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Educational Leadership Insights

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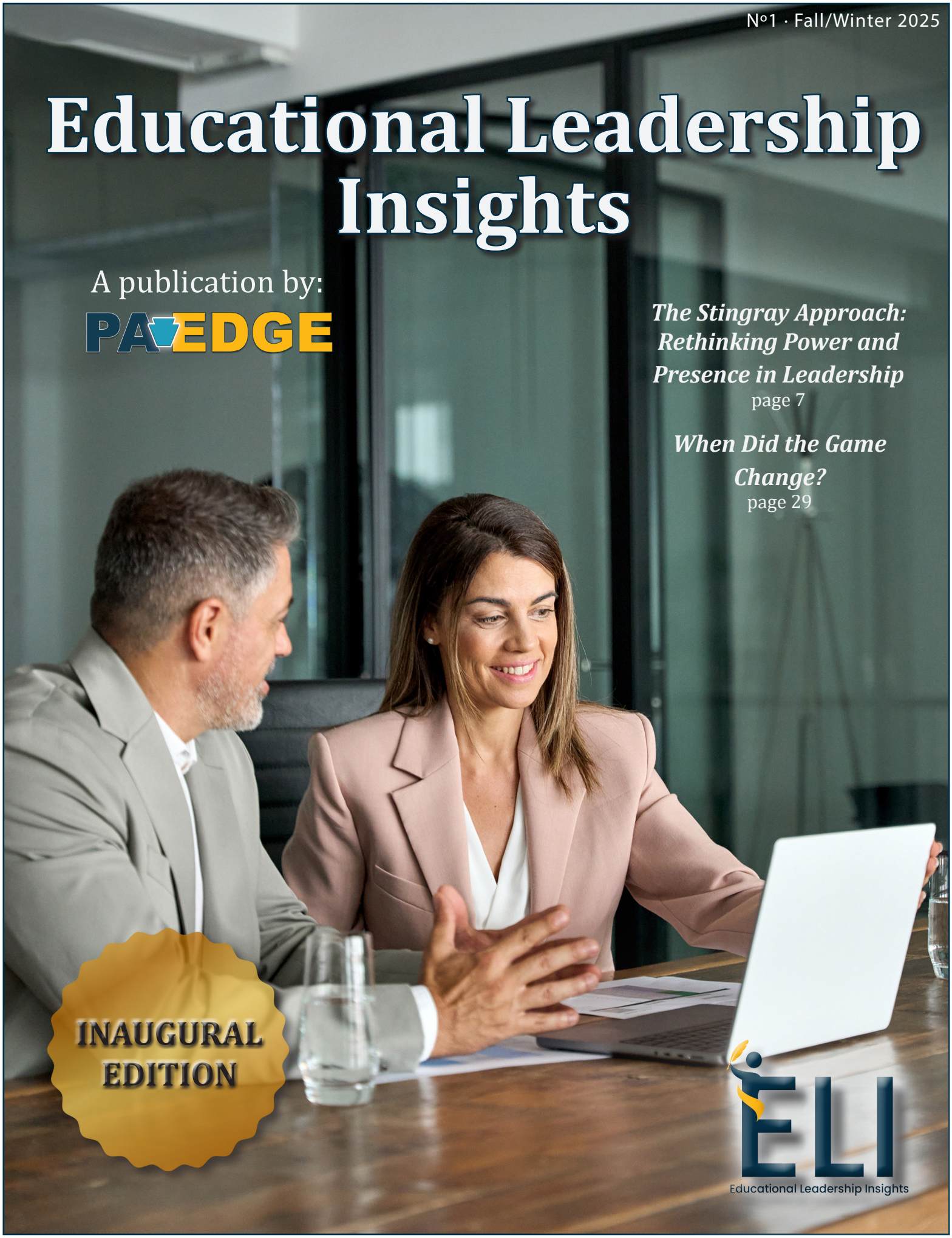
PA EDGE



