

EdTech in Elementary Schools

Brandon Wilmarth - Director of Educational Technology
Moore Public Schools



Why I'm Here

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Westmoore High
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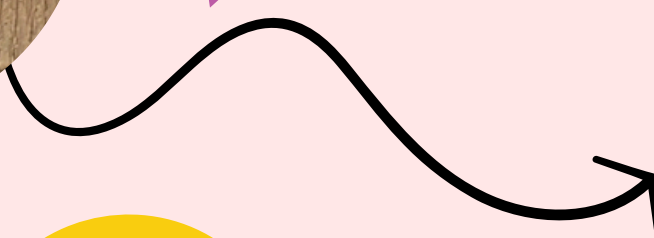


Why This Matters

Technology in schools is a moving target. Devices and apps change quickly. But what doesn't change is our responsibility:

- **to make teaching more effective**
- **learning more accessible**
- **and families more connected.**

Research from RAND found that personalized learning supported by technology leads to significant gains in math and reading achievement (Pane et al., 2015).



Defining “Screens”



Screen Time Comparison

CoSN. (2025). Screens in Balance: The Blaschke Report. Consortium for School Networking

At-Home Entertainment	Smart Phone/Social Media	EdTech
Includes TV, video games, streaming apps	Designed for maximum time-on-screen Ad revenue model	Supplement to teaching , not a replacement
Can be positive for family time (e.g., co-viewing, discussion)	Primarily passive scrolling or consumption	Active participation : reading practice, problem-solving, collaboration
Should be limited and balanced with offline play, sleep, and activity	Distracts from learning, little to no instructional value	Success depends on teacher training + alignment with curriculum



Technology is an Enhancer

Technology itself is neutral—it's the way it's used that matters. In the hands of a skilled teacher, EdTech becomes an enhancer: making lessons more interactive, engaging students in active learning, and supporting those who need extra help. But without purpose or training, the same tools can distract or disengage. Our goal is to ensure every minute of classroom screen time is intentional, guided, and connected to learning.

Source: Masiello et al., 2023; Niederhauser & Howard, 2018; OECD, 2015/2019; Hattie, 2009/2017

What Does This Look Like?

