Fall/Winter 2026
Vol. 2, Ed. 2

Educational Leadership Insights

A publication by:

PAEDGE

When Students Know More Than They Can Tell
page 10

The Human Work of Schools: What Artificial Intelligence is Asking Us to Reconsider
page 8

Reclaiming the Purpose and Culture of Grades
page 18



ELI
Educational Leadership Insights

TABLE OF CONTENTS

The EDGE Files

8 **The Human Work of Schools:**
What Artificial Intelligence is Asking Us to Reconsider

10 **When Students Know More Than They Can Tell:**
Rethinking Reading Comprehension Assessment

13 **Beyond Endurance:**
Rethinking Building Reading Stamina

15 **Beyond the Bell:**
Scaling Empathy and Relationships to Combat Chronic Absenteeism

18 **Reclaiming the Purpose and Culture of Grades:**
Actions Every School Leader Can Take Right Now to Improve Grading Practices

21 **Beyond the Mandate:**
What the New K-12 Personal Finance Standards Could Mean for Pennsylvania Schools and Students

24 **What Is Curriculum, Really?**

27 **From Data to Achievement:**
How ELCO Intermediate School Built Capacity, Strengthened Instruction, and Improved Mathematics Outcomes

29 **Leadership Training in Action:**
Why Training Requires Sustained Application and Ongoing Support

TABLE OF CONTENTS

33 **Feedback that Fuels Growth**

36 **How Education Leaders Accidentally Create Burnout Cultures... And What To Do Instead**

38 **Anchored Together:**
How Mindfulness and Mattering Build Resilient Schools

41 **The Facets of Student Engagment:**
A Continuum

The Learning LEDGER

47 **Teaching in an Age of Misinformation:**
Why Media Literacy Matters for Educators

54 **Collaborative Equine Assisted Therapy Experience to Support Children with Autism**

Now Accepting Submissions!

The deadline for the next edition is February 28, 2027. To submit an article, complete the submission form at the following website: https://paedge.org/paedge-journal. If you have any questions, please contact eli@paedge.org.

Multiple Category Options:

The **EDGE** Files
Articles on current educational issues and trends, book reviews, and best practices.

On the **EDGE**
Articles on federal or state policy updates and implications

The Learning L**EDGE**R
Articles for pre-service teachers.

EDGEucator
Articles from PA EDGE Emerging Leaders

PEL Journal
Research studies using qualitative, quantitative or mixed methods

bit.ly/48RFHxp

LETTER FROM THE EDITORS

As educators, we are asked to respond to changing expectations, emerging challenges, and the evolving needs of students. This Fall/Winter issue of *Educational Leadership Insights* brings together perspectives that invite us to pause, reflect, and consider how our decisions shape teaching, learning, and school communities. Although not published in this edition, look for the PEL to return in 2027.

Across these pages, contributors examine topics such as the human work of schools in an age of artificial intelligence, chronic absenteeism, personal financial literacy standards, leadership development, and many more meaningful topics.

We hope you find the articles in this edition relatable and applicable. Whether you are an administrator, classroom teacher, instructional coach, or another role in education, immerse yourself in the words of the authors. Perhaps you will learn a new strategy, challenge your thinking or discover a new trend. Ultimately, we hope that you find comfort in knowing you are not alone in the education field, and with shared knowledge, we are better together.

Thank you to our authors, reviewers, and readers for strengthening this professional community.

MARY WOLF, ED.D.
CO-EDITOR
PENNWEST UNIVERSITY





REBECCA GIBBONEY
CO-EDITOR
LINCOLN INTERMEDIATE UNIT 12

Thank you to the ELI Review Committee

Sarah Berman
Hatboro-Horsham School District

Mark Conlon
University of Pittsburgh at Johnstown

Nina Fenstermaker
North Penn School District

Susan Gentile
Quaker Valley School District

Helen K. McCracken
Retired Superintendent

Sandy Shacklady-White
PATTAN

Jason Stragand
Westmoreland Intermediate Unit 7

Elaine Wilson
University of Pittsburgh at Johnstown

Felix Yerace
South Fayette School District

PA EDGE

Dr. Robert S. Freil

Superintendent, South Western School District

Over the past two years, our organization has engaged in intentional, thoughtful work to rebrand and reshape our purpose and significance as a professional organization. As PA EDGE, we are embracing a tremendous opportunity to unify a network of educators across the Commonwealth, focused on building and strengthening our expertise in instructional leadership. This renewed purpose unites our collective work as leaders in the core areas of supervision, curriculum, and instruction—anchored by an unwavering, relentless focus on impacting student learning.

While our name and scope have evolved, our dedication to connecting leaders has never been stronger. PA EDGE has a long history of cultivating educator networks through conferences, webinars, legislative gatherings, and collaborative meetings. These face-to-face experiences define the heart of our community, keeping us grounded in the common thread of instruction—always focusing on students as learners and how we effectively lead the teachers who make that learning possible.

The publication of our scholarly journal, Educational Leaders Insights (ELI), serves as an essential arm of that overarching mission. While our personal connections and regional collaborations are irreplaceable, ELI reinforces an equally critical network rooted in educational research, evidence-based practices, and shared practitioner experiences.

As we begin this exciting new chapter as PA EDGE, I hope you find both inspiration and purpose in our collective commitment to students, their learning, and the instructional leadership that drives us forward.

Enjoy!

Dr. Robert S. Freil
PA EDGE President





2026 - 2027 PA EDGE BOARD MEMBERS

PRESIDENT
Dr. Robert S. Freil

EXECUTIVE DIRECTOR
Dr. Lori Stollar

PAST PRESIDENT
Dr. Dennis J. Williams, Jr.

TREASURER
Dr. Bryan O'Black

SUPERVISION:
Dr. Brian Cromer
Dr. Cathleen Cubelic

POLICY & GOVERNANCE:
Dr. Barb Davis
Dr. Michael Donnelly

PROFESSIONAL LEARNING:
Dr. Stephanie Ferree

CURRICULUM:
Dr. Susan Gentile
Dr. Tamara Solometo

MEMBERSHIPS & PARTNERSHIPS:
Dr. Jessica Miller
Dr. Michael Roth

INSTRUCTION:
Kelly Pauling
Dr. Kimberly Hughes

SCHOLARSHIP:
Dr. Felix Yerace

EMERGING LEADERS:
Dr. Leslie Trimmer

COMMUNICATIONS AND PUBLICATIONS:
Rebecca Gibboney
Dr. Mary Wolf

EASTERN REGIONAL NETWORK COORDINATOR:
Tara Desiderio

CENTRAL REGIONAL NETWORK COORDINATOR:
Lydia Dobrowlosky-Casale

WESTERN REGIONAL NETWORK COORDINATOR:
Dr. R.J. Long

The Power of We

There is something powerful about the word **we.**

In education, we know the difference one person can make. One teacher can change the trajectory of a student. One principal can shape the culture of a school. One leader can spark an idea that influences practice across an entire district.

But when we come together, something even more powerful happens.

Our impact grows.

That is the **Power of WE**.

Across Pennsylvania, educators are doing important work every day. We are supporting students, enhancing instruction, developing teachers, building stronger schools, and addressing challenges that seem to become more complex each year. The good news is that none of us has to do that work alone.

At PA EDGE, we have always believed in the power of bringing educators together. Our greatest strength is not one program, one event, or one person. It is the collective experience, expertise, and commitment of people who care deeply about teaching and learning.

It is what happens when we move beyond "my classroom," "my school," or "my district" and begin asking, **What can we learn from one another? What can we accomplish together?**



Our mission is to **Elevate, Develop, and Grow Educators**, and that mission comes to life through people. Teachers. Instructional coaches. Principals. Curriculum leaders. District administrators. Higher education faculty. Different roles. Different communities. Different perspectives.

One shared commitment to making education better.

We learn from one another. We share ideas. We challenge our thinking. We make connections beyond our own schools and districts. And along the way, we are reminded that this work is bigger than any one of us.

That is why membership in PA EDGE matters.

Of course, membership provides access to professional learning, resources, programs, and a statewide network. But it is more than that.

It is an opportunity to connect. To contribute. To learn. To belong.

Our members are what make PA EDGE strong. Every voice adds something. Every perspective expands our thinking. Every connection makes the community stronger.

There has never been a better time to be part of that community.

Individually, we make a difference.

Together, **WE** make an impact.

In partnership,
Dr. Lori J. Stollar
Executive Director PA EDGE



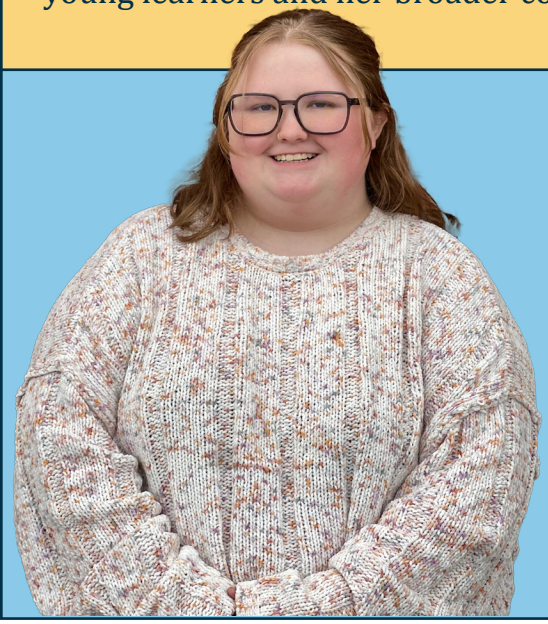
PA EDGE
Elevating, Developing, & Growing Educators
Through Curriculum, Instruction, & Supervision

2026-2027 PA EDGE Scholarship Recipients

MACKENZIE FRITZ



Mackenzie Fritz is a senior Early Childhood Education major at York College of Pennsylvania dedicated to fostering engaging, hands-on, and minds-on learning experiences. Passionate about creating supportive, predictable classroom environments where students thrive, she balances her full-time studies with student teaching, substitute teaching, full-time work as a restaurant server, and active community volunteering. Driven by a strong work ethic, a commitment to mentorship, and a deep love for animals, Mackenzie strives to make a positive, lasting impact on the lives of young learners and her broader community.



HANNAH RAKE

Hannah Rake, recipient of the 2026 Mary Ravita Memorial Scholarship, is an Early Childhood and Elementary Education major at PennWest University–Clarion and State President of Student PSEA. A passionate advocate for public education, she developed an NEA-funded STEAM lending library and organized statewide professional development for future teachers. Following her 2026–2027 student-teaching year in first- and sixth-grade classrooms, Hannah plans to teach in Pennsylvania public schools to foster curiosity, creativity, and accessible hands-on learning.

The 2027-2028 Application Process

PA EDGE is committed to supporting preservice educators as they begin their teaching careers in the Commonwealth. Since 1994, PA EDGE (formerly PASCD) has been providing scholarship awards to students who are majoring in education at colleges and universities in Pennsylvania. Two scholarships are awarded annually.

Two Scholarship Awards are available:
- One - $2,000 Scholarship
- One - $3,000 Dr. Mary Ravita Memorial Scholarship

For additional information, please contact:
Dr. Felix Yerace
Scholarships@paedge.org or fyerace@southfayette.org
412.221.4542 x603

paedge.org/Scholarships



The EDGE Files

Curated collection of articles on current educational issues and trends, book reviews, and best practices

The Human Work of Schools:

What Artifical Intelligence is Asking Us to Reconsider

Tracy Driehaus, Ed.D.



Artificial intelligence has rapidly become one of the most defining conversations in education. Conferences, faculty meetings, and leadership retreats increasingly focus on questions such as:

- Should students be allowed to use AI?
- How do we address academic integrity?
- Which platforms should our schools support?
- What policies should district adopt?

These are important conversations, and as educational leaders we have a responsibility to approach them thoughtfully. At the same time, our attention to the technology itself may be a distraction preventing us from addressing a more fundamental question:

What is the purpose of schooling when information is no longer scarce?

For generations, schools have been designed around helping students acquire knowledge. Students learned how to locate information, organize it, remember it, and demonstrate their understanding. Teachers served as guides, curators, and interpreters of information because access to knowledge was limited. Today's students experience a very different reality.

Artificial intelligence can summarize text, explain concepts, generate examples, write code, translate languages, and answer factual questions in seconds. Whether we embrace these tools or remain cautious about their use, they have fundamentally changed how learners access information. What they have not changed is the purpose of education. If anything, they have made that purpose even clearer.



Artificial intelligence can generate responses, but it cannot exercise professional judgment. It cannot weigh competing perspectives with wisdom or navigate the ethical complexities that often accompany authentic problems. It cannot build trusting relationships with students or cultivate the curiosity that inspires lifelong learning. Most importantly, it cannot replace the expertise of teachers who know their students and intentionally design learning experiences that challenge, support, and inspire them. Perhaps AI is not asking us to reinvent education. Perhaps, in an echo of Dewey's (1938) longstanding argument that education is fundamentally about the quality of experiences students have, it is asking us to clarify what has always mattered most.

As I reflect on my own experience in the classroom as well as conversations with educators across the Commonwealth, I find myself returning to a simple question:

If AI can successfully complete an assignment, what is the student actually learning?

That question is not intended as criticism of our current practice. Rather, it is an invitation to reconsider the kinds of learning experiences we create.

Many of us were trained and have spent years teaching in ways that emphasized acquiring, organizing, and communicating information. Those skills remain valuable. In a world where information is readily available, however, they are no longer sufficient on their own. Indeed, decades of learning science have demonstrated that meaningful learning occurs when students actively construct

Our students will graduate into a future that demands these skills (Organisation for Economic Co-operation and Development [OECD], 2019). They will need to evaluate competing ideas, analyze evidence, solve unfamiliar problems, collaborate with diverse perspectives, recognize bias, make ethical decisions, and adapt to circumstances none of us can fully predict today. These are not new educational goals, but they have become increasingly important because they represent the work that remains uniquely human.

Notice that none of these competencies requires us to reject artificial intelligence. Instead, they challenge us to rethink how we use it. Too often, educators ask, "How can I use AI in this lesson?" While that is certainly a reasonable question, I believe a more powerful one is:

What kind of thinking do I want students to do that AI cannot do for them?

Framing the conversation this way shifts our attention from the technology to the learning. It encourages us to begin with instructional purpose rather than digital tools. AI becomes a resource that supports learning rather than the focus of the lesson itself.

This shift has implications well beyond the classroom. As instructional leaders, we should examine whether our professional learning is centered primarily on introducing new technologies or on strengthening instructional design. During classroom observations, we might look beyond student engagement to consider the quality of thinking students are being asked to do. Curriculum conversations can focus less on the efficient delivery of content and more on creating opportunities for students to inquire, create, reason, and apply their learning in meaningful ways.

Educational technology has always prompted schools to reconsider instructional practice. Calculators changed mathematics instruction. Search engines transformed research. The internet fundamentally altered access to information. Artificial intelligence is the latest development in that progression, but it presents a different challenge (United Nations Education, Scientific, and Cultural Organization, 2023). Rather than simply changing how students access information, it compels us to reconsider why we ask students to engage with information in the first place.

If information is now abundant, then the value of schooling cannot rest solely on helping students acquire it. Instead, schools must intentionally cultivate the capacities that enable students to use knowledge wisely: critical thinking, creativity, ethical judgment, collaboration, curiosity, adaptability, and informed decision-making. These have always been the enduring outcomes of an excellent education. Artificial intelligence has simply made them impossible to ignore.

Artificial intelligence has prompted us to rethink many aspects of teaching and learning. Yet the most important question it poses has very little to do with technology. It asks us to reconsider the enduring purpose of schools. The technologies will continue to change. If we answer the question well, however, our mission will remain remarkably constant.



Dr. Tracy Driehaus is Assistant Dean for Clinical Education and Partnerships at Kutztown University. A former teacher, instructional coach, and curriculum supervisor, she has more than 20 years of experience leading instructional improvement across K–12 and higher education. Her work focuses on instructional coaching, AI-enabled learning, and designing future-ready educational systems that prepare both students and educators for an evolving world.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school.* National Academy Press.

Dewey, J. (1938). *Experience and education*. Macmillan.

Organisation for Economic Co-operation and Development. (2019). *OECD future of education and skills 2030: OECD learning compass 2030: A series of concept notes.*

United Nations Educational, Scientific, and Cultural Organization. (2023). *Guidance for generative AI in education and research.* UNESCO.



When Students Know More Than They Can Tell:

Reading Comprehension Assessment

Christine Linden

A third-grade student sits across from me after reading a grade-level passage. During our conversation, the student accurately answers questions about the story's characters, identifies the central problem, and explains how the events are connected. The student clearly demonstrates an understanding of what was read. A few moments later, I ask for an independent oral retell of the same passage. The response is brief, disorganized, and missing many important details. Did the student's comprehension suddenly disappear?

As an Academic Intervention Specialist in Pennsylvania, I have found myself asking this question more often than I expected. Over the years, I have worked with students who can thoughtfully discuss a text during a conversation but struggle to independently organize and communicate that same understanding during an oral retell. Those moments have challenged one of my own assumptions: that a student's performance on a comprehension assessment always reflects what the student understands.

At a time when schools across Pennsylvania are investing in evidence-based literacy instruction, educators are examining every aspect of how students learn to read. Districts have devoted significant time to professional learning, curriculum revisions, and structured literacy practices grounded in the Science of Reading. These efforts have strengthened foundational reading instruction and reinforced the importance of using data to guide decisions. As we continue this important work, I believe there is another conversation worth having that focuses not on how students learn to read, but on how they demonstrate what they understand after they have read.

As educators, we rely on assessment data every day. We use it to identify students who need intervention, monitor progress, evaluate growth, and make instructional decisions. We strive to make those decisions using evidence, which is exactly as it should be. But, I believe we also need to pause and ask an important question: are we always measuring reading comprehension, or are we sometimes measuring students' ability to demonstrate what they know?

Contemporary theories describe reading comprehension as an active process in which readers construct meaning by integrating information from text with their background knowledge while coordinating linguistic, cognitive, and strategic processes (Duke & Cartwright, 2021). Yet, comprehension is invisible. We cannot directly observe whether students have constructed meaning from a text. Instead, we infer comprehension through what students say, write, or do after reading.

Take an independent oral retell, for example. Students must remember important information, determine which ideas matter most, organize those ideas into a logical sequence, monitor their own responses, and communicate them clearly using oral language. Research suggests that successful

Research suggests that successful performance on these tasks draws on not only reading comprehension but also executive functioning, oral language, and discourse skills (Cain et al., 2004; Duke & Cartwright, 2021; Kim, 2023). When students struggle with an oral retell, it can be difficult to determine whether the challenge lies in understanding the text or in communicating that understanding.

That distinction matters. Educators routinely use comprehension assessments to identify students for intervention, monitor progress, and make instructional decisions. Reading comprehension assessments are intended to provide valid evidence of students' understanding; however, performance may also be influenced by the demands of the response format itself (Pearson & Hamm, 2005; Sabatini & O'Reilly, 2013).

Too often, we feel pressure to quickly interpret assessment results and move forward with instructional decisions. A low retell score can easily become evidence that a student has weak comprehension. However, I have watched students participate in rich classroom discussions, accurately answer teacher questions, and demonstrate thoughtful insights about a text, only to receive a much lower score when asked to independently retell the same passage.