INAUGURAL EDITION

ELI
Educational Leadership Insights

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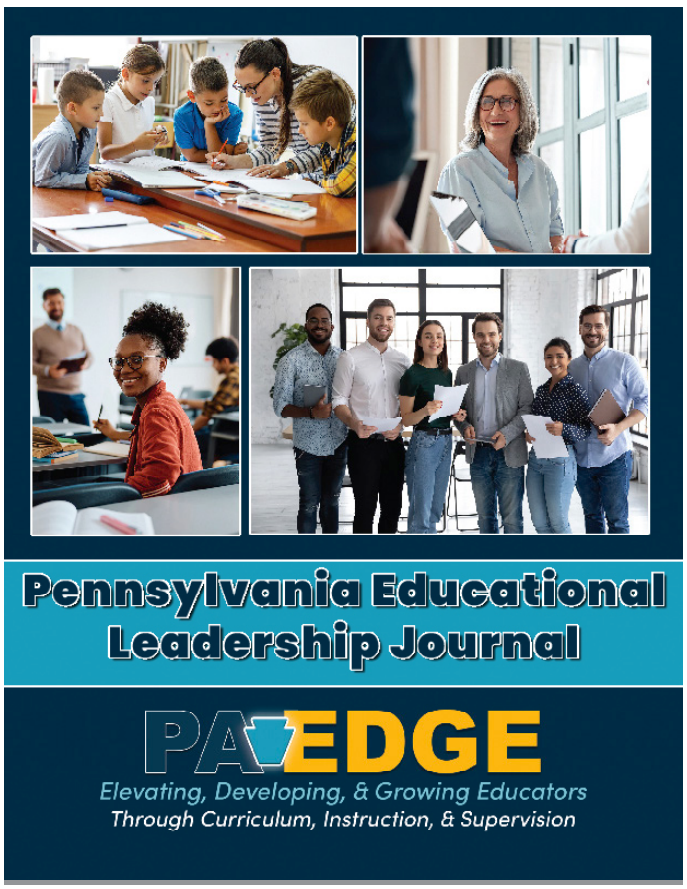
The *Pennsylvania Educational Leadership Journal* (Volume 44, Number 1) is now included within the *ELI*. The traditional *PEL Journal* continues to publish peer-reviewed research articles and appears in the final section of this publication.



A LETTER FROM THE PRESIDENT

Welcome to PA EDGE: Where Instructional Excellence Joins Collaborative Power

Imagine a Pennsylvania where every educator - whether in the classroom, principal's office, or district leadership - is connected, growing, and leading collaboratively with instructional excellence as the focus. That's not just a vision; it's the future we're building together at PA EDGE, and it's happening right now.

Our mission is straightforward yet transformative - to create a unified network of instructional leaders who are continuously sharpening their craft in supervision, curriculum design, and classroom practice. Through focused training that emphasizes high-quality feedback and evidence-based best practices, we're equipping Pennsylvania's educators with the tools they need to unlock every student's potential.

But here's what makes PA EDGE different: *this isn't just professional development*. We're breaking down the walls between districts, grade levels, and job titles to create something unprecedented - a statewide network where the teacher perfecting classroom instruction learns alongside the principal refining observation practices and the curriculum director reimagining district-wide approaches.

When you join PA EDGE, you're not just attending workshops or earning credits. You're becoming part of a collaborative force that's redefining what's possible in Pennsylvania education. You're gaining access to cutting-edge instructional strategies, connecting with peers who share your commitment to growth, and contributing to a collective expertise that elevates every corner of the commonwealth.

The opportunity is here. The network is growing. The impact is real. Join us, and let's lead Pennsylvania's instructional future - together.

Leading forward together,
Dr. Dennis M. Williams, Jr.,
President PA EDGE

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A LETTER FROM THE EXECUTIVE DIRECTOR

As we turn the page on a new chapter in our organization's history, I am honored to reflect on our journey - from PASCD to PA EDGE - and to celebrate the enduring legacy of leadership, learning, and innovation that continues to define us.

