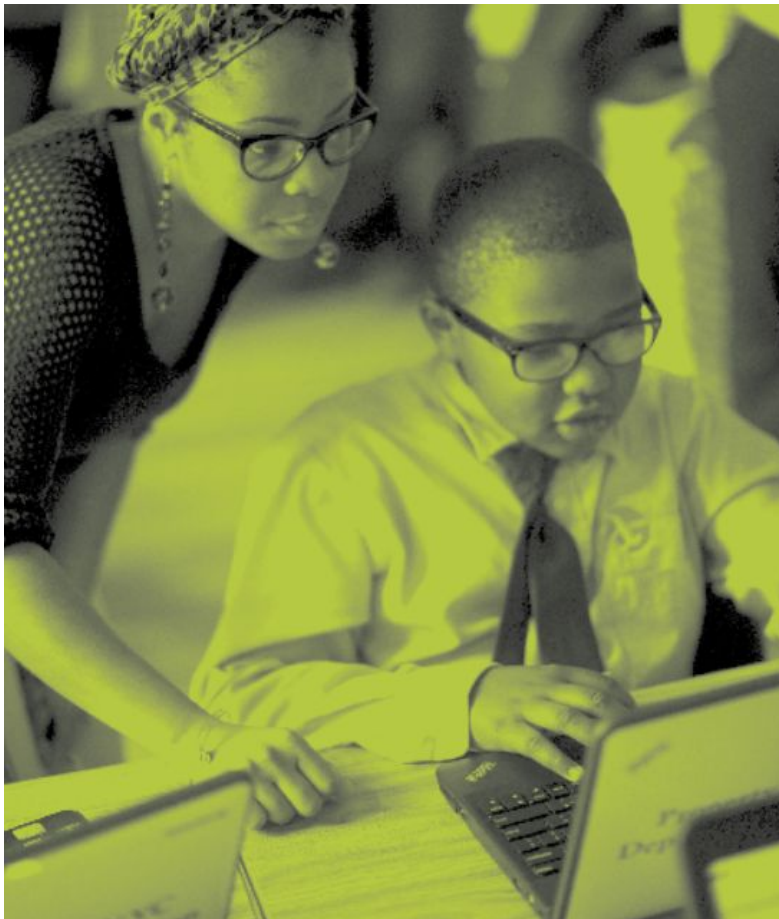
(Substitution~Augmentation~Modification~Redefinition)



# A Brief Review of SAMR



# Use Open Educational Resources (OER)



## THE 5 Rs of OPENNESS

- » **Retain:** The right to make, own and control copies of the content
- » **Reuse:** The right to use the content in a wide range of ways  
*(e.g., in a class, in a study group, on a website, in a video)*
- » **Revise:** The right to adapt, adjust, modify or alter the content itself  
*(e.g., translate the content into another language)*
- » **Remix:** The right to combine the original or revised content with other open content to create something new  
*(e.g., incorporate the content into a mashup)*
- » **Redistribute:** The right to share copies of the original content, your revisions or your remixes with others  
*(e.g., give a copy of the content to a friend)*

# Identify Rock Star Teachers





Think pair share:

What rubric would you/do you use to identify your “rock stars”?

# Sharing the Load

- \* **Build a tech team**
  - \* Administrators, curriculum team members, technologists and tech savvy teachers
- \* **Develop the SAMR Framework**
- \* **Develop a rubric that fits that Framework and make expectations clear (essential questions and understanding)**
- \* **Educate and train your Rockstars**



# Building Out Infrastructure

- ★ Ensuring Interoperability
- ★ Safeguarding Student Privacy
- ★ Selecting the Right Devices
- ★ Maintaining Network Access

# Develop a calendar and a menu

...and make it tasty



# Set Goals and Check In

- \* Check in with your peers
- \* Join a Twitter Chat
- \* Ask to visit another school
- \* Engage in Professional Development that challenges
- \* Make connections and maintain relationships

# Why Data and Data Driven Instruction?

Educators in the most rapidly achieving schools cite data-driven instruction and inquiry as one of the most important factors in helping all students achieve success.

# The Driving Questions All Stakeholders Must Continue to Ask

- Where are we in terms of our goals?
- Where are our students in terms of their college and career readiness?
- How do we get there from here?

# The Why and the When

- Why are we collecting data and why does this data contribute to instructional and student success?
- When should I collect data? How often?
- How often is too often?