Those experiences have made me wonder whether some assessments unintentionally ask students to perform several complex tasks simultaneously. In addition to understanding the text, students must retrieve information from memory, organize their thoughts, monitor their responses, and communicate them effectively, all while working independently. If any one of those processes breaks down, the final product may underestimate what the student actually knows.

This is not an argument against oral retells. In fact, I believe they provide valuable information about students' thinking and deserve an important place in literacy assessment. However, I do believe they should be interpreted thoughtfully and alongside other sources of evidence rather than viewed as a standalone measure of comprehension.

So what might this look like in practice?

Collect evidence from multiple sources.

Classroom discussions, teacher-prompted questions, written responses, observations, and independent retells each provide a different window into student understanding. Looking for patterns across these sources often tells a richer story than relying on a single assessment.

Pay attention to the process as much as the product.

Does the student know where to begin? Are ideas shared out of sequence? Does a brief prompt help the student reconnect with the text? Observing how students approach an assessment can reveal just as much as the final score.

Teach students how to communicate their thinking.

We spend considerable time teaching comprehension strategies, but we sometimes assume students naturally know how to organize and express their understanding. Explicit instruction in organizing information, identifying key ideas, and using organizational supports may help improve students' ability to communicate what they know during literacy tasks.

Resist the urge to let one assessment define a student's abilities.

Before concluding that comprehension is the problem, consider the broader picture. What happens during classroom conversations? How does the student respond to teacher questions? What does the student's written work reveal? Looking across multiple sources of evidence allows us to make instructional decisions that are more responsive and, ultimately, more equitable.

One of the greatest lessons the Science of Reading has taught us is the importance of allowing evidence to shape our instructional decisions. I believe that same principle should guide how we think about assessment. If we know that comprehension is a complex process, and that demonstrating comprehension can be equally complex, then we must be willing to examine whether our assessments are capturing what we truly intend to measure.

Maybe the question we should ask is not simply, did this student comprehend the text? Instead, we might ask, did this assessment give the student a fair opportunity to demonstrate that comprehension?

For me, that question has changed the way I interpret assessment results. It has encouraged me to look beyond a single score, consider the demands of the task, and search for multiple sources of evidence before making instructional decisions. If it prompts other educators to do the same, then perhaps we can move one step closer to ensuring that our assessments reflect not only what students can tell us, but what they truly know.



Christine Linden is an elementary educator currently serving as an Academic Intervention Specialist in the Dallastown Area School District in Dallastown, Pennsylvania. She holds Pennsylvania certification in Elementary Education (K–6) and a Master of Education degree with Reading Specialist certification. She is currently pursuing a doctorate in Educational and Organizational Leadership, with a specialized focus in School Leadership.

Cain, K. E., Bryant, P. E., & Oakhill, J. V. (2004). Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology, 96*(1), 31–42. https://doi.org/10.1037/0022-0663.96.1.31

Duke, N. K., & Cartwright, K. B. (2021). The science of reading progresses: Communicating advances beyond the simple view of reading. *Reading Research Quarterly, 56*(S1), S25–S44. https://doi.org/10.1002/rrq.411

Kim, Y.-S. G. (2023). Oral discourse skills: Dimensionality of comprehension and retell of narrative and expository texts, and the relations of language and cognitive skills to identified dimensions. *Child Development, 94*(5), e246–e263. https://doi.org/10.1111/cdev.13935

Pearson, P. D., & Hamm, D. N. (2005). The assessment of reading comprehension: A review of practices–Past, present, and future. In S. G. Paris & S. A. Stahl (Eds.), *Children's reading comprehension and assessment* (pp. 13–69). Routledge. https://doi.org/10.4324/9781410612762-9

Sabatini, J., & O'Reilly, T. (2013). Rationale for a new generation of reading comprehension assessments. In B. Miller, L. Cutting, & P. McCardle (Eds.), *Unraveling reading comprehension: Behavioral, neurobiological, and genetic components* (pp. 100–111). Brookes Publishing.

PA EDGE

Impactful Partnerships unlock additional benefits to a PA EDGE Membership.

T3LN
The Teaching, Learning, and Leading Legacy Network

2026 iste+ascd OFFICIAL PARTNER

Become an Institutional Member Today!

Empower your entire leadership team! PA EDGE offers discounted memberships for schools, districts, Intermediate Units, and Institutions of Higher Education (IHE). Get full access to resources, networking, and professional development for multiple leaders—**all at a cost-effective rate.**

Institutional Membership Pricing

Small Districts – $500
Student Enrollment < 2,500
Intermediate Units
Dept. of Teacher Ed at Higher Institutions

Medium Districts – $1,000
Student Enrollment 2,501-7,000

Large Districts – $1,500
Student Enrollment 7,001+

Institutional Membership provides unlimited enrollment; target audience includes district leaders, curriculum leaders, principals/assistant principals, teacher leaders, department chairs, and grade-level leads.

Contact: info@paedge.org to claim your Institutional Membership!

PA EDGE

Beyond Endurance:
Rethinking Building Reading Stamina

Kristen Braatz, Ph.D.

I became an English teacher for all the romantic reasons. I loved literature. I loved the classics. I loved the idea that discussing books could shape how students saw themselves and the world. It felt almost unbelievable that there was a profession where reading with teenagers counted as work.

So, when I began my first year teaching ninth grade English, I was eager for the whole-class novel experience I had imagined—shared texts, rich discussion, students underlining meaningful passages, and debating big ideas.

What I found instead was something far more complex.

The Daily Dilemma Every English Teachers Know

Students lost books. Some never completed the assigned reading at home. Some could decode the words but struggled to sustain meaning across chapters. Some could not decode the words. Every day brought the same decision so many teachers know well: Do I stop and catch everyone up, frustrating the students who did the work? Or do I move on, leaving others behind?

Eventually, I made the move many teachers make. We shifted all the reading into class time. While that decision addressed the immediate challenges, it created new instructional tradeoffs.

Reading in class meant our time became consumed by getting through the text. Explicit instruction waned. Writing got squeezed into the margins. Even students who liked the book began to feel the drag of moving page by page at the pace a whole room could sustain.

That experience has stayed with me.

What the Whole-Class Novel Teaches-and What It Doesn't

I can still picture a particular unit teaching *To Kill a Mockingbird*—months spent working through a novel together, trying to keep everyone moving at roughly the same pace. Some students were all in. They had opinions, favorite lines, questions they couldn't wait to ask. Others didn't quite get there. They followed along. They listened. Sometimes they read. Sometimes they didn't.

At the time, I told myself this was part of building stamina. That staying with a book—even imperfectly—was the work. That's still how we often talk about it. Books like *To Kill a Mockingbird* come up as the goal: if students can make it through something long and complex, they're building the endurance they need—following a character over time, tracking how themes develop, staying with an idea across chapters.

And that's true. **But it's not the whole story.**

Rethinking What Reading Stamina Actually Means

Stamina is not only the ability to stay with one long book. It is the ability to keep reading when the work of reading changes.

Confident, adept readers don't read one way. They shift. They skim and slow down. They move between story, argument, and information. They compare sources, question claims, and navigate unfamiliar vocabulary. And they keep going when meaning doesn't come easily. All of that is stamina, too—and it may be the more transferable kind.

One student spends eight weeks reading *To Kill a Mockingbird*. Another spends those same eight weeks navigating speeches, essays, poems, memoirs, and conflicting accounts.



Both are reading, but they are not building the same kind of stamina.

One builds endurance. The other builds adaptability—the ability to flex, persist, and think across varied reading situations.

The Questions That Tell Us More Than Page Count

Instead of focusing on whether students finish books or excerpts, we might ask:

Are students reading consistently and with purpose?

Are they learning how to approach different kinds of texts?

Do they persist when reading becomes challenging?

Are they leaving school more likely to keep reading on their own?

Those questions tell us far more about reading stamina than page count alone.

Range Builds a Different Kind of Empathy

Our narrow definition of stamina shapes how we think about empathy, too. Whole-class novels are often defended because students spend extended time with a character and come to understand a life unlike their own. That can absolutely happen. But empathy can also grow through range.

A poem can humanize in twenty lines. A memoir excerpt can stay with a student for years.

Conflicting accounts of the same event can deepen perspective in ways a single narrative cannot. An essay can unsettle assumptions in just a few pages.

Depth builds one kind of empathy. Range builds another.

What This Means for How We Design Curriculum

This matters when we design curriculum. If stamina means only engaging in extended reading experiences, we will privilege one instructional path. If stamina means persistence, adaptability, sustained thinking, and continued engagement with reading, then a rich diet of varied texts becomes not a compromise, but an advantage.

I still believe in the power of whole books. I still believe shared reading can matter in ways that are hard to replicate. But my first years in the classroom left me with a different question than the one I started with.

Not just: Can students finish the book?

But: What kind of readers are they becoming along the way?



Dr. Kristen Braatz is the AVP of Curriculum & Instruction at Curriculum Associates, where she leads a national team focused on helping educators successfully implement high-quality instructional materials at scale. Before joining Curriculum Associates, Kristen taught middle school and high school English language arts and led a team of literacy coaches as a literacy coordinator. She earned a master's degree from Concordia University and a Ph.D. in Language and Literacy from Cardinal Stritch University.



Beyond the Bell:

Scaling Empathy and Relationships to Combat Chronic Absenteeism

Michael Q. Roth, Ed.D.

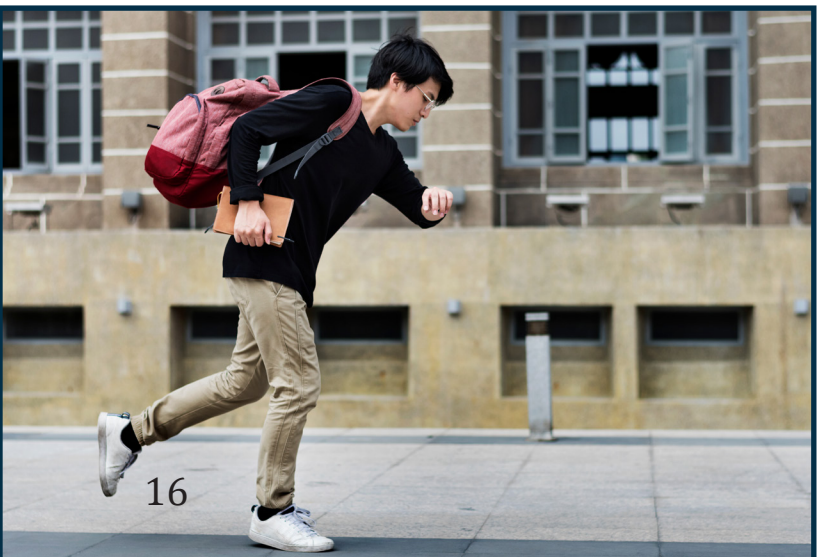
In my time coaching attendance teams across elementary, middle, and high schools, I am often asked how the strategy changes as students get older. My answer? It does not. Whether a student is six or sixteen, the reason they show up—or do not—is rooted in the same soil: relationships, empathy, and the removal of barriers. When we treat attendance as a compliance task, we fail. When we treat it as an invitation to a community, we win.

The Unified Philosophy: Tiered Support

Effective attendance work is not about "fixing" students; it is about a continuous cycle that engages students, families, and staff in approaches focused on planning, acting, and checking. By implementing a tiered approach, school and district based attendance teams can move from reactive firefighting to proactive support. By diving into attendance data over a period of time, looking for patterns and trends both broad scale and at the individual level, and conducting root cause analysis, those responsible for student attendance can generate a tiered plan for addressing student attendance that maximizes resources and minimizes time. These practices include:

Tier 1 (Universal)

Focuses on school-wide culture and positive messaging for all students to prevent absenteeism before it starts. This can be targeted messages about upcoming school calendars, class or grade level attendance recognitions, and/or bulletin boards concerning the importance of attendance, or family communications that highlight the impacts of positive versus chronic attendance on student success.



Tier 2 (Targeted)

Identifies specific students—often those with 5, 10, or 15 days of absence—who need an extra "nudge" through incentives and adult check-ins. These include an attendance buddy program aligning a trusted adult in the school with a set of students, creating attendance tracking incentives that focus on positive peer relationships, and/or classroom specific lessons when a particular grade level or class has shown to be on the verge of chronic absenteeism.

Tier 3 (Intensive)

Engages families directly through outreach to uncover and solve deep-seated obstacles to school access. These can include phone calls which highlight the desire of the school to help "coach" the student into better attendance, seeking to understand the barriers that may be inhibiting student attendance, and linking families with necessary school or community based supports to bolster student attendance.

As noted by Attendance Works (2023), chronic absence is a problem we can solve when the whole school community works together. This collaborative spirit is vital for team growth and understanding trending data.

The "All-Hands" Model

One of the most powerful shifts I have coached is expanding the attendance team beyond administrators and counselors. To truly move the needle, we must involve every adult who interacts with a child. In successful models, the "team" includes:

The Diverse Frontline

Secretaries, custodians, security officers, custodians, and paraprofessionals who can serve as mentors or individuals who "check-in" with students.

The Attendance Buddy System

Staff members who sign up to support 2–5 students each, acting as a "trusted adult" who checks in with them daily. At the secondary level, asking students who are the "trusted adults" they look-up to in the school can be a strong way to elevate their voice in the process.

Community Partners

Involving outside agencies and volunteers in school settings, including coaches and advisors, provides students with additional layers of connection.

This approach is grounded in the research of Bryk and Schneider (2002), which demonstrates that relational trust among teachers, parents, and school leaders is a core resource for school improvement. When a student knows a specific adult is seeking them out to record their progress, it creates a sense of belonging that no automated truancy letter can replicate.

Contextualizing Action: From Trackers to Incentives

While relationships are the foundation, the technical execution of these strategies requires creative, visual tools. Examples include:

"I Will Beat the Bell" Locker Trackers

Instead of using traditional calendars which can feel punitive, students use visual tracking sheets on their lockers to record daily cumulative attendance, not just the dates they have attended.

Tiered Rewards

Incentives should be progressive to maintain momentum, such as earning free time in the gym or art room or tokens that increase in value as students hit 10- and 20-day milestones of attendance.

Strategic Event Planning

Establish recognition, special events, or pop-up activities on days traditionally plagued by low attendance. Scheduling an "Attend-Dance" or "Lunch Bunch" with games on the day students return from Spring Break provides a powerful incentive to "stay the course".

Gottfried and Hutt (2019) emphasize that addressing absenteeism requires understanding the local school context and creating specific, targeted interventions for different student populations. Understanding your students and families, creating contextualized actions that are meaningful, and engaging a broad range of school personnel will assist in understanding the school's context and provide the foundation for student attendance success.

Engaging Families with Empathy

Communication with home should be rooted in support, not stigma. Utilizing platforms like Class Dojo allows for positive, focused messaging to families. Using family conference or open house nights to distribute attendance report cards for individual students, reminders about the importance and positive impact about consistent attendance, or even simple reminders about health practices can be powerful in educating families in a non-threatening manner. The goal is to avoid framing attendance as a "problem group" and instead present it as a focused effort to help the child succeed. Schools must ask, "What can we do to help?" and provide tools and incentives that align with root causes to chronic absenteeism that are within their influence and control. As The Johns Hopkins University Everyone Graduates Center (2021) has highlighted, the presence of a caring adult—both at home and at school—is a primary predictor of student persistence and attendance.

A Call to Action for Leaders

If students are not in school, they cannot access the high-quality instruction educators work so hard to provide. My challenge to you is this: stop managing attendance data and start coaching attendance relationships. When you see your team collaborating—when every voice is heard—you will find that positive results around attendance will follow.

I am in charge of my school's attendance team. Now what?

✓ Expand the Table

Invite a secretary, a custodian, and a paraprofessional to your next attendance meeting to ensure everyone has a voice.

✓ Develop a "Script"

Provide your assigned adults with a bulleted list of talking points to ensure consistent, positive messaging when they check in with students.

✓ Identify "Check-In" Adults

Map out your Tier 2 students and assign them to specialists or support staff for AM supervision check-ins.

✓ Visual Ownership

Create "Locker Trackers" or gamified bulletin boards that focus on counting "days present" rather than dates missed.

✓ Target the "Danger Zones"

Look at your calendar for low-attendance days (e.g., the Monday after Spring Break) and schedule a high-interest event like an "Attend-Dance."

✓ Support-First Outreach

Use tools like Class Dojo to send positive messages and explore family incentives like gas or grocery cards to remove external barriers.



Dr. Michael W. Roth is an experienced and innovative educational leader with 30 years of experience driving transformational change across PreK-12, higher education, and the private sector. His experience as Superintendent for the Upper Moreland and Salisbury Township School Districts.

Attendance Works. (2023). *The Power of Positive Connections: Reducing Chronic Absence.* https://www.attendanceworks.org

Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement.* Russell Sage Foundation.

Gottfried, M. A., & Hutt, E. L. (2019). *Absent from School: Understanding and Addressing Absenteeism*. Harvard Education Press.

Johns Hopkins University Everyone Graduates Center. (2021). *The role of a caring adult in student persistence and attendance.*



Lead Together. Grow Together.

Empower your entire leadership team!
PA EDGE offers discounted memberships for schools, districts, Intermediate Units, and higher education institutions. Get full access to resources, networking, and professional development for multiple leaders - **all at a cost-effective rate.**

- Unlimited Enrollment for your team
- Exclusive professional development
- A cost-effective way to scalee your impact

Institutional Membership Pricing

Small Districts - $500

Student enrollment < 2,500
Intermediate Units
Dept. of Teacher Ed at Higher Ed Institutions

Medium Districts - $1,000

Student enrollment 2,501 - 7,000

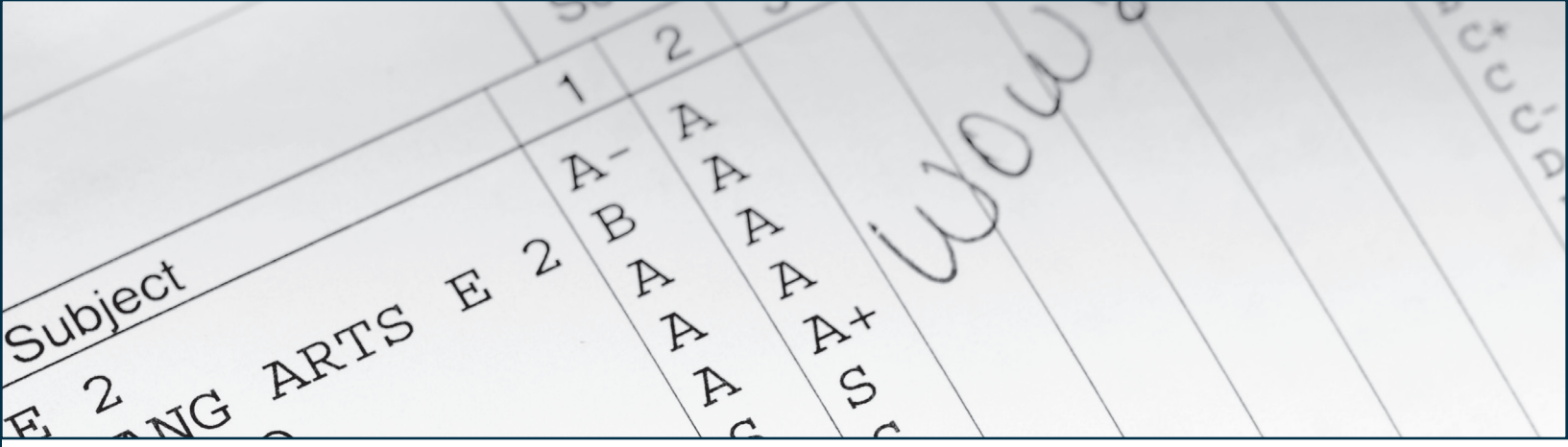
Large Districts - $1,500

Student enrollment 7,001+

Lead as a team.