123 Solve the addition problems and match the answers.

$3+2=$	♥ 5
$2+2=$	♥ 4
$5+1=$	♥ 6
$2+1=$	

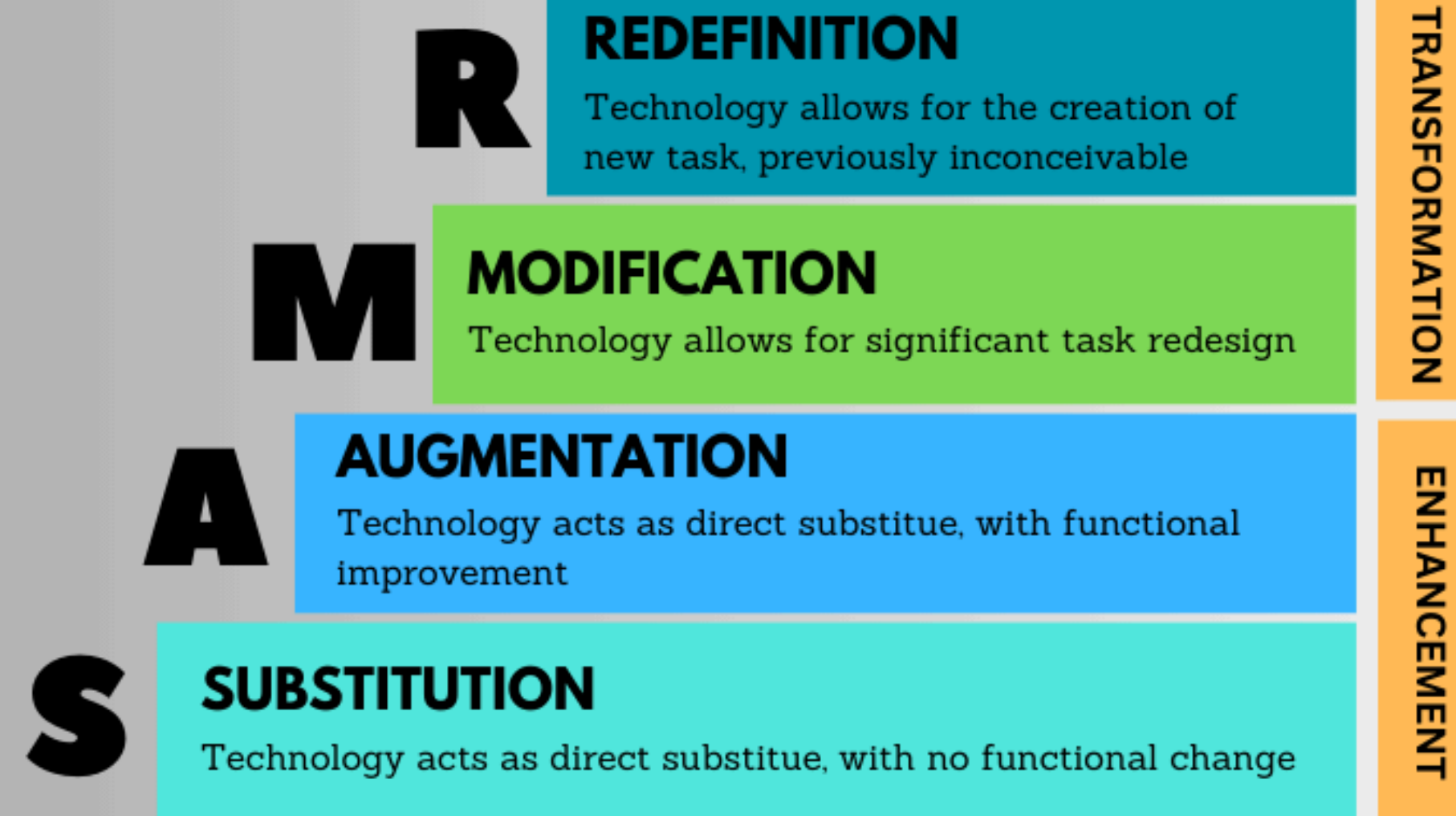


The illustration shows a young child with dark skin and hair, wearing a light blue t-shirt with a heart on it. The child is surrounded by several small pink hearts and confetti. A large pink heart with the number 3 inside is positioned above the child.

So How Do We Know EdTech is Effective?



SAMR MODEL



Adapted from Dr. Ruben Puentedura's SAMR Model

So How Do We Know EdTech is Effective?

R EPLACES

Technology sustains current practice without making meaningful changes to the learning activity.

A MPLIFIES

Technology incrementally improves the learning activity in ways that may result in some improvements in learning outcomes.

T RANSFORMS

Technology fundamentally changes the learning activity in ways that may result in significant improvements in learning outcomes.

So How Do We Know EdTech is Effective?

Extend

Does the technology create opportunities for students to learn outside of their typical school day?

Does the technology create a bridge between school learning and everyday life experiences?

Does the technology allow students to build grit skills, that they can use in their everyday lives?

Enhance

Does the technology tool aid students in developing a more sophisticated understanding of the content.

Does the technology create scaffolds to make it easier to understand concepts or ideas

Does the technology allow students to demonstrate their understanding of content that they could not do traditionally

Engage

Does the technology allow students to focus on the assignment or activity with less distraction

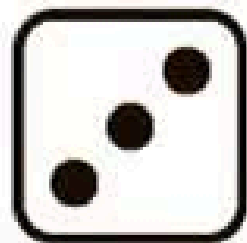
Does the technology motivate students to start the learning process

Does the technology cause a shift in the behavior of the students, where they move from passive to active learners

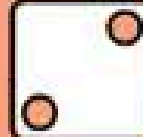
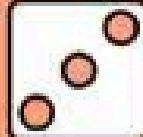
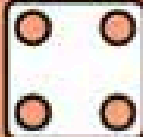
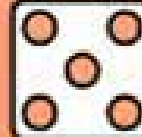
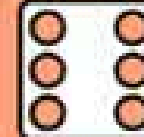
So Does This “Enhance”?