# The Data Backbone

- Collection and analysis
- Professional Development



# Developing a Culture of Data Driven Instruction

**Highly active Leadership Team:** facilitate teacher-leader and tech team data analysis meetings after each interim assessment and maintain focus on the process throughout the year



# Developing a Culture of Data Driven Instruction

**Introductory Professional Development:** teachers and leaders are effectively introduced to data-driven instruction—they understand how interim assessments define rigor and experience the process of analyzing results and adapting instruction using tools such as the PAA (Post Assessment Assessment), “Question” in the Google Classroom, Google Form, Kahoot or an Assessment Analysis Sheet

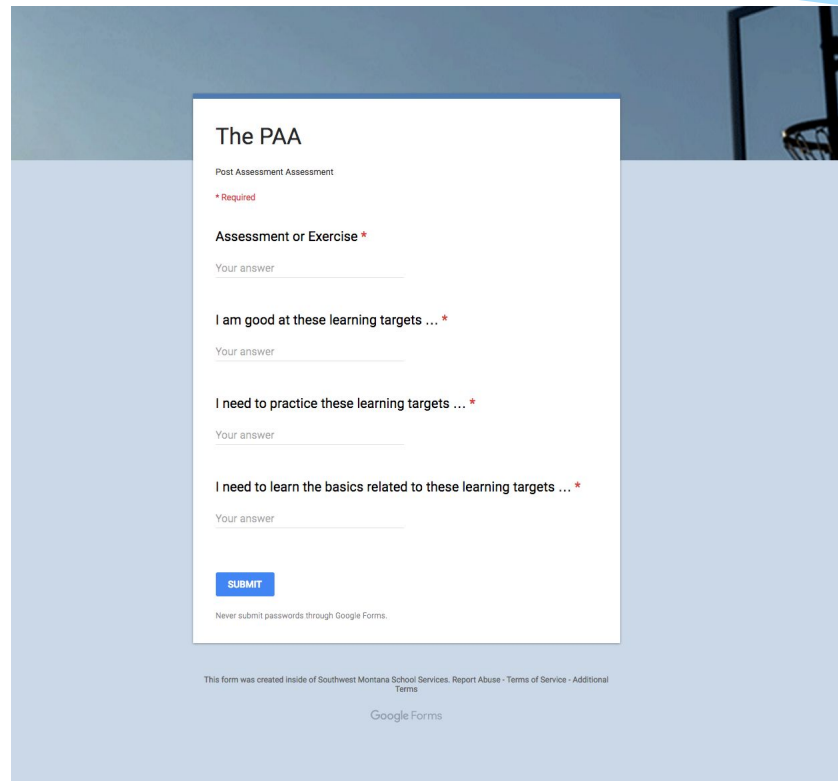
# Let's Play

Take out your device and go to  
Kahoot.it

The Kahoot! logo is displayed in a large, white, bold, sans-serif font with an exclamation point, centered on a blue square background.

**Enter**

# Where tech, data and teachers intersect



**The PAA**

Post Assessment Assessment

\* Required

**Assessment or Exercise \***

Your answer \_\_\_\_\_

**I am good at these learning targets ... \***

Your answer \_\_\_\_\_

**I need to practice these learning targets ... \***

Your answer \_\_\_\_\_

**I need to learn the basics related to these learning targets ... \***

Your answer \_\_\_\_\_

**SUBMIT**

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Google Forms

# Where tech, data and teachers intersect

CUMULATIVE REVIEW OF PROFICIENT STANDARDS —Write the standards you will address with each of the following			
Spiral in HW	Spiral in Do Now	Do Mini-Lesson	Do Now with Mini-Lesson
<b>SMALL GROUP INSTRUCTION:</b> What standards warrant more time for small-group instruction and review?		<b>INSTRUCTIONAL PLAN HOW OR WHEN WILL YOU STRUCTURE SMALL GROUP INSTRUCTION</b>	
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>			

STANDARDS ANALYSIS	ANALYSIS OF WHY STUDENTS DID NOT LEARN IT	INSTRUCTIONAL PLAN- WHAT TECHNIQUES WILL YOU USE TO ADDRESS THESE STANDARDS
<b>WHOLE CLASS INSTRUCTION:</b> What standards warrant more time for whole-class instruction, re-teaching and review?		
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>		
<b>STUDENTS OF MAJOR CONCERN</b>	<b>WHAT THEY NEED MOST HELP WITH?</b>	<b>INSTRUCTIONAL PLAN—WHEN OR HOW WILL THEY GET TUTORING, SUPPORTED ADDRESSED</b>
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>		

# Developing a Culture of Data Driven Instruction

**Implementation Calendar:** Begin school year with a detailed calendar that includes time for assessment creation/adaptation, implementation, analysis, planning meetings, and re-teaching (flexible enough to accommodate district changes/mandates)

# Developing a Culture of Data Driven Instruction

**Ongoing Professional Development:** PD calendar is aligned with data-driven instructional plan: includes modeling assessment analysis/action planning and is flexible to adapt to student learning needs

# Developing a Culture of Data Driven Instruction

**Build by Borrowing:** Identify and implement best practices from high-achieving teachers & tech-forward schools: visit schools/classrooms, share & disseminate resources/strategies

# We can help achieve this!

“The schools and districts that doubled student achievement added another layer of testing—common formative or benchmark assessments. These assessments were designed to provide detailed and concrete information on what students know and do not know with respect to specific learning targets.” (Odden & Archibald, 2009)



# Questions?