Contact info@paedge.org to claim your Institutional Membership

PA EDGE



Reclaiming the Purpose and Culture of Grades:

Actions Every School Leader Can Take Right Now to Improve Grading Practices

Joseph R. Anthes, Ed.D.

Recently, in a thread shared with non-educator friends, someone shared a university's move to a pass/fail grade for first semester freshman in 2027, a move intended to support student mental health and well-being and allow time to acclimatize academically and socially without the pressure of grades.

"Why are they making it so easy?" "They're some of the smartest students in the country." Another very honestly stated, "It's interesting, but I don't know enough and need to learn more." What struck me about this seemingly insignificant text conversation was the interest garnered from a group of middle-aged adults, none of whom are educators. It was a sharp reminder that grades strike a chord with people, regardless of age or affiliation. If grading can cause a group of middle-aged friends to grumble, imagine how educators feel when they read about removing grades altogether?

Anyone who has received a grade in school can connect grading policies to their own K-12 or college experience. Undoubtedly, opinions that surfaced in reaction to the university's policy have the potential to impact K-12 conversations and influence future grading and reporting decisions.

K-12 Grading Landscape

At the K-12 level, school district grading policies vary. Some maintain traditional A-F grades on 100-point scales. Others have moved to standards-based report cards, and a few use a multiple grades (MG) report card which intends to effectively communicate academic progress and student behavioral attributes *separately*.

Teachers spend a significant amount of their professional time grading; yet grading practices can vary significantly between classrooms. Grades are often a combination of various factors, or what researchers have coined a "hodgepodge" - a combination of both academic and behavioral factors such as participation, attitude, and effort that can make interpreting a final letter grade impossible- into a final grade (Brookhart, 1991). An "A" in one subject might reflect a student's kind demeanor and a consistent pattern of participation, without mastery of the subject or material. Meanwhile, a "C" for another may be indicative of the student's classroom conduct and lack of participation, despite strong performance on assessments.

Unfortunately, grades can be a punitive method used for behavioral management, rather than serving the intended purpose of communicating academic progress. Fear of disrupting norms often outweighs student and family concerns about imperfect grading systems. Some school communities find themselves stuck settling for subjective systems, brimming with unconscious bias, rather than embracing the challenging work of reform.

Educational leaders are often painfully aware of the limitations in traditional grading systems. While educational leaders play a critical role in grading reform, research indicates that leaders may be unlikely to challenge traditions and initiate a difficult change process (Guskey, 2015). Additionally, the decision to overhaul a grading system ultimately falls on the board of school directors and requires significant commitment from all levels of the organization.

However, what if leaders in the middle of the organization - assistant principals, principals, and supervisors - are seeking to improve grading practices in their schools or departments now? Regardless of a district's grading system, leaders at all levels can engage in key actions to shift their cultures and reestablish what grades are for and why they matter.

Actions Every Leader Can Take Right Now

Communicate the Purpose of Grades

Before any changes in practice can occur, leaders need to open and maintain dialogue about grades. It is essential to unearth belief systems and past practices amongst teachers and administrators. Leaders must work to build consensus, review evidence-based practices, and define the purpose for grades.

While serving as a K-12 curriculum supervisor for several content areas, my previous district adopted a multiple grades report card in which we reported academic achievement separate from behavioral factors. I vividly remember the concern from our physical education (P.E.) department teachers, who were accustomed to awarding points for dress code compliance and participation. We scheduled a series of meetings and professional learning opportunities prior to the report card change. In that time, we had difficult conversations, and I learned about teachers' practices and fears of the new system.

Over time, our P.E. teachers regrounded in disciplinary standards and assessment practices that some commented had not discussed since their undergraduate teacher preparation programs. Ultimately, the process took time and some folks adapted better than others. Nonetheless, the collaborations held tremendous value and required all members to delve into discipline-specific standards, assessment practices, and literature on both physical education and grading. The following year, I was elated to see rubrics used while observing student skills and progress in the gym, along with traditional assessments about rules, gameplay, and the movement principles.

The example serves to highlight that rather than dictate to teachers exactly what to do and how to do it; teachers should be engaged as adult learners with professional expertise. Discussions about grading bias, subjectivity, and variance in grading systems is difficult, but can help prime teachers for purposeful and meaningful shifts in their grading and assessment practices. Communication, dialogue and collaboration, and coaching support from leaders can begin to shift mindsets and in turn, improve practice.

Grading Analysis for Disparities

Before any changes in practice can occur, leaders need to open and maintain dialogue about grades. It is essential to unearth belief systems and past practices amongst teachers and administrators. Leaders must work to build consensus, review evidence-based practices, and define the purpose for grades.

As I progressed, the trend was consistent across each of the teacher's math classes. The trend essentially revealed that if I have "Teacher A," my odds of failing the class were less than 4%. On the other hand, if I get scheduled with "Teacher B" my odds of failing the class are about 33%. Further analysis of discipline referrals found a similar trend. The same 7th grade math teacher with the high failure rates was one of the school's top producers of discipline referrals.

Students are not identical across all classes and teachers' grade distributions may not look identical either. However, glaring disparities are indicative of inequitable grading practices. My follow up conversation with the teacher revealed that grades were in fact being used for disciplinary purposes. The conversation was difficult, but it was my responsibility to call attention to this glaring data point and work with the teacher to better serve our students.

Gradebook Audits

Gradebooks are often treated like a bank vault. However, if leaders are ultimately responsible for student records, accurate transcripts, and confirming all graduation requirements have been met, they should understand factors that combine to create a grade.

purposes. The conversation was difficult, but it was my responsibility to call attention to this glaring data point and work with the teacher to better serve our students.

The purpose of gradebook auditing is not to micromanage or to be Big Brother; rather, leaders who review gradebooks observe practices and trends, discuss consistencies and inconsistencies, and support teachers on the most effective grading methods in their discipline. Grading practices are not evident during instructional time. Therefore, audits afford leaders formative opportunities to observe grading practices in the same way that a classroom visit does so for instruction.

As a K-12 curriculum supervisor, I led gradebook audits with principals and supervisors to inform our multiple grades report card implementation. The exercise revealed major variations in teacher grading practice. In one example, a teacher had three summative grades throughout a semester-long course, making those summative assessments very high stakes. In another example, a teacher had more than 40 grades recorded in their grade book! The audit led to supportive and collaborative follow-ups. No one mandated an exact number of grades required in a grade book; principals did, however, coach teachers on how they can create a lower-stakes assessment environment with more performance opportunities throughout a semester. Principals also revisited how formative assessments should align with summative assessments. In some cases, students were given more opportunities. In others, teachers were relieved that they could reconsider not grading everything!

Technology makes gradebook audits more feasible and more accessible. Gone are the days where a principal, supervisor, or department chair thumbs through a paper gradebook. Student information systems and learning management systems offer robust reporting tools and administrative features to support transparency and collaboration in the gradebook.

Conclusion

The culture of grading lives in a commonly unspoken agreement in which autonomous grading is an unalienable right reserved by the individual teacher, never to be questioned and rarely spoken of. As a result, leaders need to be intentional and strategic to open dialogue and reshape the culture of grading within their schools. Grades will likely remain a controversial topic; however, by embracing the conversation rather than avoiding it, leaders can shift the discourse from one of contention to a collaborative dialogue that seeks to better communicate what students know and can do. By making the choice to lead for grading reform, leaders have an opportunity to leverage and reintroduce grades for their intended purpose – to communicate student learning progress and academic growth.

Grading is not simply a summative, periodic practice – it is an ongoing practice and vital method of communication between the teachers, the school system and its students and families. Avoidance might buy time and preserve a status quo, but it will not improve the shortcomings associated with traditional grades. The question for leaders is whether the grades students receive accurately communicate what they have learned.



Dr. Joseph Anthes is an Assistant Professor in the Professional and Secondary Education Department in the College of Education at East Stroudsburg University of Pennsylvania. He previously served as Curriculum Supervisor for the Related Arts and Social Studies, K-12, a building principal and assistant principal, a high school social studies teacher, and an instructional coach. Anthes's research interests include grading and assessment, curriculum implementation, social studies education, and evaluation for equitable programs and systems.

Brookhart, S. M. (1991). Grading practices and validity. *Educational Measurement: Issues and Practice, 10*(1), 35–36. https://doi.org/10.1111/j.1745-3992.1991.tb00182.x

Guskey, T. R. (2015). *On your mark: Challenging the conventions of grading and reporting.* Solution Tree Press.

Link, L. J. (2019). Leadership in grading reform. In T. R. Guskey & S. M. Brookhart (Eds.), *What we know about grading: What works, what doesn't, and what's next?* (pp. 157–194). ASCD.

Pennsylvania Department of Education. (2021). *Educator effectiveness observation & practice: Framework for evaluation: Classroom teacher.*

Stiggins, R. J., & Conklin, N. F. (1992). *In teachers' hands: Investigating the practices of classroom assessment.* State University of New York Press.



Beyond the Mandate:

What the New K-12 Personal Finance Standards Could Mean for Pennsylvania Schools and Students

Ramat Oyetunji

Beginning with the 2026–27 school year, Pennsylvania students will be required to complete at least one-half credit of personal financial literacy during grades 9 through 12. Established by Act 35 of 2023, the requirement represents a significant step toward ensuring that students receive formal financial education before graduating from high school (Pennsylvania Department of Education [PDE], n.d.).

Much of the attention has understandably focused on the mandate. However, another part of Pennsylvania's changing approach to personal finance education warrants consideration. On July 1, 2026, new Academic Standards for Personal Finance took effect across the Commonwealth. Unlike the high school course requirement, the standards begin in kindergarten (PDE, 2025).

Pennsylvania has therefore established a high school requirement while simultaneously creating a K–12 framework for developing the knowledge and skills that underpin it. The new standards offer an opportunity to consider personal finance not simply as a subject students encounter just before graduation, but as an area of learning that can develop progressively throughout their education.



A K-12 Approach to Personal Finance

Pennsylvania's decision to address personal finance as a K–12 learning continuum rather than exclusively as a high school graduation requirement is consistent with a broader body of work in financial education. The National Endowment for Financial Education (NEFE) has emphasized the value of beginning financial education early and building a foundation of financial literacy throughout K–12 education (NEFE, n.d.). The Council for Economic Education (CEE) and the Jump$tart Coalition have similarly established national standards around financial knowledge, skills, and decision-making abilities that progress through elementary, middle, and high school (CEE & Jump$tart Coalition for Personal Financial Literacy, 2021).

Pennsylvania's standards reflect this developmental approach. Organized across four grade bands—K–2, 3–5, 6–8, and 9–12—the standards address Personal Finance Fundamentals, Income, Spending, Saving and Investing, Risk and Insurance, and Credit. Under this progression, concepts introduced in earlier grades are revisited with increasing sophistication as students progress through school (PDE, 2025).

Consider financial decision-making. In early grades, students explore how limited financial resources force choices. As students progress, that foundation develops into an understanding of opportunity cost and the trade-offs associated with earning, spending, and saving. By high school, students are expected to apply systematic decision-making processes to increasingly complex financial goals and choices (PDE, 2025). The underlying concept remains recognizable while the level of reasoning develops with the learner.

Together, the standards and the broader evidence expand the conversation beyond what students should know about personal finance before they graduate to what financial knowledge and reasoning might be developed throughout their K–12 education.

The Challenge for High Schools

Personal finance encompasses a broad range of knowledge and skills. Within a half-credit course, students may encounter income and taxes, banking, budgeting, saving, investing, credit, debt, insurance, risk, consumer decision-making, and financial goal setting. This often occurs as they approach the age when these concepts begin to have immediate consequences.

For students with limited prior financial education, high school teachers may face two instructional demands simultaneously: establishing foundational financial understanding and developing students' ability to apply that understanding to complex decisions. Implementation also extends beyond placing a course on the schedule. NEFE's examination of state financial education requirements has identified recurring considerations involving teacher preparation, access to quality curriculum and resources, partnerships and collaboration, and evaluation (NEFE, 2025). A mandate establishes that financial education must occur; effective implementation requires determining how a substantial body of knowledge can be taught meaningfully within the available instructional time.

The Opportunity for Elementary and Middle Schools

The K–12 structure of Pennsylvania's new standards presents another possibility: students need not necessarily arrive at the mandated high school course at the beginning of their financial education. Prior exposure to foundational concepts could allow the high school course to devote greater attention to analysis and application as students approach increasingly independent financial decisions.

Children encounter money long before high school, and their financial environment becomes increasingly complex as they move through elementary and middle school. Peer influence becomes more significant. Advertising and social media begin to shape preferences. Pennsylvania's grade-banded standards provide a framework for connecting these experiences to increasingly formal financial concepts without simply introducing high school content at younger ages.

A young student who understands that having limited money requires choices can later develop an understanding of opportunity cost. A student who recognizes the relationship between work and income can later explore different forms of compensation, taxes, gross pay, and net pay. A student who understands saving toward a desired purchase can eventually examine interest, investing, and longer-term financial goals. Research by Lusardi et al. (2010) underscores the importance of developing financial knowledge before adulthood. Their study of young adults found that fewer than one-third demonstrated basic knowledge of concepts such as interest rates, inflation, and risk diversification.

Earlier financial learning can therefore establish conceptual familiarity that later instruction can extend. Students entering high school with prior exposure to financial choices, trade-offs, income, spending, saving, goals, and basic concepts of risk may not arrive knowing everything required of a high school personal finance course. They would, however, have a framework through which more complex material could be understood.

Viewed in this context, the K–12 standards and the high school mandate are complementary rather than separate developments. The standards create the possibility of progressively developing financial understanding, while the mandated course provides an opportunity to apply that understanding as students approach adulthood.



The Intersection of Financial Literacy and Existing Academic Priorities

One consideration for elementary and middle schools is how financial literacy might intersect with existing academic priorities to avoid burdening already stretched resources and instructional time. Personal finance provides a practical context for mathematics through arithmetic, percentages, proportional reasoning, comparison, interest, and data analysis. It can support English language arts through interpreting information, evaluating claims, explaining choices, and communicating reasoning. Connections to career education can help students consider relationships among skills, education, work, income, and future opportunities.

The connections extend beyond academic content. Financial decision-making requires students to compare alternatives, establish priorities, evaluate information, consider consequences, solve problems, and make choices under constraints. Financial literacy can therefore provide an applied context for critical thinking, decision-making, problem-solving, goal setting, and communication.

This interdisciplinary potential is particularly relevant in elementary and middle schools, formative years for developing transferable skills that support increasingly complex learning and decision-making.

Beyond the Mandate

Pennsylvania's new approach to personal finance education is very encouraging. The high school mandate establishes an important expectation: students should not leave our schools without meaningful financial education, while the K–12 standards provide a framework for developing financial understanding gradually rather than beginning shortly before students are expected to use it independently.

My 14-year-old is among the Pennsylvania students coming of age during this transition and will be among the early cohorts to whom the new high school requirement will apply. The next several years will give educators, families, and other stakeholders across the Commonwealth an opportunity to observe how this progression takes shape in practice. As both an educator and a parent, I look forward to seeing where it takes us.



Ramat Oyetunji, MBA, CPFC®, CEPF®, holds a master's degree in business administration and a bachelor's degree in mechanical engineering. She is an educator, author, speaker, and founder of FLEX Financial Education™, where her work focuses on early financial education and financial literacy. The author of seven personal finance books, she is a Pennsylvania resident and parent dedicated to advancing students' financial education and real-world readiness.

Council for Economic Education, & Jump$tart Coalition for Personal Financial Literacy. (2021). *National standards for personal financial education*. https://www.councilforeconed.org/wp-content/uploads/2021/11/National-Standards-for-Personal-Financial-Education-2021.pdf

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs, 44*(2), 358–380. https://doi.org/10.1111/j.1745-6606.2010.01173.x

National Endowment for Financial Education. (n.d.). *Financial education research, resources for educators.* https://www.nefe.org/impact/educators.aspx

National Endowment for Financial Education. (2025). *K–12 financial education graduation requirement implementation position papers*. https://www.nefe.org/impact/policy-and-advocacy/k-12-financial-education-implementation-papers/default.aspx

Pennsylvania Department of Education. (2025). *Academic standards for personal finance: Grades K–12.* Commonwealth of Pennsylvania.

Pennsylvania Department of Education. (n.d.). Personal finance. Commonwealth of Pennsylvania. https://www.education.pa.gov



What Is Curriculum, Really?

Kristina Fulton, Ed.D. • Anne Jewett, Ed.D.

In 1957, the Soviet Union launched Sputnik, and the American curriculum changed. Curriculum changed in response to national urgency during the "race to space." Congress passed the National Defense Education Act, pressing schools to redesign math and science curriculum. During this time, schools began to ask what students should understand and why does it matter?

This was not the first time schools changed curriculum in response to an event or new understanding. Changes also occurred with the development of theories about learning. Decades earlier, John Dewey argued that learning should connect to students' lived experience. In the 1960s, Jerome Bruner proposed the concept of a spiral curriculum, in which students revisit the same core ideas with increasing depth as they grew.

Through the years, social and historical underpinnings have influenced curriculum, what knowledge is viewed as important, and how learning is organized. Today, Pennsylvania schools continue to address the effects of the COVID-19 pandemic while focusing on the implementation of new standards in some content areas. Schools are continuously coming back to the wonderings of what students should understand and why. What is the curriculum, and how is it connected to student learning? When used effectively, curriculum helps teachers make sense of learning goals, communicate, create coherence, and inspire meaningful learning for students.

What Curriculum Is

"I covered it," Cooper, a fifth-grade teacher in Virginia, shared with her colleague at lunch. These three words may also be spoken in grade level meetings, the copier room, or with a colleague in the hallway. Cooper lamented more, "I taught them (the students) that matter is 'anything that has mass and takes up space' and how energy helps matter change phases. I covered it all from the (curriculum) framework."

"Why don't they get it?" These five words are also shared in classrooms, offices, and as teachers review classroom assessment data. Cooper's experience points to a common misconception about curriculum. Rather than viewing curriculum as a list of topics or a pacing guide, curriculum can and should be more. Curriculum carries multiple meanings across literature. Sometimes, curriculum is interpreted as the resource or program adopted by a district for instruction. Curriculum refers to student learning goals, meaning what students should know, understand, and be able to do, and the learning experiences to achieve them (Wiggins & McTighe, 2005). The curriculum also reflects a district's values and goals. Curriculum is a coherent system that supports purposeful teaching and learning. A strong curriculum allows teachers to connect daily instruction to broader learning goals.