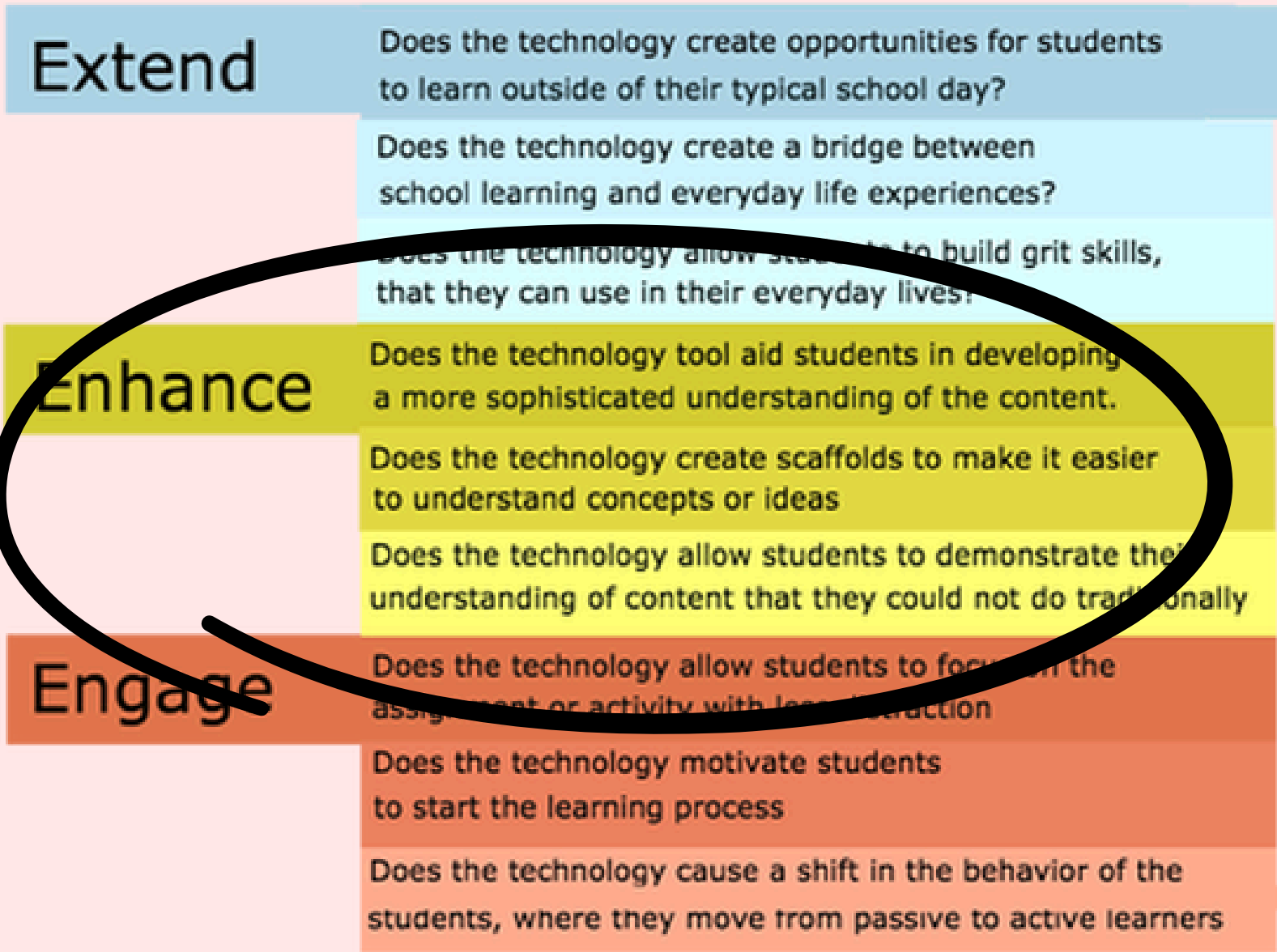
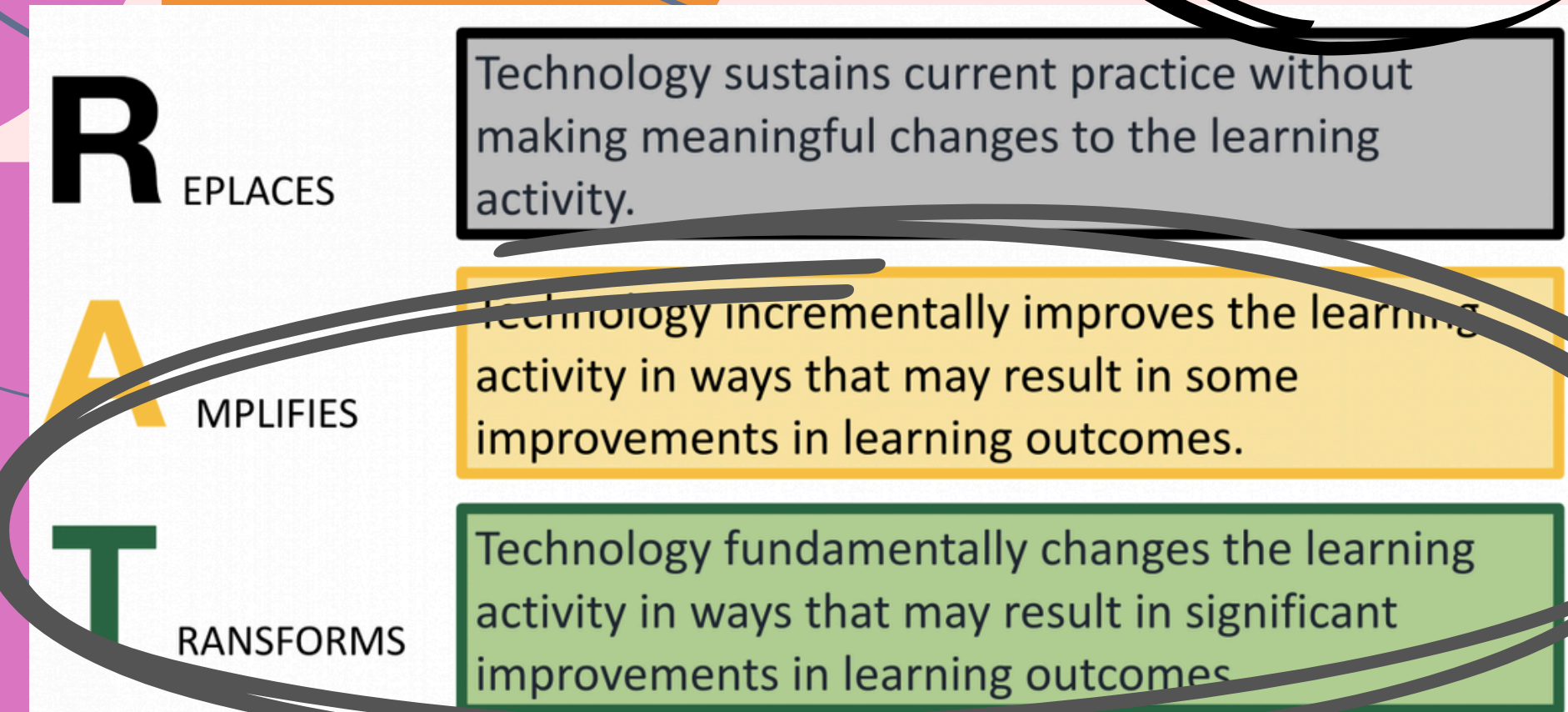