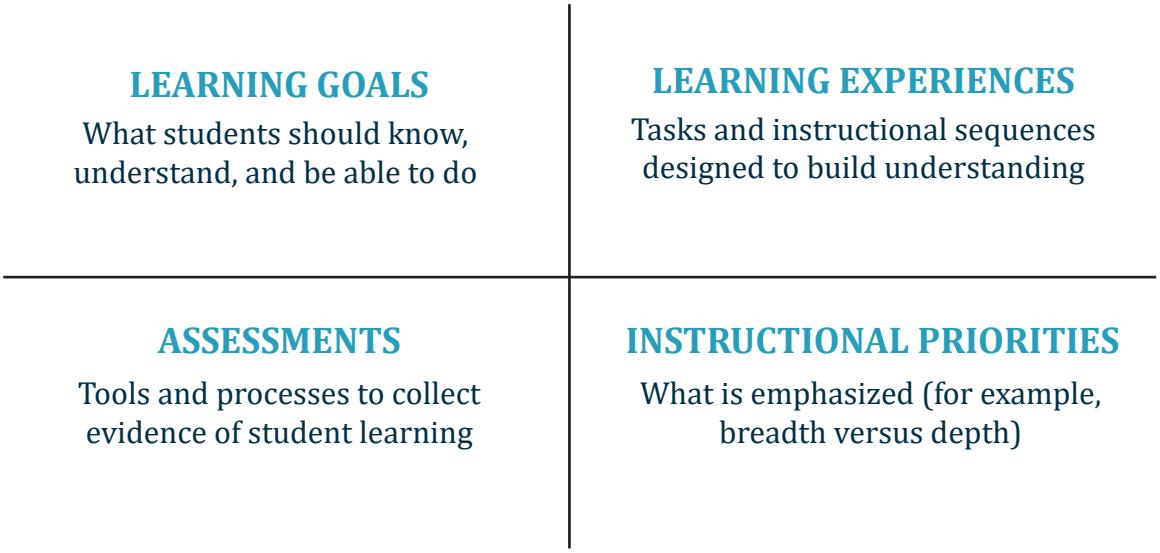


Defining Curriculum: A Shared Language

The field of education can have many buzzwords, abbreviations, or instructional approaches that have drifted from their original intention. And, at times, curriculum may be referred to as "materials," yet it is so much more. These varied and sometimes misused terms can be confusing. In order for a curriculum to be usable, it is necessary for teachers and school leaders to share common understandings.

To get started, consider the definitions of learning goals, learning experiences, assessments, and instructional priorities. These definitions are important curriculum components. How are they different? How are they similar? Are there any areas of uncertainty? How might these connect with definitions others hold within your school context?

Components of Curriculum



Curriculum as Sensemaking

Curricula are most effective when they help teachers make sense of how lessons build toward broader goals and when they guide them in planning with intention (Penuel et al., 2007; Remillard, 2005). How do the lessons connect to the learning goals? How can I plan instruction with intention rather than improvisation?

Strong curriculum materials support both teaching and learning. They include explicit learning goals, convey how lessons build across days or units as an instructional sequence, share the rationale for instructional decisions, and spotlight connections between the content and tasks.

In practice, teachers can ask, *How does this lesson connect to the learning goals? How does this learning experience support understanding?* Curriculum is the guide for meaning-making–both for the teacher and the classroom of students.

Teachers as Active Decision Makers

Teachers use curriculum materials to make decisions about what to emphasize, what to omit, and how to adjust tasks to align with their instructional priorities and the unique circumstances of their classrooms (Biesta et al., 2015; Brown, 2009; Remillard, 2005).

The learning context factors into this decision-making. What are students' backgrounds and needs? What are the structural logistics (for example, the schedule and time) to navigate? Which resources are available and when? What are the teachers' beliefs? What are the current instructional priorities?

Effective teaching involves constant decision-making. A guiding compass for the volume of decisions is to ensure alignment with learning goals and adapting tasks to ensure engagement.

The path forward begins with perspective, not purchase. When leaders treat materials as design choices, and teachers adapt them around learners, relevance and growth become the norm. That is the promise of student-centered design.

What Curriculum is Not

1 Misconception #1- Curriculum is static

The path forward begins with perspective, not purchase. When leaders treat materials as design choices, and teachers adapt them around learners, relevance and growth become the norm. That is the promise of student-centered design.

Curriculum evolves through evidence that students leave behind. Evidence of what students understand and where they experience difficulties can guide curriculum refinement. "Next time I will…" is something teachers say to themselves or perhaps in collaboration with colleagues after lessons or as units end.

Changing goals and priorities also motivate curriculum evolution. When a school division adopts a new initiative, such as a Portrait of a Graduate, the curriculum also needs to be revised to incorporate the changes. Curriculum that does not respond to changes in vision becomes a barrier rather than an enabler.

Lastly, the curriculum needs to be responsive beyond the school walls. Real-world events, changes in a community, and new understandings about how people learn all have the potential to inform and change what is being taught and how.

What serves students in one community may not serve students elsewhere. This is why curriculum is not the same everywhere and why curriculum work is always evolving.

2 Misconception #2- Curriculum is a checklist or pacing guide

Curriculum is not a checklist of standards, activities, or assessments. "Coverage of material" does not equal learning, and simply progressing through content does not imply understanding or long-term learning. Rather, standards identify outcomes. And activities are simply tasks unless they are purposefully designed to create meaningful learning.

A widely used curriculum development framework is Understanding by Design (Wiggins & McTighe, 2005). The intent of the framework is to provide a structured process for developing curriculum in a way that deepens students' understanding. It helps teachers too. The core idea is to first identify the results before determining the evidence needed to know whether the outcomes have been achieved. Finally, the learning experiences are planned. With this framework, lessons have a clear purpose and contribute to students' deep learning rather than being simply a checklist.

3 Misconception #3- Curriculum is instruction and assessment

Curriculum, instruction, and assessment are related, but not the same. Each depends on the other but serves different purposes in our schools. It establishes goals, priorities, and learning progressions that provide a framework for teaching and learning. Instruction is how learning is brought to life with students. When curriculum is confused with instruction, teachers may feel curriculum is what they teach rather than what they use as they are planning. Curriculum is not a script; instead, teachers use curriculum as a guide as they make instructional decisions that are responsive to the students in front of them. Assessment is how teachers and students know that learning is happening. When curriculum is confused with assessment, compliance and coverage become the focus rather than learning for understanding. A well-designed curriculum provides the framework for instruction and shares the assessments to pinpoint and monitor student understanding. A lack of alignment of curriculum, instruction, and assessment can lead to fragmented practices.



Conclusion

The story of curriculum change over time is, in many ways, the story of questions that keep getting asked in new ways. How do we best meet the needs of our students in our school? How do we prepare them for the future?

The underlying idea is that curriculum is not a finished product to deliver but a living structure to understand and refine. When curriculum functions as sensemaking, communication, coherence, and inspiration, it becomes a shared framework to help students build understanding that lasts.



Dr. Kristina Fulton is a Curriculum and Instruction Specialist at Lancaster-Lebanon Intermediate Unit 13. She has experience as a high school mathematics teacher, adjunct professor, instructional coach, and curriculum specialist. Her work centers on partnering with educators and leaders to create coherent, learner-centered experiences that make learning meaningful.



Anne Jewett directs the M.Ed. in curriculum and instruction program while also teaching and advising students in the Ed.S. and Ed.D. programs in curriculum and instruction. She has experience as a teacher, school administrator, curriculum specialist, and community college instructor across preK through graduate-level contexts.

Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. Teachers and Teaching, 21(6), 624–640. https://doi.org/10.1080/13540602.2015.1044325

Brown, M. W. (2009). The teacher-tool relationship: Theorizing the design and use of curriculum materials. In J. T. Remillard, B. A. Herbel-Eisenmann, & G. M. Lloyd (Eds.), *Mathematics teachers at work: Connecting curriculum materials and classroom instruction* (pp. 17–36). Routledge.

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal, 44*(4), 921–958. https://doi.org/10.3102/0002831207308221

Remillard, J. T. (2005). Examining Key Concepts in Research on Teachers' Use of Mathematics Curricula. *Review of Educational Research, 75(*2), 211-246. https://doi.org/10.3102/00346543075002211

Wiggins, G., & McTighe, J. (2005). Understanding by design (Expanded 2nd ed.). ASCD.



From Data to Achievement:

How ELCO Intermediate School Built Capacity, Strengthened Instruction, and Improved Mathematics Outcomes

Mindy Smith, M.Ed. • Barbara Davis, Ed.D.

Sustainable improvement in mathematics rarely comes from adopting a new program or implementing a single initiative. It comes from building educators' capacity to understand student learning, respond to evidence, and continuously refine instruction. At Eastern Lebanon County (ELCO) Intermediate School, inconsistent student performance in mathematics revealed the need for timely, actionable data to ensure instructional decisions were responsive to student needs and that teaching aligned closely with each learner's strengths and areas for growth. Improving mathematics achievement was never about finding a quick fix. It was about creating a system that empowered teachers to use timely data to make informed instructional decisions. Over the past several years, our school has experienced meaningful growth in mathematics performance because of a deliberate focus on collaboration, assessment, data analysis, and targeted instructional support.

One of the most important lessons we learned is that improvement begins with understanding exactly what students know and what they still need to learn. While statewide assessments provide valuable information, they often arrive months after instruction has occurred. We needed a way to monitor student learning in real time and respond immediately when students struggled.

A Shared Understanding

To accomplish this, our teachers worked together to create common mathematics assessments aligned to priority standards. More importantly, they established a shared understanding of what students should know and be able to do. Administering common assessments through LinkIt transformed professional conversations among teachers. Because teachers had immediate access to consistent, standards-based results, they could examine the same evidence, compare student performance across classrooms, and discuss instructional practices together. This shift moved the focus from simply covering content to ensuring students mastered essential skills and concepts.

Turning Data into Action

This level of precision changed the way we approached instruction. Data became a tool for action. Teachers reviewed LinkIt's standards-level reports during collaborative team meetings and analyzed which standards required additional attention. Together, they asked critical questions: What do we want students to know and be able to do? How will we know if they learned it? What will we do if they have not learned it? And how will we extend learning for students who have already demonstrated mastery?

Looking beyond individual student performance allowed us to identify instructional patterns across classrooms. When students consistently struggled with specific standards, we looked closely at the curriculum and how those concepts were being taught. This led to meaningful conversations about curriculum alignment, pacing, instructional strategies, and the opportunities students had to engage in higher-level thinking.

Through classroom observations and instructional walkthroughs, we identified areas where additional support could strengthen instruction. We found that teachers were deeply committed to student success and were working hard to meet student needs. However, we also identified opportunities to improve consistency in instructional practices, particularly around conceptual understanding, application of learning, and student discourse.

To support continuous improvement, instructional coaching was used to provide individualized feedback, model effective instructional strategies, and facilitate reflective conversations with teachers. Coaching created an ongoing cycle of observation, feedback, and support that helped teachers refine their practice and strengthen

strengthen student learning experiences. As a result, teachers were better equipped to implement research-based instructional practices and respond to student learning needs.

Building Teacher Capacity

Using this information, we developed a targeted professional learning plan designed to build teacher capacity. Professional learning focused on research-based instructional strategies, effective use of the Concrete-Representational-Abstract (CRA) model, differentiation, student engagement, and increasing opportunities for mathematical discussion and problem solving.

Rather than offering one-time workshops, we provided ongoing coaching, collaborative planning opportunities, peer observations, and data meetings. Teachers had opportunities to learn, implement, reflect, and refine their practices. This continuous improvement cycle helped create a culture where professional growth was viewed as a shared responsibility rather than an individual endeavor.

The impact of these efforts became increasingly evident during collaborative team meetings. Teachers regularly reviewed common assessment results and standards-level reports to identify students who required additional support and determine which concepts needed reteaching. The ability to disaggregate results by classroom, teacher, standard, and student allowed collaborative teams to move quickly from identifying learning needs to planning instructional responses. They created reteaching groups, adjusted instructional plans, and monitored the effectiveness of interventions. Because assessment data was available immediately, support could be provided before learning gaps became larger obstacles.

At the same time, students who demonstrated proficiency received enrichment opportunities that extended their learning. The goal was not merely to help struggling students catch up but to ensure that every student continued to grow.

Perhaps the most significant shift was the development of a culture centered on continuous improvement. Data discussions evolved from conversations about scores to conversations about instruction and learning. Teachers openly shared strategies that were producing positive results and collaborated to solve challenges together. Successes were celebrated, and obstacles became opportunities for collective problem solving.

Evidence of Impact

As a result, mathematics achievement at ELCO Intermediate School has steadily improved. Our data showed growth on both internal assessments and statewide measures. More importantly, students developed stronger mathematical reasoning skills, increased confidence, and greater perseverance when faced with challenging tasks.

The success we experienced reinforced a simple but powerful belief: student achievement improves when educators have access to timely information, meaningful collaboration, and targeted support. Tools, like LinkIt, supported that work by providing immediate access to actionable data, but it was how educators used that information to inform decisions, adjust instruction, and support one another that created lasting change.

While we are proud of the growth we have achieved, our work continues. We remain committed to refining our assessment practices, strengthening intervention systems, and ensuring that all students have access to high-quality mathematics instruction. We continue to focus on essential standards, address prerequisite skill gaps, improve differentiation, and increase student engagement through meaningful mathematical discourse and problem solving.

Lessons for Leaders

For school leaders, the lesson is clear:

Sustainable improvement is not created by purchasing a new program or waiting for annual assessment results. It is created by establishing systems that provide timely evidence of learning, empowering teachers to collaborate around that evidence, and supporting continuous refinement of instructional practice.

By building teacher capacity, improving instructional practices, and maintaining a relentless focus on student learning, we have created conditions where mathematics achievement can flourish.





Mindy Smith, M.Ed., is an Assistant Principal and former Instructional Coach. She holds M.S. degrees in Curriculum & Instruction, Online Teaching, and Educational Leadership. Mindy is dedicated to empowering both students and educators through collaboration, professional growth, and effective instructional practices. She is committed to building strong school communities, fostering continuous improvement, and creating meaningful learning experiences that help all learners reach their full potential.



Dr. Barbara Davis is a retired Assistant Superintendent and a past president of PA EDGE. She holds M.S. degrees in Instructional Technology (Bloomsburg University) and Ed Leadership (University of Scranton) and an Ed.D. from Neumann University in Ed Leadership. Dr. Davis continues to serve districts as the Director of Teaching & Learning for LinkIt!





SOLUTIONS DIRECTORY

Unlock game-changing solutions, high-impact programs, and trusted partner opportunities in our 2026-2027 Solutions Directory.

https://www.paedge.org/solutions-directory

PA EDGE



Leadership Training in Action

Why Training Requires Sustained Application and Ongoing Support

Ryan S. Sanders, D.B.A.

The Transfer Problem: Training Is Only the Beginning

Leadership training does not consistently transfer to job performance. Sørensen (2017) argues that while organizations invest impressive sums in leadership development annually, little evidence-based guidance exists for creating programs that transfer learning to practice. The gap between what leaders learn in training and what they apply in their organizations remains a significant challenge in professional development.

Research on public sector leaders reveals this issue. Hedberg Rundgren, et al. (2026) conducted a mixed-methods evaluation of leadership training on change management and found that training produced positive proximal outcomes through increased self-efficacy and leadership identity immediately following the intervention. However, sustained transfer to on-the-job application was dependent on work-environment factors, particularly whether participants held formal leadership positions and received organizational support (Hedberg Rundgren, 2026).

A meta-analysis of leadership training suggests that training is effective in improving reactions, learning, transfer, and results (Lacerenza et al., 2017). It also reinforces previous research suggesting that leadership training improves affective, cognitive, and skill-based outcomes (Avolio et al., 2009). If the training is to work, however, it must be tailored to the trainees with a needs analysis (Gurdjian et al., 2014; Lacerenza et al., 2017; Salas et al., 2012; Tannenbaum, 2002).

These findings reframe the transfer problem: training effectiveness depends not just on instructional quality but also on the conditions leaders encounter when returning to their organizations (Seeg et al., 2022; Velada et al., 2007).

Three Essential Conditions for Training Transfer

Successful leadership transfer requires attention to conditions across three timeframes: before training, during training, and critically after training.

Pre-training conditions establish readiness. Andragogy is central; adult leaders must perceive training as relevant to their current challenges, understand how learning connects to their own and organizational priorities, and be empowered to experiment with new approaches (Knowles, 1972).

During-training conditions create initial competence. Effective leadership development incorporates realistic scenarios, opportunities for practice and feedback, and explicit connections between training content and participants' work contexts (Knowles, 1972).

Post-training conditions determine sustainability. Merino et al. (2025) conducted a systematic review of continuing professional development and identified long-term engagement as a key factor in effective change. Programs that extend beyond training events through follow-up sessions and embedded support are significantly more likely to impact actual practice (Merino et al., 2025). Structured reflection, both individual and collective, enhances professional learning and sustains behavioral change (Merino et al., 2025). Research suggests more must be done because 30% to 40% of trainees fail to apply their training immediately, 70% discontinue within one year, and only 50% of training investments produce lasting results (Burke & Hutchins, 2007; Ford et al., 2018; Hall et al., 2014; Saks & Burke, 2012).

Action-Formation: Translating Learning into Practice

Translation of training into sustained action requires what Nīmante et al. (2025) describe a application to practice. This is not passive knowledg retention but deliberate, guided action wher leaders actively adapt innovations to their uniqu organizational contexts (Nīmante et al., 2025) Successful application requires action research co-designed methodologies, and embedded suppor systems that help leaders navigate the specifi constraints and opportunities (Nīmante et al., 2025)

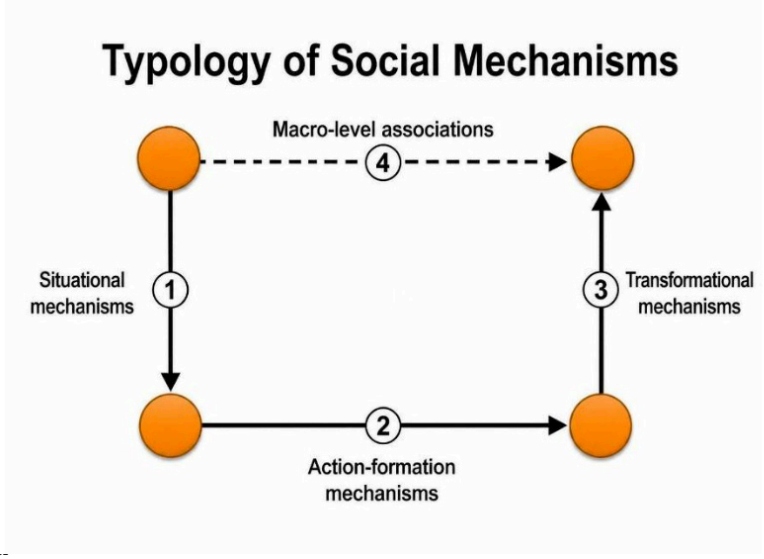
Leaders who engage in this process demonstrat stronger outcomes. Kurteshi and Rrustemi (2025 found a strong positive relationship betwee continuous professional development and teachin performance, but only when professional developmen extended beyond initial training to include sustaine engagement. Leaders who participated in structured, ongoing development programs demonstrated measurably better performance than those who attended isolated training events (Kurteshi & Rrustemi, 2025).

Mechanisms of Action-Formation

Translating training to sustained action requires an understanding of mechanisms that influence whether leaders maintain new practices. The method for translating learning into practice is based on the typology of social mechanisms. Hedströmand Swedberg's (1996) typology is a recognized sociological tool that allows for connecting the theoretical relationship of macro-level circumstances, or situational mechanisms, that occur during a training and its application to the micro level responses trainees have to the training, or action-formation mechanisms. This typology enables the trainer to identify patterns that illustrate the micro-level individual action mechanisms within the trainees during a training (Hedström & Swedberg, 1996). As shown in Figure 1, these patterns can be used to make causal inferences that highlight the transformational mechanisms that lead to training being effectively transferred (Hedström & Swedberg, 1996).

Figure 1

Typology of Social Mechanisms



Understanding Mechanisms of Action Formation

Knowles (1972) indicates that adults learn most effectively when perceiving training as relevant to their needs, which suggests that leaders sustain new practices when training addresses immediate challenges they face and organizations establish alignment through needs assessments, and explicitly frame content to address leaders' stated priorities.

Because social mechanisms connect macro-level training conditions to micro-level individual responses that allow inference of causal dynamics, they are effective at explaining how to assess sustained transfer (Hedström & Swedberg, 1996). But they require understanding of the specific mechanisms that indicate the training is being applied and sustained (Sanders, 2025).

Effective training transfer requires the trainer to assess and adjust training approaches based on four mechanisms: (1) Aligning Training and Outcomes, which creates focused, motivated attention by aligning trainee and organizational interests; (2) Connecting Theory and Practice, which facilitates learning by doing through integrated presentation of theory and application; (3) Practice and Pressure, which builds habit formation through balanced repetition and strategically applied pressure; and (4) Friction Management and Energetic Persistence, which maintains learning momentum by reducing cognitive, emotional, and physical overload, as trainee (and trainer) exhaustion or overload can trigger regression (Sanders, 2025).

These mechanisms operate at each phase of the typology of social mechanisms and produce learning outcomes; situational mechanisms are the organizational level (training design) and action formation mechanisms are the individual level (learned internal changes) (Sanders, 2025). The iterative adjustment of these mechanisms by trainers—assessing outcomes, modifying design, and reassessing—is found in the third phase of the typology, the transformational mechanisms. These tailored, individualized training processes are essential for consistent transfer (Sanders, 2025). For larger groups, multiple trainers paired with trained observers are necessary to maintain detailed knowledge of individual trainee needs and apply appropriately calibrated pressure to ensure transfer success (Sanders, 2025).

Organizational Context: The Make-or-Break Factor

Nadeem (2024) examined how distributed leadership functions in educational improvement and found that sustained leadership practice depends on institutional support, shared decision-making structures, and alignment between espoused values and operational systems. Leaders attempting to implement collaborative, coaching-oriented approaches within hierarchical or directive organizational cultures may face friction and eventual reversion to habitual behaviors.

Leadership transfer ultimately depends on whether the organizational environment reinforces or undermines new behaviors. When leaders return from training to unchanged systems, unsupportive managers, or misaligned performance expectations, even well-designed training is likely to have limited impact (Seeg et al., 2022; Velada et al., 2007).

Recommendations for Maximizing Leadership Transfer

Design Professional Development as a Multi-Phase System

To maximize transfer and sustained application, trainers must do regular assessments and adjustments using the mechanisms of action formation. Because of this, leadership development must span months or longer to encompass pre-training preparation, during-training practice, and post-training support. This is reinforced by the research suggesting 70% of trainees falter within one year and ultimately only 50% of training investments stick (Ford et al., 2018; Hall et al., 2014; Burke & Hutchins, 2007; Saks & Burke, 2012).

Each stage of training creates opportunities for transfer. First, assessments enable pre-training preparation to establish trainee readiness; by connecting their training to organizational priorities and their personal experiences and needs (Knowles, 1972). Second, assessment of during-training practice creates competence; through realistic scenarios with feedback at the moment of first application. Lastly, measurement of post-training conditions over time determines whether new practices stick. Merino et al. (2025) found that programs extending beyond initial events through follow-up sessions and embedded support produce significantly greater impacts, enhanced by structured individual and collective reflection.

Establish Peer Learning Communities and Structured Reflection

To reinforce transfer, consider peer learning communities to reduce isolation, enable collective problem-solving, and create peer accountability. Kurteshi and Rrustemi (2025) found that continuous professional development improves leadership performance only when sustained engagement with peers continues beyond initial training. Structured reflection—both individual (reflective journals, coaching conversations, action research) and collective (case discussions, learning circles)—makes tacit learning explicit and enables practical adjustment (Merino et al., 2025).

Align Organizational Systems and Engage Supervisors

Performance management, resource allocation, and strategic priorities must reinforce trained behaviors; otherwise, leaders revert to familiar approaches (Nadeem, 2024; Seeg et al., 2022; Velada et al., 2007). To improve the transfer of training, direct supervisors should understand training content, model new approaches, discuss implementation in regular check-ins, include training in performance feedback, and remove barriers to practicing change. Without active supervisor engagement, training transfer is likely to remain optional rather than genuinely expected.

Conclusion

Further research is needed to identify the transformational mechanisms that enable tailored, individualized training processes to consistently transfer leadership training. But the body of

literature does show that it requires sustained application, continuous reinforcement, and ongoing organizational support to produce meaningful results. Organizations that invest in leadership development must recognize that training marks the beginning, not the end, of the development process. By attending to post-training conditions, fostering deliberate action-formation, and aligning organizational systems, educational leaders can ensure that professional development investments yield lasting improvements in leadership practice and, ultimately, organizational effectiveness.



Dr. Ryan Sanders is an Assistant Professor of International Business at Temple University. He founded Educate Innovate Inspire, a leadership consulting company, advising organizations on leadership, team performance, and organizational development. Previously, he taught international business at the University of Delaware's Lerner College of Business and Economics, where he directed international

Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology, 60*(1), 421–449. https://doi.org/10.1146/annurev.psych.60.110707.163621

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review, 6*(3), 263–296. https://doi.org/10.1177/1534484307303035

Ford, J. K., Baldwin, T. T., & Prasad, J. (2018). Transfer of Training: The Known and the Unknown. *Annual Review of Organizational Psychology and Organizational Behavior, 5*(1), 201–225. https://doi.org/10.1146/annurev-orgpsych-032117-104443

Gurdjian, P., Halbeisen, T., & Lane, K. (2014). Why leadership-development programs fail. *McKinsey Quarterly,* (1), 121–126.

Hall, G., Smith, M., & Dare, C. (2014). The Learning Transfer Big Picture. *Performance Improvement, 53*(10), 6–11. https://doi.org/10.1002/pfi.21442

Hedberg Rundgren, E., Costea, V.-A., Hasson, H., Augustsson Öfverström, H., & Richter, A. (2026). Developing leaders' capacity to lead change in the public sector: a mixed-methods evaluation of proximal training outcomes and training transfer. *International Journal of Public Leadership*, 1–16. https://doi.org/10.1108/IJPL-03-2026-0060

Hedström, P., & Swedberg, R. (1996). Social Mechanisms. *Acta Sociologica, 39*(3), 281–308. https://doi.org/10.1177/000169939603900302

Knowles, M. S. (1972). Innovations in Teaching Styles and Approaches Based upon Adult Learning. *Journal of Education for Social Work, 8*(2), 32–39. https://doi.org/10.1080/00220612.1972.10671913

Kurteshi, V., & Rrustemi, J. (2025). Exploring the Impact of Continuous Professional Development on Teacher Performance: Insights from Students and Teachers. *Educational Process International Journal, 16*(1). https://doi.org/10.22521/edupij.2025.16.228

Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Joseph, D. L., & Salas, E. (2017). Leadership training design, delivery, and implementation: A meta-analysis. *Journal of Applied Psychology, 102*(12), 1686–1718. https://doi.org/10.1037/apl0000241

Merino, C., Pacheco, G., Arenas-Martija, A., Becerra, R., & Solís-Pinilla, J. (2025). Continuing professional development in teachers: insights for designing a formative trajectory in scientific education. *Frontiers in Education, 10*. https://doi.org/10.3389/feduc.2025.1537502

Nadeem, M. (2024). Distributed leadership in educational contexts: A catalyst for school improvement. *Social Sciences & Humanities Open, 9*, 100835. https://doi.org/10.1016/j.ssaho.2024.100835

Nīmante, D., Kokare, M., Baranova, S., & Surikova, S. (2025). Transferring Results of Professional Development into Practice: A Scoping Review. *Education Sciences, 15*(1), 95. https://doi.org/10.3390/educsci15010095

Saks, A. M., & Burke, L. A. (2012). An investigation into the relationship between training evaluation and the transfer of training. *International Journal of Training and Development, 16*(2), 118–127. https://doi.org/10.1111/j.1468-2419.2011.00397.x

Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The Science of Training and Development in Organizations. *Psychological Science in the Public Interest, 13*(2), 74–101. https://doi.org/10.1177/1529100612436661

Sanders, R. (2025). *The long and winding road to self-leadership: Ethnographic insights into effective training transfer* [Doctoral Dissertation]. Temple University.

Seeg, B., Gauglitz, I. K., & Schütz, A. (2022). Explaining and enhancing training transfer: a consumer-centric evaluation of a leadership training. *Human Resource Development International, 25*(5), 506–526. https://doi.org/10.1080/13678868.2021.1904351

Sørensen, P. (2017). What research on learning transfer can teach about improving the impact of leadership-development initiatives. *Consulting Psychology Journal: Practice and Research, 69*(1), 47–62. https://doi.org/10.1037/cpb0000072

Tannenbaum, S. I. (2002). A strategic view of organizational training and learning. In K. Kraiger (Ed.), *Creating, implementing, and maintaining effective training and development: State-of-the-art lessons for practice* (pp. 10–52). Jossey-Bass.

Velada, R., Caetano, A., Michel, J. W., Lyons, B. D., & Kavanagh, M. J. (2007). The effects of training design, individual characteristics and work environment on transfer of training. *International Journal of Training and Development, 11*(4), 282–294. https://doi.org/10.1111/j.1468-2419.2007.00286.x



Feedback That Fuels Growth

Stephanie Ferree, Ed.D.

A continuous cycle of feedback is an integral component of supervision, evaluation, and coaching. The school experience thrives when this feedback emanates from many perspectives – administrative teams to administrative teams, administrator to staff, staff to staff, teacher to student, student to student– but does the feedback provided in these scenarios create two-way conversation, provide opportunity for reflection, and focus on fueling growth? Or does it elicit emotional responses that paralyze the ability to move forward and focus on past shortcomings? Years ago, an administrator was approached by a student teacher who requested an observation because, during their pre-service journey, they did not feel as if they were given feedback that was designed to help them grow. The student teacher's observation was stellar, and the administrator provided examples based on the administrator's perception of the teacher's strengths. The conversation affirmed the student teacher's strengths, but it missed an opportunity to move beyond affirmation toward reflection, innovation, and future growth.

Consider another example, this time from the perspective of a new building principal. A new building principal always prided herself on the post-observation conference with new or veteran teachers, where she provided and discussed a prepared list of strengths or very specific areas to improve. The administrator thought she was having conversations with individuals that helped them grow, but were there opportunities for two-way communication and support for these teachers to focus on the future and adjustments to instruction or brainstorming about innovative practices? In both examples, it is possible that the administrator was creating a sense of frustration and a perception that feedback is all about what went well or what shortfalls were present, all with solutions from an outside lens. This approach is very traditional and often counterintuitive to the work that should be done in school: fueling growth, not emptying the tank.

The work of Joe Hirsch (2017) in his book, The Feedback Fix, takes a look at how a leader can focus less on what happened in the past and instead on where to go in the future. Hirsch (2017) defines feedforward as "the future learning feedback that creates consciousness, unleashes creativity, re-purposes teams, and builds autonomy and resilience" (p. 24). According to Mormando (2023), feedforward allows individuals and teams to focus on empowering future progress. Feedforward focuses on reinforcing what is working, coaching through the opportunity to teach and motivate for a different result, with the phrase, "next time," as a core component of listening and discussion. Feedforward opens opportunities for positive improvements, fostering an environment of growth and creativity – not who you are, but who you can be. Feedforward shifts thinking toward a growth mindset approach to fueling creativity and innovation rather than always focusing on errors and judgment. Feedback in and of itself alludes to what has already happened, often making it feel critical, even if that is not the intent. Brain research supports that the word "feedback" often triggers the limbic threat recognition system in the brain, which elicits a fight-or-flight reaction (Hirsch, 2017). This explains why teachers often loathe post-observation conferences because their brain is saying, 'get away, this is wrong,' and produces an emotional response. This is often why there is no growth or change after the conversation. Human Resources expert Per Frageman (2025), in his blog, states, "feedback is vital to growth. But if we can't hear or internalize the feedback due to emotional response, it is totally ineffective. To accelerate learning and improve performance, try minimizing the negative emotion inherent in feedback by focusing on the future rather than on the past." Putting the feedforward approach into practice can take many forms, from simple individual conversations to more structured approaches for coaching and problem-solving. The following strategies provide practical ways to shift conversations from looking back at what happened to thinking forward about what could happen next.



Marshall Goldsmith (2025) creates a simple approach where individuals are asked to pick one area of improvement, receive one or two quick suggestions from someone else with no judgment or discussion, say thank you, and recognize suggestions as a gift to help, not to criticize. It sounds like this:

Person 1: I want to get better at _____.
Person 2: Have you tried _____ and _____.
Person 1: Listen attentively and take notes. Thank you.

The concept seems simple, yet it is powerful. Feedforward shifts the focus away from the past and toward growth, allowing individuals to receive and process ideas as gifts intended to support improvement — not as judgments to be defended, debated, or overanalyzed. The receiver is responsible for taking on what was shared and internalizing it to make a personal shift.

While Goldsmith's approach emphasizes receiving ideas without judgment, feedforward can also invite individuals to take a more active role in identifying their own solutions. Feedforward can also place greater responsibility for identifying solutions with the individual. Hirsch (2018) recommends a direct approach to embracing feedforward thinking. Describe what is happening, explain why it is a problem, and then prompt the individual for a solution. This method is clear and concise and takes away any emotions that could become defensive. It allows for a problem to be identified and solutions to be developed together. Sometimes, when grappling with a challenge, the administrator poses the question, 'Share your challenges/barriers, but also identify solutions to meet this challenge/barrier.' This causes people to reflect and think about how they can overcome a challenge.

While these approaches can strengthen individual coaching conversations, feedforward can also extend to how teams approach challenges and make decisions. The 1-3-1 method is one framework that shifts teams from reporting problems to owning solutions. This method is a productivity method used with teams to shift from reporting problems to owning solutions. This method identifies one problem, brainstorms three potential, viable solutions, and makes one recommendation for the best course of action. This method can help teams and individuals move from what has happened in the past to what the future can look like- a feedforward approach. Questioning by the facilitator looks like:

- Can you tell me more about this solution?
- I wonder how you could... to strengthen...?
- To make this even stronger, what if...?

Regardless of the strategy or framework being used, the power of the feedforward approach often lies in the way questions are asked and how individuals are encouraged to think and respond. Active listening is key, as well as encouragement and follow-up. Conversations that fuel growth and opportunity are not one and done. They are not part of a checklist but part of an ongoing cycle that focuses on positivity and the future. Effective questions are:

- I loved how you..., I wonder if you could... by trying...?
- How might this impact...?
- What is your plan to address...?
- What would make it better next time?

This same reflective approach can be incorporated into classroom observation and coaching. One method can be the use of a verbal flowchart, where the observer maps the flow of communication, focusing on who is talking with whom, the sequence of interactions, transitions, or teacher-student dialogue in a lesson or a given period of time. The observer collects the data, and the conversation with the teacher focuses on what the teacher sees in the data. The observer may point out an area of concern where the teacher can provide the solutions. If an observer is taking a feedforward approach, it's best practice for the observer to ask permission after listening to the teacher. This forward-thinking language includes:

- Can I give you an alternative approach going forward?
- Would you mind if I gave you some guidance for next time?
- I used to do that. Can I tell you what I did to improve/change?

Effective leaders create an environment where a feedforward approach is about growth in order to empower people to see upcoming opportunities. Instead of telling people what they have done wrong, invite them to reflect and open the door to self-awareness and accountability.

The value of these questions becomes even more apparent when conversations involve challenging or emotionally charged situations. Consider, for example, a conversation between an administrator and teacher about problematic student behavior. All too often, a conversation of this nature can start or quickly move into a negative spiral of communication and not focus on moving forward. In a meeting related to student behavior, it is important to move from frustration and anger to a place of curiosity and support. Helping the teacher to celebrate improvement or what the student does well, identifying strengths and identifying behaviors, will set the stage for forward movement for both the teacher and student. Asking questions like:

- I notice the student struggles with _____...
- The student responds well to _____...
- One of the student's strengths is _____...
- I wonder what would happen if we...

Whether working with an individual or a team, a feedforward approach creates space for collaboration, reflection, and shared problem-solving. It builds psychological safety by allowing individuals to be heard while encouraging them to take ownership of what comes next. The goal is not to ignore the past, but to use what has been learned from it to shape future actions, possibilities, and growth. Shifting from feedback to feedforward does not require abandoning the conversations we already have. It requires being more intentional about how we frame those conversations, the questions we ask, and who owns the thinking. When we spend less time looking backward and more time considering what is possible next, feedback can become fuel for growth rather than a judgment of performance. As you consider your own conversations with individuals and teams, ask yourself:

- Am I fueling my feedback from a place of growth and development or from a place of fear and conflict?
- How can I change my current practice to be more reflective of the future and intentionally fuel growth?

Perhaps the most important shift is a simple one: move the conversation from "what went wrong?" to "where do we go next?"



Dr. Stephanie Ferree has dedicated 32 years to education in Pennsylvania, which has contributed to her expertise in school leadership. Before becoming the Director of Elementary Education in Dallastown Area School District, she served as Supervisor of Curriculum and Instruction, supporting K-12 curriculum, instruction, and assessment, federal grants, and professional development.

Frageman, Per (2025, December 11). Feedback To Critical? Try the Feedforward Approach. *Small Improvements.* https://www.small-improvements.com/blog/feedback-too-critical-try-the-feedforward-approach/.

Goldsmith, M. (2025, February 11). Try Feedforward Instead of Feedback. *Marshall Goldsmith* https://www.marshallgoldsmith.com/post/try-feedforward-instead-of-feedback.

Gonzales, J. (2018, January 21.). Moving From Feedback to Feedforward. *Cult of Pedagogy.* https://www.cultofpedagogy.com/feedforward/.

Hirsch, Joe (2017). *The Feedback Fix.* Rowman & Littlefield.

Mormando, S. (2023, November 15). The Power of Feedforward in Student Learning. *Medium*. https://medium.com/@SamMormando/the-power-of-feedforward-in-student-learning-c6fee9cff3be)





How Education Leaders Accidentally Create Burnout Cultures... And What To Do Instead

Julia Bialeski

Supporting educator well-being is about more than recognition, one-off initiatives during Teacher Appreciation Week, a ten minute chair massage, or wearing jeans on Fridays. Instead of episodic well-being gestures that can feel to overworked educators like removing a single grain of sand from a beach, education leaders should be focused on building a culture of wellness across schools and districts.

The cumulative demands of increasing student needs, high accountability requirements, rapidly changing technology, community and public scrutiny on our schools, and the inherent demands of working with children have made educators particularly susceptible to occupational burnout, with serious impact not only on individual teachers' well-being, but student outcomes as well (Nwoko et al., 2023).

Unfortunately, there could be some districts that operate based on a culture of burnout. This is done through normalized habits, unspoken expectations, and systems that reward unsustainable behavior in our schools and districts. Here are 12 ways leaders accidentally create burnout cultures, and what to do instead:

1. Rewarding responsiveness over sustainability:

Instead of saying, "Thank you for always being available," which creates a culture where people are never disconnected from work, reward people who are excellent at prioritization, setting and keeping boundaries, and performing consistently—and sustainably—over time.