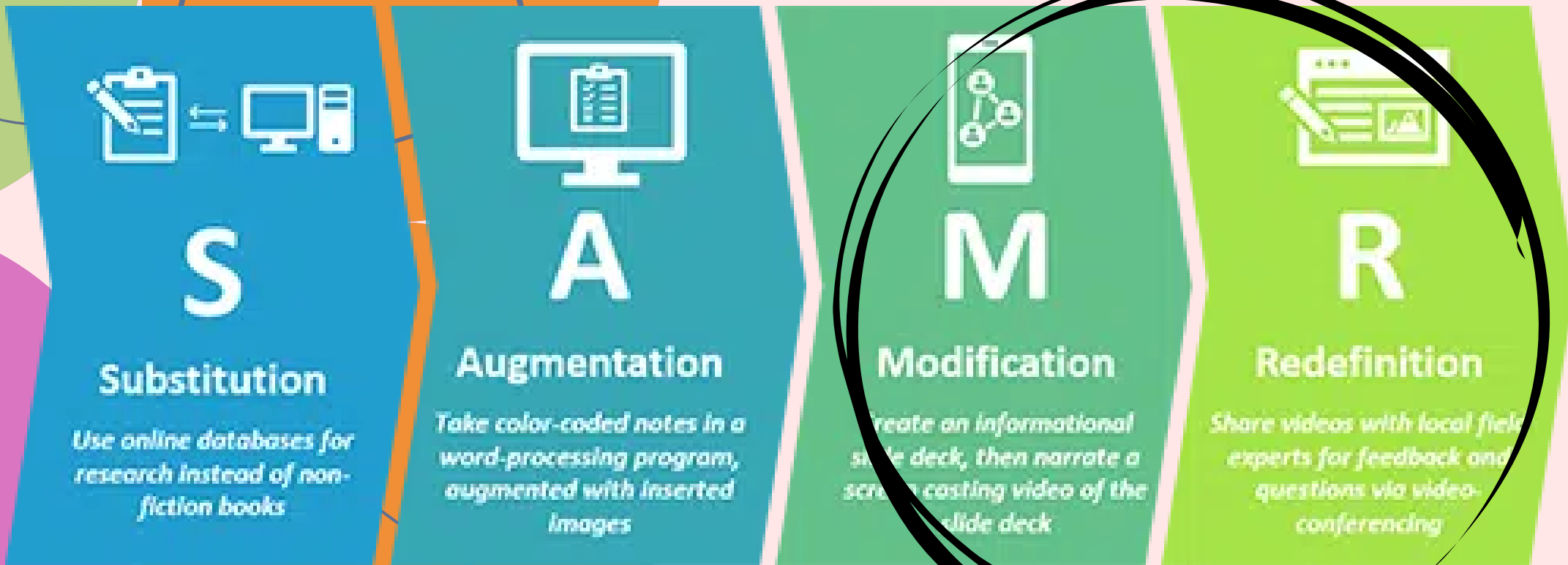
Roll, Record, and Read