2. Confusing high performance with high capacity:

Instead of relying heavily on a reliable high performer every time a new project or initiative comes up, ensure that work is evenly distributed across the team.

3. Normalizing urgency:

If everything is a priority, nothing is a priority. Be explicit with yourself and your team about what is urgent, what is important, and what is simply loud noise. Push back on the "squeaky wheels" and watch that they don't always get the grease, or you're sure to be unintentionally supporting a culture of nonstop urgency.

4. Confusing sacrifice with commitment:

If you find yourself praising someone for staying until 9pm to get something done at school, pause and recognize that behavior for what it is: overwork. Look for opportunities to celebrate effectiveness, collaboration, and working at a healthy pace instead.

5. Failing to create psychological safety:

Many leaders believe, "If people are struggling, it's up to them to come to me and tell me." Instead, create an environment of trust and honesty, and stay attuned to your people. In a culture of wellness, leaders proactively recognize when someone on the team is struggling.

6. Overloading the team during busy times:

Instead of thinking, "We just need to push through" during stressful seasons, reduce nonessential demands on the team. This could look like pausing recurring meetings as teachers are preparing for parent conferences or report card deadlines, or ensuring that you do not commit to new projects or initiatives while your staff is still learning a new curriculum.

7. Leading without your EQ:

A team could be high performing and hitting all goals, targets, and metrics, but people could be completely burned out. Instead of just assuming you're on track, measure staff morale, emotional bandwidth, and student proficiency data equally to see how your team is really doing.

8. Modeling unhealthy behavior:

If there is one thing on this list that I personally believe is the most toxic, it's this one. Leaders who are sending emails 24/7, never taking a day off of work, and in a state of constant exhaustion themselves are modeling these behaviors for their teams. Instead, leaders committed to a culture of wellness should model healthy work/life boundaries, take time for recovery, and hold themselves to realistic expectations.

9. Assuming silence means people are okay:

No news does not necessarily mean good news. Instead, have regular check-ins with team leaders for frequent opportunities to see how people are doing in order to stop burnout before it happens.

10. Constantly adding without removing:

When something new needs to be done, instead of just adding "one more thing" to everyone's plates, identify what else can be stopped, paused, or can wait until later.

11. Treating resilience as an unlimited resource:

People are resilient. Educators as a group are particularly skilled at adapting to change. But, leaders of wellness should create supports and systems within their schools and districts, so that people aren't constantly needing to tap into their resilience in order to survive.

12. Assuming leadership means having all the answers:

We all feel the pressure to hold everything together for our teams. Instead, hold steady, be clear about what only you can do, and be honest with your team when you don't have an answer. Know you're not perfect, and no one expects you to be.

A principal or district leader who commits to establishing a culture of wellness can have a tremendous impact on the educators within their immediate sphere of influence and on the long-term health and sustainability of the district. Ultimately, the goal is not simply to help educators cope with burnout; it is to create schools and districts where people can do meaningful, demanding work without sacrificing their well-being to do it.



Julia Bialeski is the founder and principal consultant with Julia Bialeski Coaching & Consulting, LLC. She serves as the Coordinator of Recruitment and Hiring for the Howard County Public School System in Maryland, where she leads districtwide talent acquisition initiatives supporting more than 57,000 students across 78 schools. A former elementary principal, assistant principal, instructional specialist, and classroom teacher, she brings more than two decades of experience in educational leadership, human resources, and educator development. Julia is the author of Leading with Grace, and she presents nationally on educator wellbeing, emotional intelligence, leadership development, and sustainable leadership practices.

Nwoko, J. C., Emeto, T. I., Malau-Aduli, A. E. O., & Malau-Aduli, B. S. (2023). *A systematic review of the factors that influence teachers' occupational wellbeing. International Journal of Environmental Research and Public Health, 20*(12), 6070. https://doi.org/10.3390/ijerph20126070

Anchored Together:

How Mindfulness and Mattering Build Resilient Schools

Lori J. Stollar, Ed.D.

Leading a school has become increasingly complex. Rapid technological change, the rise of AI, the lasting effects of COVID-19, and growing expectations from parents and employers are converging in ways that have disrupted traditional models of schooling (Garipagaoglu, 2025). The disruption is no longer occasional. It is constant, overlapping, and largely unpredictable. As a result, school leaders can no longer rely on incremental adjustments. They must rethink how the entire organization operates so it can remain responsive to students, families, and their workforce while staying flexible enough to adapt (Stollar, Prendergast, & Lee, 2027).

Organizational resilience begins with the capacity to adapt, learn, and move forward together. That capacity rests on how carefully people attend to one another and to the conditions that shape their work. This kind of resilience requires two complementary leadership disciplines: the ability to notice what is happening in the organization and the ability to ensure people know they matter within it.

The NAN Model: Creating Mattering in Schools

Think about the last time you felt you truly mattered somewhere. It likely was not because someone gave you a certificate or offered a generic "great job" in a staff meeting. More likely, someone noticed what you were carrying, named a strength you brought, or made clear how your contribution helped the organization. That is mattering. Mercurio (2025) describes mattering as the belief that we are significant to the world around us, grounded in feeling valued by others and recognizing that we add value to them.

Mattering is often confused with belonging, but the two are distinct. Belonging communicates, "You are welcome here." Mattering goes further: "You make a difference here." One signals acceptance; the other signals significance.



Mindfulness and Mattering: Building Organizations That Notice and Respond

Together, mindfulness and mattering strengthen organizational resilience. Resilience grows when people feel seen, have their strengths recognized, and understand that their contributions are essential to the school's success. Mercurio's (2025) NAN model—Noticed, Affirmed, and Needed—gives leaders a practical way to create these conditions. Organizational mindfulness, rooted in Weick and Sutcliffe's (2001) research on High Reliability Organizations, gives leaders a way to notice what those conditions require in the first place. The sections that follow take up mattering, then mindfulness, showing how each discipline supports the other.

Mercurio's NAN model (2025) breaks mattering down into three experiences: Noticed, Affirmed, and Needed.

Noticed means feeling genuinely seen and heard. That takes more than knowing someone's name or job title. It means paying attention to the shifts, concerns, and circumstances that might otherwise go unseen. Leaders show this by asking real questions, listening closely, remembering what matters to people, and responding with compassion when someone's struggling.

Affirmed means understanding how your specific strengths create real impact. This goes beyond generic praise. It's evidence of significance, drawing a clear line between what someone did, how they did it, and

and why it mattered to colleagues, students, families, or the organization's larger purpose. People recognize their own value more easily when leaders can name it specifically.

Needed means seeing how your presence and contribution are indispensable to something shared. This comes from being trusted with responsibility, invited to bring your expertise, and shown how your work serves a purpose bigger than any single task. It's not about making people feel overburdened or irreplaceable in an unhealthy way. It's about helping them see that the organization is stronger because of what they uniquely bring.

Together, these three experiences make mattering an everyday practice, not an occasional gesture of appreciation. Leaders build it through how they pay attention, explain impact, distribute responsibility, and connect individual work to a shared purpose.

Organizational Mindfulness as a Support for the NAN Model

Weick and Sutcliffe's (2001) research helps explain how leaders can embed these experiences into the routines of a resilient organization. Their work with High Reliability Organizations such as hospital emergency departments, nuclear power plants, and aircraft carriers identified five processes that help complex systems remain alert and adaptive: preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise.

Schools are not nuclear power plants or aircraft carriers, but they are complex systems where small concerns can grow if they go unnoticed. A subtle change in student behavior, an increasingly overwhelmed teacher, a pattern of communication breakdowns, or an inequitable practice may initially appear minor. Organizational mindfulness encourages leaders to notice these signals early, investigate them carefully, and respond with the people who understand the situation best.

These five processes need not become another framework competing for leaders' attention. Instead, they can function as organizational habits that support the NAN model.

Sensitivity to operations strengthens noticing. Mindful leaders remain close to the daily reality of classrooms, teams, and departments. They do not rely exclusively on reports, surveys, or end-of-year outcomes to understand the school. They listen, observe, ask questions, and pay attention to the experiences of people doing the work.

Reluctance to simplify strengthens affirmation. Leaders resist reducing people or situations to labels, assumptions, or single explanations. They seek multiple perspectives and recognize the unique strengths, experiences, and insights individuals contribute. This creates a more accurate understanding of both challenges and the team's capacity to address them.

Deference to expertise helps people feel needed. In mindful organizations, authority can move toward the person with the most relevant situational knowledge, regardless of title or position. A teacher, paraprofessional, counselor, custodian, student, or family member may understand an issue more fully than the person with the most formal authority. Inviting that expertise communicates that the person's knowledge is indispensable to the response.

Preoccupation with failure strengthens noticing. Alongside sensitivity to operations, it pushes leaders to treat small, easily dismissed issues as valuable information worth investigating rather than noise to move past. This approach also supports and affirms those who have the courage to bring these issues to light.

Commitment to resilience strengthens being needed. It recognizes that schools will face disruptions, and recovering from them relies on trusting people with real responsibility when things go sideways, not centralizing the response in a single office or leader.

A school cannot be truly mindful if people are afraid to speak, convinced that no one will listen, or uncertain that their contributions matter. Likewise, a school cannot sustain mattering if leaders fail to notice emerging problems or repeatedly allow pressures to fall on the same people.

Becoming a Resilient Anchor

Organizational theorist Peter Vaill (1996) described leaders as navigating "permanent white water"—the continuous, unpredictable turbulence this article opened with rather than occasional disruption. For school leaders, the image captures both the pace of change and the need for steady practices that help people respond together. Education has been operating in this white water for some time. School leaders cannot calm every current or prevent every wave, but they can build schools that are less likely to be pulled apart by each new challenge.

Two practices make that kind of resilience possible. Mindfulness gives the organization the awareness to see what is emerging. Mattering gives people the confidence and commitment to respond together. Resilience cannot be mandated into existence. It is built through deliberate leadership practices that help leaders notice shifting conditions and help people stay anchored to one another before the next wave arrives.



Dr. Lori Stollar is Executive Director of PA EDGE. She brings a career in curriculum leadership, innovation, and higher education teaching to her work bridging research and practice for school and district leaders. She is co-author of Leading Resilient Schools (Corwin, 2027) and serves as a thought partner to leaders navigating organizational change.

Garipağaoğlu, B. Ç. (2025). Achieving organisational agility in K–12 schools through school mindfulness: The role of school social capital as a mediator. *European Journal of Education, 60*(3), e70170.https://doi.org/10.1111/ejed.70170

Mercurio, Z. (2025). *The power of mattering: How leaders can create a culture of significance. Harvard Business Review Press.*

Stollar, L., Prendergast, L., & Lee, P. (2027). *Leading resilient schools: Adapting for collective efficacy, impact, and coherence*. Corwin.

Vaill, P. B. (1996). *Learning as a way of being: Strategies for survival in a world of permanent white water*. Jossey-Bass.

Weick, K. E., & Sutcliffe, K. M. (2001). *Managing the unexpected*. Jossey-Bass.



SAVE THE DATES



elevateED 27
PA EDGE CONFERENCE

One Conference. Three Locations. Infinite Impact.

PA EDGE is bringing high-quality professional learning directly to you with three one-day conferences across the Commonwealth.

Find your closest location and mark your calendar NOW!

Cranberry Township	State College	Malvern
April 13th	April 14th	April 15th

Registration Opens in November

MAGNOLIA CONSULTING GROUP
LinkIt!

Save the date.

AUG 1–3

Pennsylvania Summit for Educational Leaders

Learn. Connect. Lead.

For school leaders at every level, building to district

Bethel Park Elementary School & Canonsburg, PA

Accept | Maybe | Decline

PENNSYLVANIA SUMMIT 27 FOR EDUCATIONAL LEADERS

PENNSYLVANIA PRINCIPALS ASSOCIATION

PA EDGE

The Facets of Student Engagement:

A Continuum

Rob McGee, Ph.D • Odette Falone

Student engagement in the classroom is a widely discussed element of effective and successful instruction, yet defining "student engagement" and measuring it remain nebulous at best. There is no shortage of ideas, models, and articles on the topic. Much of the discussion focuses on instructional practices that increase engagement while circumventing its accurate measurement and the clear articulation of its multiple facets.

It is as if the definition of student engagement mirrors Supreme Court Justice Potter Stewart's definition of another vague topic in 1964—we rely on the nebulous notion of "I know it when I see it" to define and measure student engagement (Jacobellis v. Ohio, 1964).

A review of the literature reveals a similar lack of consensus. As shown in Table 1, Hattie's effect size for "Active Engagement/Active Learning" is 0.48—above the average effect size of 0.40—yet he notes that one of the difficulties with measuring student engagement is that it is poorly defined. Additionally, components of engagement such as participation and motivation are foundational to the success of most other instructional strategies (Hattie et al., 2023).

Consider questioning strategies and classroom discussion. Questioning strategies have an above-average effect size of 0.48, but classroom discussion has a significantly higher effect size of 0.82 (Hattie et al., 2023). Is student engagement necessary for questioning and discussion to be effective? Or are impactful questioning and discussion strategies necessary for student engagement to occur?

Table 1

Effect Sizes of Selected Instructional Practices

Instructional Practice	Effect Size
Classroom Discussion	0.82
Teacher-Student Relationships	0.72
Active Engagement	0.48
Questioning Strategies	0.48
Average of Effect Size	0.40 *Across 200+ Strategies*

Note. Effect sizes from Hattie et al. (2023).

Spoiler alert: We do not plan to answer this conundrum. Instead, we propose that we need a better way to measure student engagement through a common model and language. That model must include clearly defined facets of engagement that are easily identified through classroom "look-fors." If we cannot measure student engagement, how can we meaningfully discuss and improve it? Therefore, the remainder of this article focuses on a "measuring stick" for student engagement, leaving specific strategies for another time.

Essential Question:

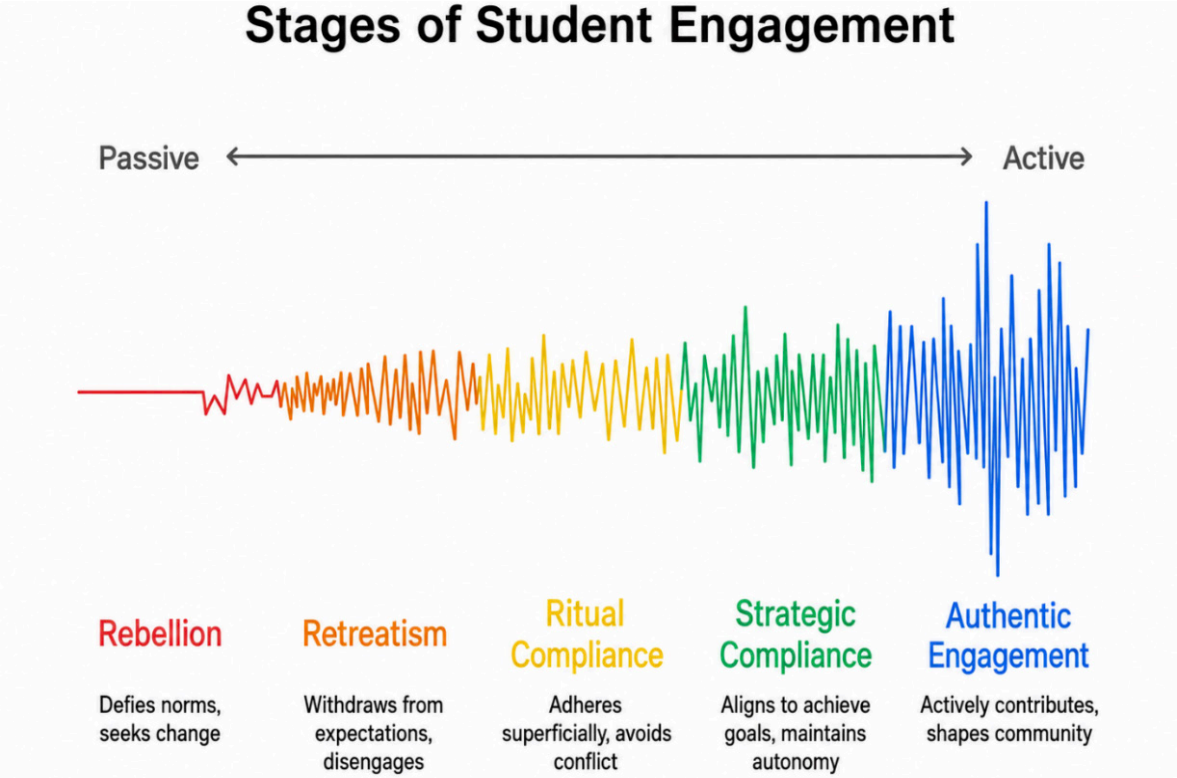
What metric are you using to measure student engagement in the classroom?

Schlechty's Stages of Engagement

For years, the "go-to" student engagement model has been Phillip Schlechty's five stage framework (Figure 1): 1) Authentic Engagement, 2) Strategic Compliance, 3) Ritual Compliance, 4) Retreatism, and 5) Rebellion (Schlechty, 2002).

Figure 1

Stages of Student Engagement



Note. Based on the conceptual framework presented by Schlechty (2002).

The Rebellion Stage

Rebellion is self-explanatory. Students in this stage reject, ignore, refuse, or challenge school and classroom expectations. These students are often overtly disruptive—to other students and to the learning process itself.

The achievement of all students may be jeopardized by those in this stage. Such students present one of a teacher's greatest challenges: balancing the needs of one with the needs of the whole. "If some students are unresponsive, maybe you can't teach them yet, but you can love them. And if you love them today, maybe you can teach them tomorrow" (Holland, 2007, p. 92).

Don't give up on them!

The Retreatism Stage

A student in the Retreatism Stage is not rebellious or disruptive. Instead, they are quiet and largely noncompliant when it comes to classroom tasks and activities. Apathy best describes these students' approach to learning. Recall a standardized report card comment that read: "Indifferent attitude toward learning?"

Students in this stage are not exclusively quiet and disconnected. This group also includes social and outgoing students who avoid meaningful participation in learning. Homework and studying? No. But what are you wearing to the pep rally tonight?

The root causes of this disengagement are complex and are likely similar to those in the Rebellion Stage, though manifested differently. Again, building positive relationships is the starting point with such students.

The Ritual Compliance Stage

Ritual Compliance is marked by avoidance of negative consequences. Students attend school and complete homework to avoid getting in trouble. They believe simple participation is sufficient to achieve educational goals. Passivity is a key characteristic: they move only when the conveyor belt moves.

The Strategic Compliance Stage

Strategic Compliance is often mistaken for Authentic Engagement, but a significant difference exists. Strategic Compliance centers on short-term extrinsic rewards. Students are motivated by grades, honor roll status, and adult praise. They believe that excelling within the system of rewards will lead to future success. There is certainly a correlation between academic achievement and future opportunities. However, students in this stage are often more pleased with a curved test score or extra credit than with deep understanding of content.

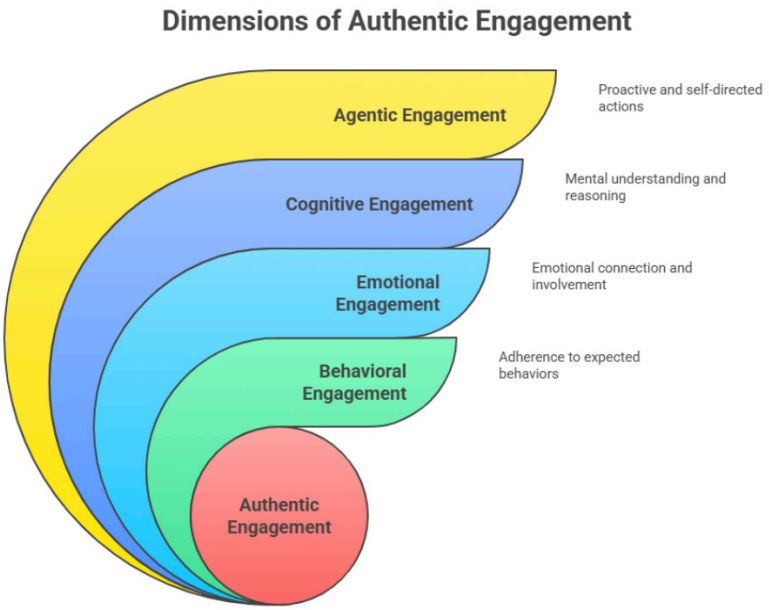
This group includes students who risk withdrawing from future educational pursuits despite appearing well-prepared. Strategic Compliance can stand in the way of Authentic Engagement, depth of understanding, and critical and creative thinking.

The Authentic Engagement Stage

The highest level in Schlechty's model is Authentic Engagement (figure 2). Students at this stage demonstrate self-motivation, excitement, and genuine interest in deepening their understanding of the world. However, Schlechty's definition of Authentic Engagement lacks clarity, making it difficult to distinguish from Strategic Compliance. Educators attempting to measure engagement are again left with Justice Stewart's "I know it when I see it" approach—or by process of elimination (Jacobellis v. Ohio, 1964).

Figure 2

Dimensions of Authentic Engagement



Note. Based on the conceptual framework presented by Kagan (2009) and Reeve (2012).

Kagan (and Reeve) to the Rescue

Kagan and Kagan's (2009) framework defines student engagement across three dimensions: 1) Behavioral, 2) Cognitive/Intellectual, and 3) Social/Emotional. Reeve (2012) added a fourth dimension: agentic engagement.

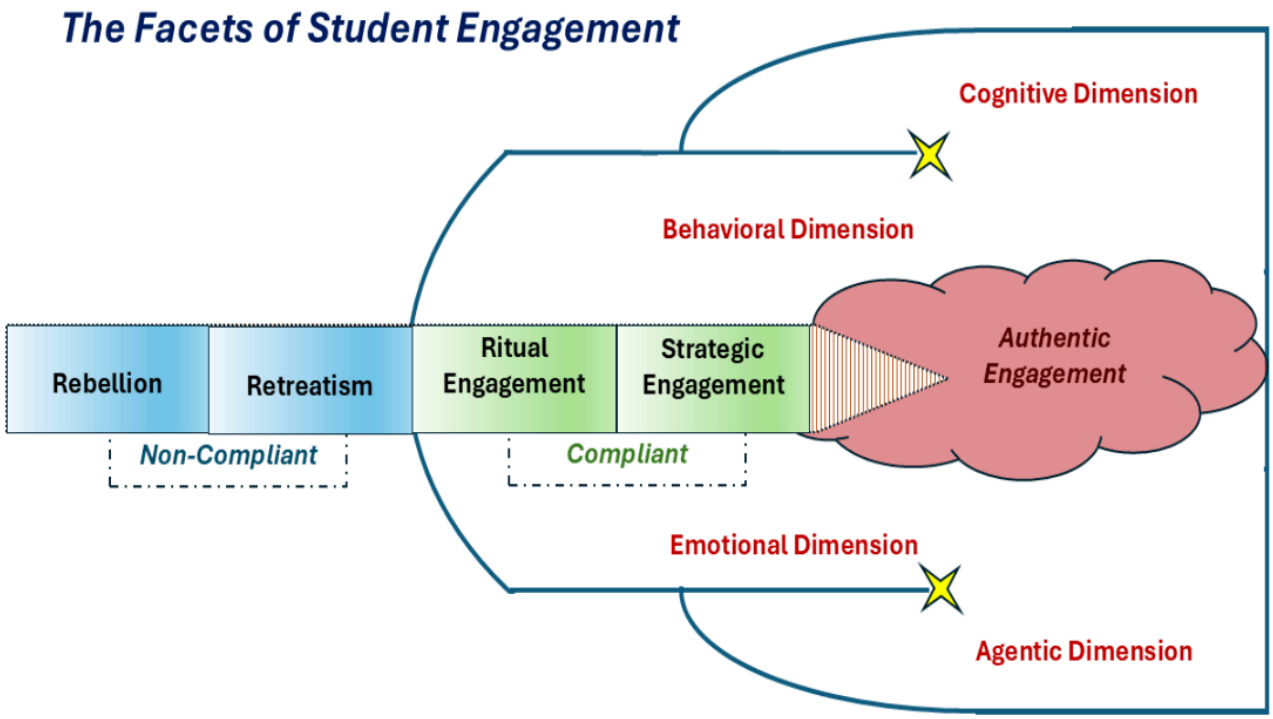
Kagan's (2009) framework, amended by Reeve (2012), fills the void in Schlechty's model by better defining Authentic Engagement through four overlapping dimensions. However, Kagan's model does not clearly define disengagement or noncompliance at the lower end of the spectrum.

Therefore, we propose merging both models into a comprehensive continuum. Schlechty's stages form the central engagement continuum. As the continuum approaches Authentic Engagement, elements of Kagan's Behavioral and Emotional dimensions emerge. At Authentic Engagement, all four dimensions—Behavioral, Emotional, Cognitive, and Agentic—overlap and operate concurrently.

This synthesis provides clearer "look-fors" for measuring student engagement in observable ways (Figure 3).

Figure 3

The Facets of Student Engagement



Note. Based on the conceptual framework presented by Schlechty (2002), Kagan (2009), and Reeve (2012).

The Four Dimensions of Engagement

Behavioral Dimension: "What are they doing?"

Attributes of the Behavioral Dimension are necessary but not sufficient for Authentic Engagement. This dimension is marked by many overlapping measures in the compliant phase of the continuum in the Ritual and Strategic stages such as attendance, completing assignments, and participating as required.

Social/Emotional Dimension: "How are they feeling?"

The Emotional Dimension's attributes of Authentic Engagement include motivation and positive attitude overlapping with those in the Strategic Stage on the continuum. However, it extends further to include relationships, physical and emotional safety, and a sense of belonging. Existing research is clear on such effective elements as the underpinning of student achievement in the classroom.

Again, the Emotional Dimension alone is necessary but not sufficient for Authentic Engagement.

Cognitive Dimension: "At what level are they thinking?"

Here, Authentic Engagement truly takes shape. Critical and creative thinking dominate this dimension as students increase depth of understanding. Questioning, initiated by both teachers and students, leads to classroom discussions at the higher end of Bloom's Hierarchy. Students not only can explain complex content but can also apply and interpret situations from multiple perspectives.

Agentic Dimension: "What are they curious about?"

The capstone of this continuum is the Agentic Dimension. This elusive dimension is marked by students improving their personal experience and taking ownership of their learning. Instead of being prompted by teacher-initiated activities, students at this level proactively question and explore a broader and deeper spectrum of understanding related to classroom content.

Teachers become partners instead of leaders, as they themselves explore areas unfamiliar to them. Think of the Zone of Proximal Development. Vygotsky and constructivist Piagetians would be proud.

Next-Step Essential Questions

This discussion has not focused on specific strategies to increase engagement. Instead, it has proposed a common language and model for measuring and articulating engagement data. Once that foundation exists, we can better address root causes and identify improvement strategies.

We leave you with the following essential questions to ponder:

- ***What instructional strategies foster authentic engagement?***
- ***How do we capitalize on student behavior characteristics of the Ritual and Strategic Stages to facilitate a shift to the Cognitive and Agentic Dimensions of Authentic Engagement?***
- ***What are common root causes of students in the Rebellion and Retreatism Stages?***
- ***Is there a benefit to differentiating engagement strategies?***

And after all of this, we believe Rita Pierson captured it best: "Kids don't learn from people they don't like" (Pierson, 2013, 9:02).

Often, we overcomplicate things—as we may have done here. At its essence, engagement is relational. Perhaps fostering it begins with something as simple as a smile and hello that acknowledges each student's need to be seen.

Rob McGee, Ph.D., is a National Educational Consultant with a Doctor of Philosophy degree from Drexel University and extensive experience across all levels of the K–18 educational system. Dr. McGee has served as a mathematics teacher, high school principal, university adjunct instructor, Director of Curriculum and Instruction, and Superintendent of Schools.





Odette Falone is the Director of Instructional Strategist at Inspired Instruction with degrees in Early Childhood Education, Elementary Education, and Spanish along with significant experience in instructional leadership, professional learning, and educator development. Among Mrs. Falone's areas of expertise are instructional design, differentiated and student-centered instruction, data-informed decision-making, and the recruitment, onboarding, and professional development of more than 80 educational consultants.

Hattie, J., Fisher, D., & Frey, N. (2023). *Visible learning: The sequel.* Corwin.

Holland, J. R. (2007, June). Teaching and learning in the Church. *Ensign, 37*(6), 88–105. https://www.churchofjesuschrist.org/study/ensign/2007/06/teaching-and-learning-in-the-church

Jacobellis v. Ohio, 378 U.S. 184 (1964). https://www.govinfo.gov/app/details/USREPORTS-378/USREPORTS-378-184

Kagan, S., & Kagan, M. (2009). *Kagan cooperative learning.* Kagan Publishing.

Pierson, R. (2013, May). *Every kid needs a champion* [Video]. TED Conferences. https://www.ted.com/talks/rita_pierson_every_kid_needs_a_champion

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), Handbook of research on student engagement (pp. 149–172). Springer. https://doi.org/10.1007/978-1-4614-2018-7_7

Schlechty, P. C. (2002). *Working on the work: An action plan for teachers, principals, and superintendents* (1st ed.). Jossey-Bass.



The Learning LEDGER

Articles for pre-service teachers: perspectives written for pre-service teachers by professors and students

Teaching in an Age of Misinformation:
Why Media Literacy Matters for Education

Tracy A. McNelly, Ed.D.

Today's students are growing up in a rapidly evolving digital world, where technology offers unprecedented opportunities to access information, communicate globally, and engage with diverse perspectives, opinions, and news sources (Media Literacy Now, 2026). While this connectivity offers unique opportunities for learning, it also exposes students to misinformation, manipulated images, misleading statistics, algorithmically curated content, and AI-generated information. In a world where anyone can publish content and information often spreads faster than it can be verified, students need more than traditional literacy skills; they must learn to question, evaluate, verify, and critically analyze the media messages they encounter (Media Literacy Now, 2026). This article examines the growing need for media literacy education and offers practical recommendations and resources to help teacher preparation programs and school districts equip educators with the knowledge and skills needed to prepare students for today's information-rich digital world.

Why Media Literacy Matters in Education

Media literacy equips students to become critical consumers and responsible creators of media by evaluating digital content, including social media, news, and AI-generated information, while recognizing how algorithms and emerging technologies shape what they encounter. As digital media increasingly influence how students access and interpret information, media literacy has become an essential focus in PK-12 education. Recognizing the importance of these skills, policymakers across the United States have prioritized media literacy education through legislative action. At the time of this writing, 25 states have enacted some form of media literacy legislation (Media Literacy Now, 2026), reflecting the growing emphasis on media literacy education nationwide. In Pennsylvania, lawmakers have also proposed legislation aimed at strengthening media literacy education. As of June 2026, three bills under review—House Bill 332 (H.B. 332, 2025), House Bill 2176 (H.B. 2176, 2026), and Senate Bill 839 (S.B. 839, 2025)—would require the State Board of Education to develop academic standards for media literacy and instructional guidance that schools can incorporate into existing programs. House Bill 332 and Senate Bill 839 remain under consideration in their respective Education Committees, while House Bill 2176, which focuses primarily on social media, has passed the Pennsylvania House of Representatives and is awaiting action in the Senate Education Committee. Although these legislative efforts remain pending, the Pennsylvania Department of Education (2026) has developed an Information and *Media Literacy Toolkit* through its Standards Aligned System (SAS) to support educators in integrating media literacy into classroom instruction.

These policy initiatives reflect a growing recognition that media literacy is important, particularly as children and adolescents spend increasing amounts of time engaging with digital media. Among tweens and teens, media use increased more rapidly between 2019 and 2021 than it had the previous four years, with tweens' media use time increasing from 4 hours 44 minutes to 5 hours 33 minutes, and teens' daily media use increasing from 7 hours 22 minutes to 8 hours 39 minutes. Although COVID-19 restrictions may have contributed to this increase, the extent to which pandemic-related restrictions contributed to this increase remains unclear (Rideout et al., 2022). A more recent report shares that nearly half of U.S. teens report they are online almost constantly, nearly double what was reported a decade ago (Faverio & Sidoti, 2024). Tweens and teens are not the only demographic to be heavily connected to their screens. Mann et al. (2025) found that children ages 8 and under spend an average of two and a half hours a day with screen media.

Being connected does not equate to being media literate. Unfortunately, many PK–12 students struggle to critically evaluate media content, including distinguishing AI-generated images and text from authentic information (Langer et al., 2026), distinguishing credible news from misinformation (Shtulman, 2024), and recognizing false information, particularly after repeated exposure (Lemaire et al., 2025). These findings underscore the importance of media literacy education in developing students' critical thinking skills and ability to evaluate the credibility of digital content. Research suggests that media literacy instruction can strengthen students'

media knowledge, critical thinking, and ability to identify misinformation, evaluate sources, and verify digital content (Cho et al., 2025; Rodríguez Castillo et al., 2026). Integrating media literacy into PK–12 education provides an opportunity for teacher preparation programs and school districts to equip preservice and in-service teachers with the knowledge and pedagogical skills needed to effectively incorporate media literacy into classroom instruction.

Preparing Teachers to Teach Media Literacy

A substantial body of teacher education research asserts that effective instruction requires teachers to possess both strong content knowledge and the pedagogical knowledge needed to teach that content (Shulman, 1986). Applied to media literacy, scholars argue that teachers must first develop their own media literacy knowledge and instructional competence before they can effectively foster those skills within their students (Gretter & Yadav, 2018; Hobbs, 2017; McNelly & Harvey, 2021). Despite the importance of these competencies, media literacy is not explicitly identified as a required competency in the Council for the Accreditation of Educator Preparation (2022) standards. Consequently, teacher preparation programs have considerable flexibility in addressing media literacy, resulting in inconsistent preparation and limited formal training for many preservice teachers (Hobbs, 2017; Zhu et al., 2025). This lack of emphasis extends to PK-12 education. While the Pennsylvania Core Standards address related skills such as evaluating information, conducting research, and analyzing texts, they do not explicitly identify media literacy as a distinct set of competencies. These implementation challenges are reflected in Harvey et al. (2022), who found that insufficient professional development, limited administrative support, competing instructional priorities, and the absence of media literacy in school curricula hinder teachers' ability and confidence to integrate media literacy into instruction.

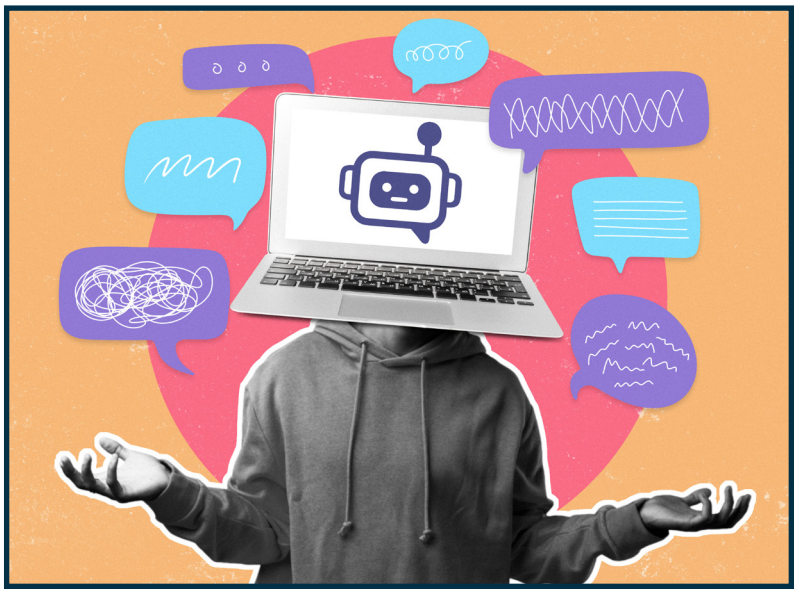
However, with adequate preparation, professional development, and ongoing support, preservice and in-service teachers can effectively integrate media literacy into instruction. Research indicates that teacher knowledge, confidence, and access to meaningful learning opportunities are associated with greater implementation of media literacy practices, while insufficient preparation and professional development remain persistent barriers (Harvey et al., 2022; Hobbs, 2017; McNelly et al., 2023). These findings underscore the importance of investing in teacher preparation and professional development to strengthen educators' capacity to integrate media literacy into instruction.

Integrating Media Literacy into Existing Educational Practices

Preparing educators to effectively teach media literacy requires purposeful efforts by both teacher preparation programs and school districts to equip teachers with the knowledge, skills, and confidence needed to help students critically navigate today's complex digital environment. Rather than introducing another stand-alone initiative, these institutions can intentionally integrate media literacy into existing coursework, professional development, and instructional practices. The following recommendations offer practical strategies for accomplishing this goal.

Leverage Media Literacy Resources

Fromm (2024) emphasizes the importance of investing in resources and professional learning opportunities that equip educators to effectively integrate media literacy into instruction. Numerous organizations offer free, research-based media literacy resources, including lesson plans, classroom activities, professional development modules, and assessment tools that educators can use or adapt to meet instructional needs. However, providing access to these resources is only the first step. Educators also need opportunities to explore, evaluate, and apply these tools within their instructional contexts. Leveraging existing resources and incorporating them into professional learning allows teacher preparation programs and school districts to strengthen media literacy instruction without developing entirely new curricula. Table 1 highlights resources for integrating media literacy into professional learning and classroom instruction.



Embed Media Literacy Across Curriculum

Integrating media literacy across content areas and grade levels, as recommended by Fromm (2024), moves instruction beyond isolated lessons and provides meaningful opportunities for students to develop these skills across disciplines. Through curriculum mapping, institutions can identify existing courses, standards, and instructional opportunities that align with media literacy, providing students with repeated, authentic learning experiences rather than isolated lessons.

For example, students might evaluate the credibility of online sources in English language arts, examine differing perspectives in news coverage in social studies, assess scientific claims in science, and analyze persuasive techniques and propaganda in health-related advertisements. These activities not only reinforce existing content standards but also provide opportunities for students to practice questioning sources, evaluating evidence, recognizing bias, and making informed judgments about the information they encounter. By embedding these skills into everyday instruction, educators can help students recognize that media literacy extends beyond the classroom and is essential to navigating information in their daily lives.