¾

					
coal	croak	load	toad	roam	glow
row	blow	road	foam	loaf	soak
bow	coach	coast	toast	flow	grow
roast	low	soap	snow	boat	loan
coat	oak	cloak	float	oat	goat
slow	goal	show	tow	mow	bowl

So Does This “Enhance”?



Screen Time Guidelines

Early Childhood PK - 2 nd Grade	Upper Elementary 3 rd - 6 th Grade	Secondary 7 th - 12 th Grade
Short, daily bursts (15–20 minutes) of Adaptive Learning Systems that build foundational literacy and numeracy skills.	No more than 20 minutes per session , with daily totals of 45–75 minutes across subjects.	Limit device use to 30 minutes per session , with breaks for discussion , labs, and offline activities.
Screen time is always teacher-guided , balanced with play , movement, and hands-on learning.	Focus on interactive , project-based , and collaborative tasks — not digital worksheets.	Daily totals of 90–120 minutes are effective when focused on creation , critical thinking , and assessment .
Less is more: young learners benefit from intentional, interactive use, not extended passive viewing.	Moderate, intentional use strengthens engagement and achievement; overuse diminishes impact.	Structured academic use enhances learning, while excessive or passive use mirrors the harms of recreational screen time.

American Academy of Pediatrics, 2016 (updated); World Health Organization, 2019; Pane et al., RAND Corporation, 2015; Hattie, 2009; Hattie, 2017; Johnson & Johnson, 2009; Mayer, 2009; OECD, 2015; OECD, 2019; CoSN, Blaschke Report — Screens in Balance, 2025 (Masiello et al., 2023; Niederhauser & Howard, 2018); Twenge & Campbell, 2018; Waterford.org efficacy reports, 2020–2023



The Perfect EdTech Checklist

✓ Short Bursts

Keep sessions ≤ 20 min

(OECD, 2015; AAP, 2016)

✓ Interactive & Engaging

Active, collaborative learning

(Johnson & Johnson, 2009; Mayer, 2009)

✓ Curriculum-Connected

Aligned with lessons & goals

(Hattie, 2009; Niederhauser & Howard, 2018)

When integrating technology into elementary education, it's crucial to ensure it is effective. **Short bursts** of technology use help maintain student engagement and focus. Additionally, **interactive** tools foster active participation, making learning more enjoyable and effective. Lastly, ensuring that technology is **curriculum-connected** allows for seamless integration into lessons, enhancing the overall educational experience and supporting student learning goals.