In teacher preparation programs, educational technology courses provide opportunities for preservice teachers to develop foundational media literacy knowledge, including artificial intelligence, algorithmically driven content, and digital citizenship. Methods courses allow them to apply this knowledge by exploring ways to integrate media literacy into their future classrooms, such as developing standards-aligned lessons or units for specific content areas and grade levels. Field experiences and student teaching provide additional opportunities for preservice teachers to implement these lessons, assess students' media literacy skills, and reflect on their instructional effectiveness. Together, these experiences help bridge the gap between understanding media literacy concepts and developing the practical skills and confidence needed to teach them effectively.

Celebrate Media Literacy

U.S. Media Literacy Week is an annual national initiative hosted by the National Association for Media Literacy Education and held over five days in late October. The initiative encourages educators, schools, librarians, and organizations to promote media literacy education through lessons, events, and other learning activities. Throughout the week, NAMLE provides instructional resources and activities organized around five essential media literacy competencies: access, analyze, evaluate, create, and act. Media Literacy Week provides an opportunity for institutions to introduce or expand media literacy initiatives, engage educators in meaningful professional learning, and foster a culture that recognizes media literacy as an essential component of teaching and learning.

School Districts: Embed Media Literacy Learning Into New Teacher Induction

Media literacy can be integrated into Pennsylvania's existing teacher induction programs, aligning with key components of the Pennsylvania Department of Education's (2023) *Educator Induction Plan Guidelines*. For example, media literacy supports professional ethics through digital citizenship and responsible technology use, culturally relevant and sustaining education through examining representation and bias in media, and instructional competency through strategies that promote critical thinking and evidence evaluation. As part of induction, new teachers might participate in a workshop on evaluating misinformation and AI-generated content, followed by developing and implementing a lesson that integrates these skills into their instruction. Induction mentors could further support this process by helping new teachers identify opportunities to incorporate media literacy across content areas, evaluate student learning, and reflect on instructional effectiveness. Integrating media literacy into existing induction structures provides a practical approach to strengthening new teachers' competencies without creating additional professional development requirements.

Teacher Preparation Programs: Assess Media Literacy Before Program Completion

If teacher preparation programs intend for media literacy to become a part of preservice teachers' future classrooms, they should also assess preservice teachers' capacity to demonstrate their competencies before program completion. The United Nations Educational, Scientific and Cultural Organization (2021) emphasizes the importance of assessing media and information literacy competencies among both educators and learners, providing a foundation for incorporating these skills into teacher preparation assessments. Programs can embed media literacy within existing key assessments, clinical experiences, and program portfolios. For example, candidates might be required to develop and teach a lesson or unit that incorporates media literacy concepts, evaluate the

credibility of digital and AI-generated sources, design learning activities that promote critical analysis of media messages, or reflect on how they integrated media literacy during student teaching. Assessing media literacy sends a clear message that these competencies are valued as an essential component of effective teaching rather than an optional add-on.

Conclusion

As digital media continue to shape how students access, interpret, and share information, media literacy has become an essential component of PK–12 education. Preparing students to think critically, evaluate information, and participate responsibly in a digital society begins with preparing their teachers. Through purposeful and sustained efforts, teacher preparation programs and school districts can equip educators with the knowledge, confidence, and instructional strategies needed to effectively integrate media literacy into their classrooms. By investing in educators today, we empower future generations to become critical consumers, responsible media creators, and informed citizens.

Table 1

Resources for Educators that Support Media Literacy Education

Civic Online Reasoning (Stanford History Education Group)

https://cor.stanford.edu

Civic Online Reasoning provides free, research-based curriculum materials, assessments, videos, and professional learning resources designed to help students evaluate the credibility of online information.

Common Sense Media

https://www.commonsense.org/education

Provides a free, research-based K–12 Digital Citizenship Curriculum along with lesson plans, videos, assessments, professional development, and family resources to help students develop digital citizenship, media literacy, online safety, information literacy, and AI literacy.

Crash Course Media Literacy

https://thecrashcourse.com/topic/medialiteracy/

The Crash Course Media Literacy series is a free, introductory multimedia curriculum designed to teach learners the foundations of media literacy.

FactCheck.org

https://www.factcheck.org/

Offers nonpartisan fact-checking resources that evaluate the accuracy of political claims, viral misinformation, and online rumors. The site also offers educational resources, including fact-checking lessons and classroom activities.

Google Be Internet Awesome

https://beinternetawesome.withgoogle.com/en_us

Makes available a free, research-based digital citizenship and media literacy curriculum for students in grades 2–8 that includes ready-to-use lesson plans, classroom activities, an AI literacy guide, the interactive *Interland* game, and family resources.

Media Education Lab

https://mediaeducationlab.com/

The Media Education Lab provides free media literacy resources for educators, including lesson plans, instructional materials, professional development opportunities, webinars, and research on media literacy education.

Media Literacy Now

https://medialiteracynow.org/

Media Literacy Now features advocacy resources, policy updates, and educator support to advance media literacy education. The site includes professional learning opportunities, implementation guides, legislative updates, and a searchable library of more than 130 free lesson plans.

National Association for Media Literacy Education (NAMLE)

https://namle.org/

The organization promotes media literacy education across PK–12 and higher education. It provides research, classroom resources, instructional frameworks, and professional development to support educators. It also publishes evidence-based reports and teaching resources.

News Literacy Project

https://newslit.org/

Provides free news literacy resources that help educators teach students how to identify credible information, recognize misinformation and disinformation, evaluate sources, detect bias, and verify claims. The site includes lesson plans, classroom activities, professional learning opportunities, webinars, and the *Checkology*® virtual classroom.

PA Department of Education Information and Media Literacy Toolkit

https://www.pdesas.org/Page/Viewer/ViewPage/79/

This toolkit, available through Pennsylvania's Standards Aligned System, provides instructional strategies, lesson ideas, and professional resources.

Project Look Sharp

https://www.projectlooksharp.org

Developed by Ithaca College, Project Look Sharp provides standards-aligned media literacy curriculum, lesson plans, classroom activities, and multimedia resource kits for PK–16 educators, as well as professional development opportunities.



UNESCO Media & Information Literacy

https://www.unesco.org/en

Features international frameworks, research, policy guidance, and educational resources that support the development of media and information literacy.



Dr. Tracy McNelly is Professor and Chair of the Education Department at Saint Vincent College, where she teaches undergraduate and graduate courses, advises Kappa Delta Pi, and serves as co-editor of the Pennsylvania Teacher Educator journal, a publication of the Pennsylvania Association of Colleges and Teacher Educators. Prior to entering higher education, she held teaching and administrative positions in the Penn-Trafford, Conemaugh Township, and Norwin School Districts, culminating in her role as Assistant Superintendent of Secondary Education. Her research focuses mainly on media literacy and PK–12 literacy development.

Cho, H., Carpenter, C. J., & Li, W. (2025). Media literacy interventions: Meta-analytic review of 40 years of research. *Human Communication Research, 51*(2), 57–79. https://doi.org/10.1093/hcr/hqaf004

Council for the Accreditation of Educator Preparation. (2022). *CAEP accreditation standards*. https://caepnet.org/caep-standards/

Faverio, M., & Sidoti, O. (2024, December 12). *Teens, social media and technology 2024.* Pew Research Center. https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/

Fromm, M. (2024). *Media literacy snapshot 2024: The state of media literacy education in the United States.* National Association for Media Literacy Education. https://namle.org/wp-content/uploads/2024/01/Snapshot-2024-State-of-Media-Literacy-FINAL.pdf

Gretter, S., & Yadav, A. (2018). What do preservice teachers think about teaching media literacy? An exploratory study using the theory of planned behavior. *Journal of Media Literacy Education, 10(*1), 1–14. https://doi.org/10.23860/JMLE-2018-10-1-6

Harvey, J., McNelly, T. A., & Buxton, J. A. (2022). Toward a media literate world: Exploring secondary educators' challenges incorporating media literacy education. *Media Education Research Journal, 11(*2), 1–21. https://doi.org/10.5281/zenodo.7459944

H.B. 332, 2025–2026 Reg. Sess. (Pa. 2025). https://www.palegis.us/legislation/bills/2025/hb332

H.B. 2176, 2025–2026 Reg. Sess. (Pa. 2026). https://www.palegis.us/legislation/bills/2025/hb2176

Hobbs, R. (2017). Approaches to teacher professional development in digital and media literacy education. In B. De Abreu, P. Mihailidis, A. Y. Lee, J. Melki, & J. McDougall (Eds.), *International handbook of media literacy education* (pp. 88–113). Routledge.

Langer, A., Martinez, S., Marshall, P. J., & Chein, J. (2026). Children's susceptibility to content generated by artificial intelligence. *Technology in Society, 86*. https://doi.org/10.1016/j.techsoc.2026.103303

Lemaire, M., Ye, S., Le Stanc, L., Borst, G., & Cassotti, M. (2025). The development of media truth discernment and fake news detection is related to the development of reasoning during adolescence. *Scientific Reports, 15*. https://doi.org/10.1038/s41598-025-90427-z

Mann, S., Calvin, A., Lenhart, A., & Robb, M. B. (2025). *The Common Sense census: Media use by kids zero to eight, 2025*. Common Sense Media. https://www.commonsensemedia.org/sites/default/files/research/report/2025-common-sense-census-web-2.pdf

McNelly, T. A., Ent, V. I., & McMullen, M. (2023). Preservice teacher perceptions of virtual just-in-time learning and delivery using online media literacy modules. *Pennsylvania Teacher Educator, 22*(2), 57-72. https://www.pac-te.org/files/journal/Fall_23_PTE_-_McNelly%2C_Ent%2C_McMullen.pdf

McNelly, T. A., & Harvey, J. (2021). Media literacy instruction in today's classrooms: A study of teachers' knowledge, confidence, and integration. *Journal of Media Literacy Education, 13*(1), 108–130. https://doi.org/10.23860/JMLE-2021-13-1-10

Media Literacy Now. (2026). *U.S. media literacy policy & impact report (2026)*. https://medialiteracynow.org/document/u-s-media-literacy-policy-impact-report-2026/

Pennsylvania Department of Education. (2023, March). *Educator induction plan guidelines.* https://www.pa.gov/agencies/education/programs- and-services/educators/continuing-education-and-professional-development/act-48-approved-providers/educator-induction-plan-guidelines

Pennsylvania Department of Education. (2026). *Standards Aligned System (SAS)*. https://www.pdesas.org/

Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). *The Common Sense census: Media use by tweens and teens, 2021*. Common Sense Media. https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens-2021

Rodríguez Castillo, N. E., Mendoza Carrera, J. E., Andrade-Vásquez, M. M., & Acosta-Barreno, K. (2026). Media literacy education and misinformation in social media among adolescents: A systematic review and meta-analysis. *Journalism and Media, 7*(2). https://doi.org/10.3390/journalmedia7020071

S.B. 839, 2025–2026 Reg. Sess. (Pa. 2025). https://www.palegis.us/legislation/bills/2025/sb839

Shtulman, A. (2024). Children's susceptibility to online misinformation. *Current Opinion in Psychology, 55.* https://doi.org/10.1016/j.copsyc.2023.101753

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4–14. https://doi.org/10.3102/0013189X015002004

United Nations Educational, Scientific and Cultural Organization. (2021). *Global standards for media and information literacy curricula development guidelines.* https://www.unesco.org/sites/default/files/medias/files/2022/02/Global%20Standards%20for%20Media%20and%20Information%20Literacy%20Curricula%20Development%20Guidelines_EN.pdf

Zhu, Y., Scott, L. M., & Jiao, Y. (2025). Insights into teacher educators' understanding of media literacy: A case study of undergraduate teacher preparation institutions. *Currents in Teaching and Learning, 17*(1), 50–68. https://webcdn.worcester.edu/currents-in-teaching-and-learning/wp-content/uploads/sites/65/2025/08/Teacher-Educators-Understanding-of-Media-Literacy.pdf



Collaborative Equine-Assisted Therapy Experience to Support Children with Autism

Jill Merritt, Ph.D. • Julia Hawkins- Pokabla, Ph.D.

As the prevalence of children with a diagnosis of autism has continued to grow (Johns Hopkins Bloomberg School of Public Health, 2025), it is imperative that teachers and occupational therapists (OTs) are trained to understand the developmental, social, sensory, and behavioral challenges these children face. It is equally important that these professionals understand and be exposed to various proven therapy techniques, including equine-assisted therapy. To address this important need, a grant was awarded for an inter-professional pilot program using equine therapy to provide direct benefits to children with autism while simultaneously providing education and experience to future teachers and occupational therapists. University students and faculty, in partnership with an equine therapy center and a school for children with special needs, created an interdisciplinary program in which university students were able to work side-by-side with children who have a diagnosis of autism in an equine-assisted therapy program.

Children from one classroom were invited to participate in weekly equine therapy sessions. The children attend a specialized private school that provides a specially designed environment to help children with significant disabilities. This organization provides children and adults with autism and intellectual disabilities education, support, and resources needed to be as independent in their daily routine as possible. Each of the nine children participating in the riding program had a diagnosis of autism. Learning experiences reflected academic, behavioral, and therapeutic needs written in their IEPs. Prior to the start of the study, the Institutional Review Board (IRB) of the participating university provided approval for this study involving children with a diagnosis of autism which included public and community-based involvement and consent.

Two faculty and two groups of university students came together to collaborate with community members supporting children with a diagnosis of autism. A group of undergraduate special education majors and a group of undergraduate OT students each supervised by a faculty member with expertise in their respective department met weekly to participate in a leisure group activity with children with autism. For the students with the special education major, this time spent with children with special needs served as part of a field experience. Each group met with their professors outside of the therapy sessions during class time to discuss observations, seek guidance and prepare for upcoming sessions. University students had many questions related to the behaviors of the children, what could potentially be sensory related issues and how to plan for successful inclusion of the children in the weekly activities. All students collaborated with community members from equine therapy center and the specialized school for children with disabilities to ask questions and get to know the children at the program and to create child-centered

activities each week.

There is a growing amount of support in research related to animal-assisted therapy. Experts note that equine therapy can help to assist in developing self-efficacy, self-confidence, emotional development and understanding non-verbal cues (Johnson, 2023). Research supports the use of horses in therapy to increase engagement in tasks in children with a diagnosis of autism (Llambias et al., 2016). The participating equine therapy center is an organization that began over fifty years ago with a mission to provide equine-assisted therapeutic programs for children and adults with physical, cognitive, and social challenges. Programs and classes are carefully designed to be safe, effective, and enjoyable. The instructors are nationally certified through the Professional Association of Therapeutic Horsemanship (PATH). PATH provides consistent standards of operation and monitors performance. Staff at the equine therapy center worked closely with participants of the project to create weekly equine mounted and ground activities to address the needs of the children with autism that participated in the program.

The purpose of the study was to see if the children could make gains in skills such as academic, language, self-awareness, sensory skills, self-care, and participation in therapeutic riding sessions. Studies indicate that the sensory features of children with autism spectrum disorder (ASD) may hinder their emotional regulation and ability to perform tasks (Dugas et al., 2018). Occupational therapy students observed the children and interviewed school staff to complete a sensory processing assessment called The Sensory Processing Measure-2 (SPM-2) at the beginning and the end of the group sessions. Equine therapy was scheduled for ten sessions, once a week during the fall semester. University students worked with the children during the therapeutic riding lessons and for a groundwork session each week. As they got to know the children, the students began to design activities that were suited to the child's skill level and area of need. The students created individual social stories for each of the children to help with specific social skills observed during the weekly sessions. When any child was not comfortable getting on a horse, they were still included in the activities in a way that is fun and educational.

The children participated in adapted ways working at their own pace to participate in a way that was as close to what their peers were doing while still meeting their own individual needs. Goals that were established at the start of the project were for university students to be able to describe social, emotional, sensory, and physical characteristics associated with autism and to utilize an established sensory assessment tool (SPM-2) under the supervision of a licensed OT faculty member to complete an initial evaluation and to determine progress at the end of the semester. After the initial completion of the tool, university OT students created goals for the children related to sensory processing challenges, fine motor skills, wearing a riding helmet and socialization. University OT students practiced documenting session notes after each weekly session and received individualized feedback from their professor.

University students took turns each week planning and preparing activities for the following week's session in collaboration with the lead equine-assisted therapy supervisor. Before every session, the entire group participated in a mindfulness activity to create a calm environment. Doing this seemed to help the children feel a sense of belonging and organize themselves before interacting with the horses. After a couple of sessions, one of the children began to lead the mindfulness activity. The sessions started with getting children comfortable putting a helmet on and petting the horses, they were gradually prepared for riding on a horse that was led by a trained equine therapy staff member with two university students walking alongside the horse.

During the first session, students participated in a scavenger hunt to find all the horses on the equine therapy property. Students used photos of the horses to learn their names and what makes them unique. During the scavenger hunt the children were also introduced to the different areas of the grounds such as the barn, riding ring, and pasture. Some of the children were uneasy about climbing onto the horse, not all of them were willing to try it the first few sessions.

In the following weeks the children learned about proper posture and horse-riding procedures such as how to hold reins and where to place their feet on a model of a horse, they also learned steps on how to properly mount a horse, all before getting on an actual horse. The university students came up with many creative and fun groundwork activities for the children to participate in. One week, while learning about the body parts, the children were given paint brushes and allowed to paint on the horse's body. In another session, a meal preparation and sensory motor activity was planned that involved the children making

treats for the horses that they later fed to them. Unique activities were planned with non-verbal opportunities to enhance self-awareness, tolerate sensory input, recognize maladaptive behaviors, identify negative feelings, and face self-defeating cognitions. Upon completion of the nine-weekly session half of the children showed improvement in sensory processing skills per the SPM-2 re-evaluation results and 75% of the children reached their OT goals.

Participants were provided with a unique, experiential application of equine-assisted activities to improve sensory skill development per the re-evaluation with the SPM-2. The experience incorporated an exploration of theories, research and skills related to self-awareness, sensory and emotional regulation. University students learned that equine therapy has the potential to be enjoyable, improve social/emotional skills, sensory and academic skills. This program provided an opportunity for university students to discover the impact of equine-assisted therapy and students with a diagnosis of autism. The community members and Gannon University participants were able to develop rapport in an equine-assisted therapy environment with the school aged students they had the honor of working with.



Dr. Merrit has been a long-time faculty member at Gannon University and has organized student volunteer visits to an equine-assisted program serving people with disabilities. She still volunteers there personally.



Dr. Hawkins-Pokabla teaches students at Gannon University about pediatric and developmental disabilities as they relate to occupational therapy.

Dugas, C., Simard, M.-N., Fombonne, E., & Couture, M. (2018). Comparison of two tools to assess sensory features in children with autism spectrum disorder. *American Journal of Occupational Therapy, 72*, 7201195010. https://doi.org/10.5014/ajot.2018.024604

Johns Hopkins Bloomberg School of Public Health. (n.d.). *Is there an autism epidemic?* https://publichealth.jhu.edu/2025/is-there-an-autism-epidemic

Johnson, D. (2023, Fall). *Frequently asked questions about equine therapy: What clinical social workers should know.* National Association of Social Workers. https://www.socialworkers.org/LinkClick.aspx?fileticket=FgrTyrVFcQE%3d&portalid=0

Llambias, C., Magill-Evans, J., Smith, V., & Warren, S. (2016). Equine-assisted occupational therapy: Increasing engagement for children with autism spectrum disorder. *American Journal of Occupational Therapy, 70*, 7006220040. https://doi.org/10.5014/ajot.2016.020701



Elevating, Developing, & Growing Educators through Curriculum, Instruction, & Supervision

Join Us Today!

PAEDGE