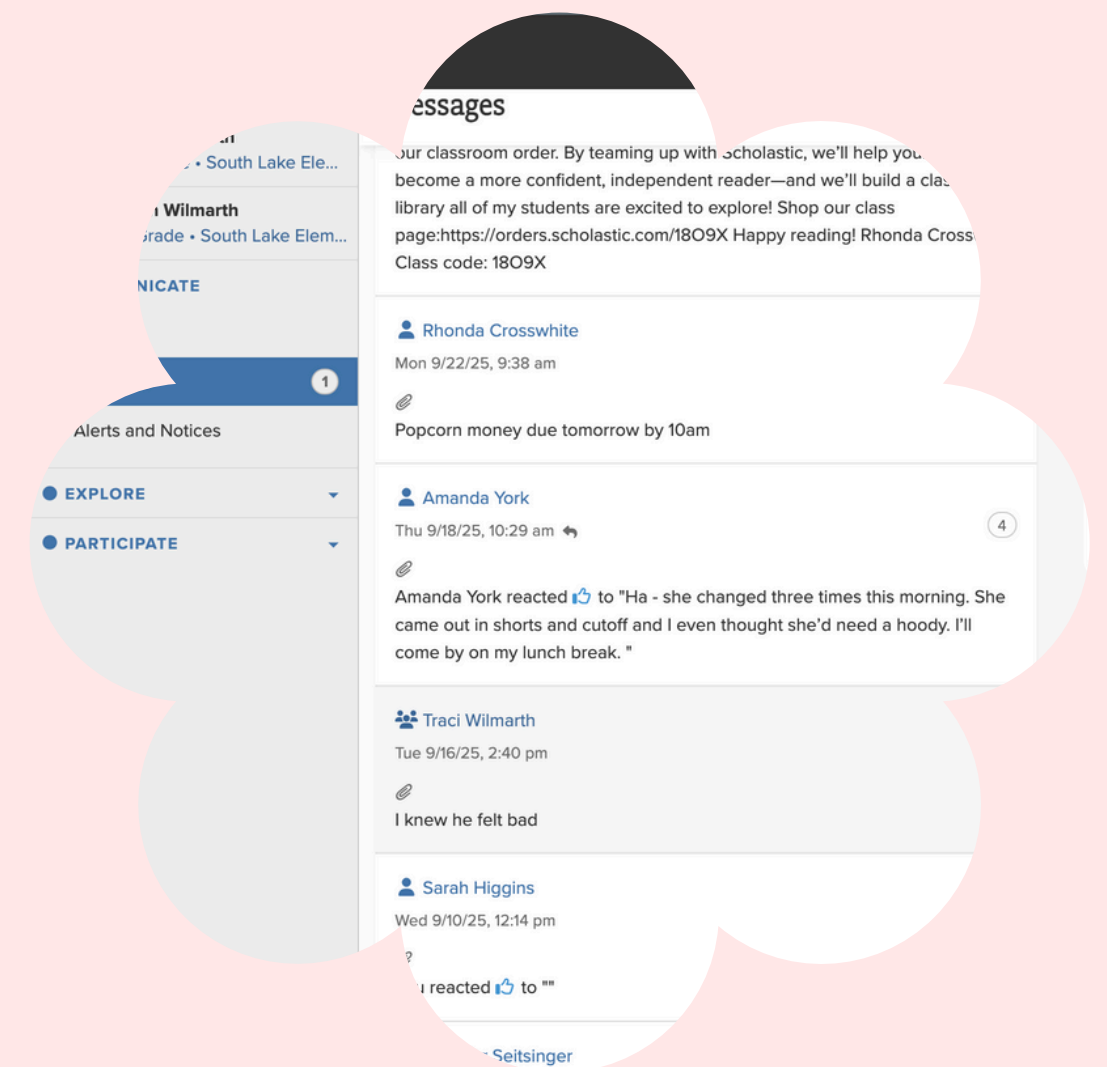
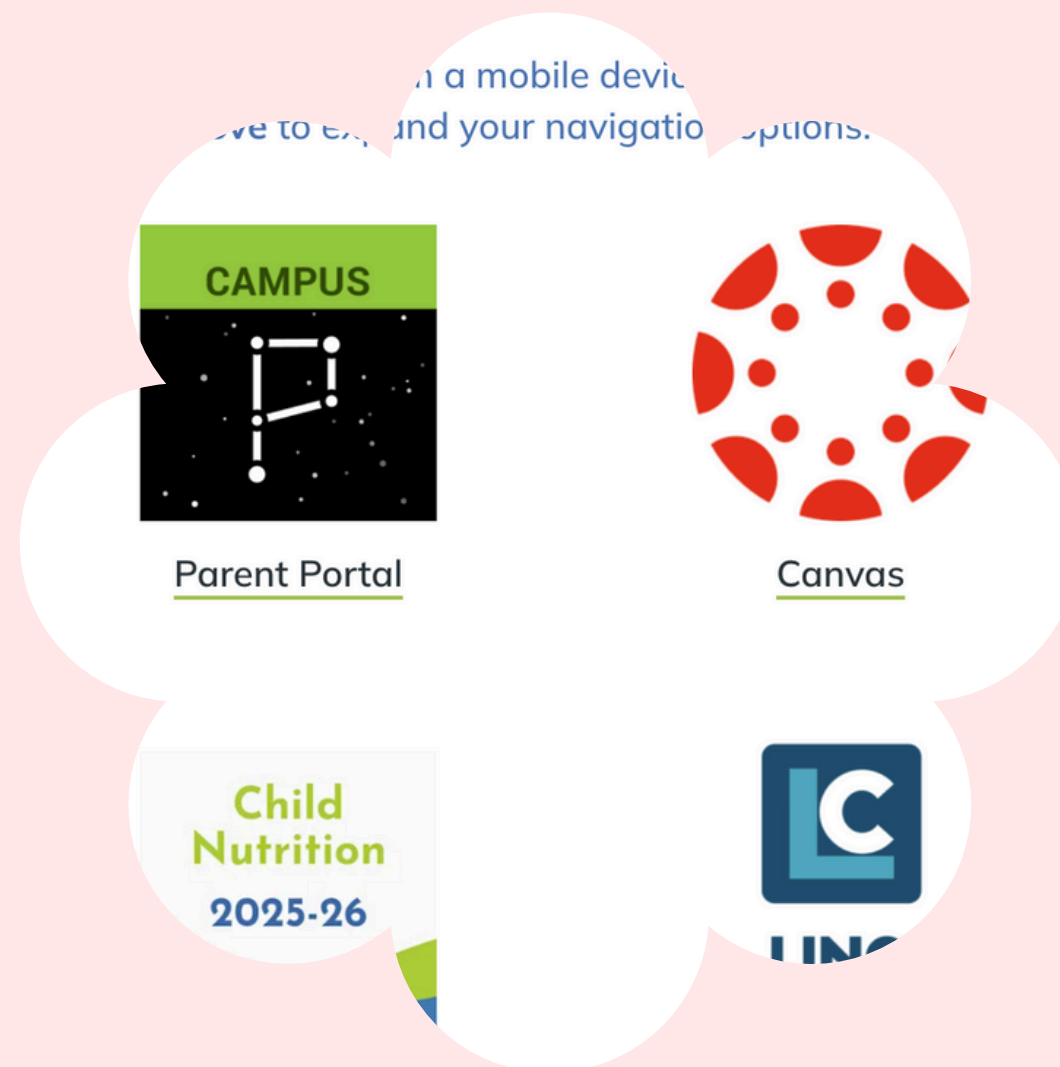
Staff

Engaging & Enhancing with Technology



Family

Engaging & Enhancing with Technology



Closing: The Big Picture

Students

Implementing **effective guidelines** ensures students engage safely and productively with technology in their learning environment.

Teachers

Continuous **professional development** empowers educators to integrate EdTech effectively, enhancing their teaching strategies and student outcomes.

Families

Strengthening **communication channels** between school and home fosters collaboration, ensuring families are engaged in their child's educational journey.

Research

Technology in Elementary Education

Questions?

& Answers

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