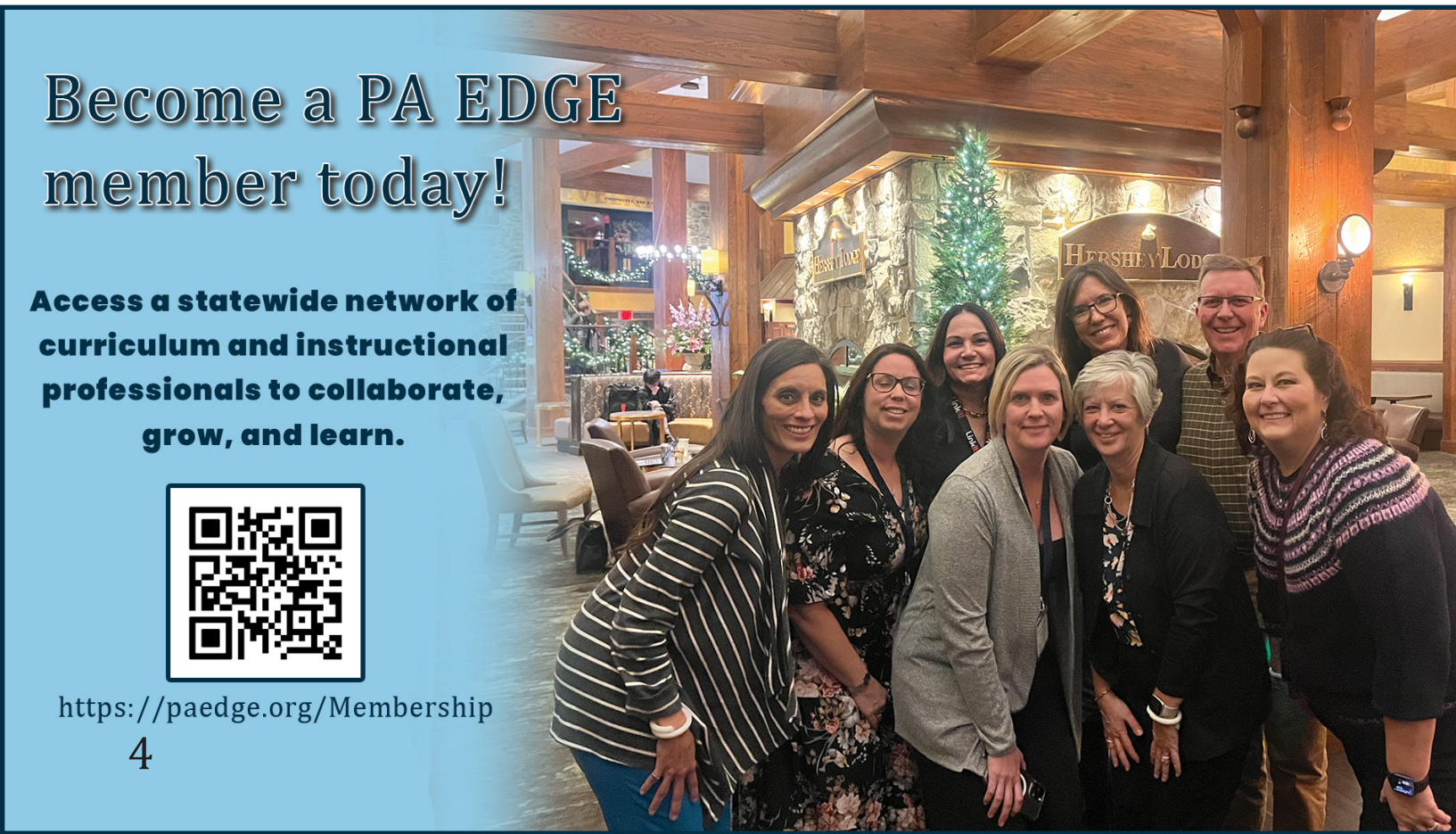
Our story began in 1940, when a small group of visionary elementary supervisors within PSEA gathered at the Penn-Harris Hotel in Camp Hill, Pennsylvania. Their shared commitment to improving instruction and curriculum sparked the creation of what would become the Pennsylvania Association for Supervision and Curriculum Development (PASCD). Even then, these pioneers were ahead of their time, advocating for "the total education of the total child"—a concept that would later evolve into the idea of educating the Whole Child.

Over the decades, PASCD grew into one of the most respected affiliates of ASCD. Between 1996 and 2016, PASCD received ASCD's Overall Excellence Award multiple times, recognizing affiliates for outstanding achievement in Communication and Publications; Programs, Products, and Services; Membership; Organizational Structure and Operations; and Conventions and Conferences. These five pillars became the foundation for comprehensive excellence, affirming PASCD's leadership in advancing ASCD's mission to improve teaching and learning for all learners.

Our consistent recognition reflected the dedication of our members and our unwavering commitment to professional growth and service. Through statewide conferences, publications, and initiatives such as the Leadership Academies and Emerging Leaders Program, PASCD built a vibrant network of educators focused on leadership, excellence, and student achievement.

Today, as PA EDGE, we carry this proud legacy forward with a renewed mission: to Elevate, Develop, and Grow educational leaders across Pennsylvania. With gratitude for our past and optimism for our future, we will continue to honor our history while shaping the future of education in our Commonwealth.

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



LETTER FROM THE EDITORS

Welcome to the Inaugural Edition of Educational Leadership Insights

As Co-Editors, we are thrilled to introduce a new publication that brings together both practitioner-focused and peer-reviewed articles. The organization, PA EDGE (formerly known as PASCD), has a long history of publishing research through the Pennsylvania Educational Leadership (PEL) Journal. As the field of education continues to evolve, we are proud to expand that legacy with a publication that now features practical insights alongside scholarly research.

Educational Leadership Insights (ELI)includes a curated collection of articles addressing current educaitonal issues and trends, best practices, and perspectives for and from pre-service teachers. Additional sections highlight policy updates and book reviews. This collection invites educators to explore new possibilities in teaching, leadership, and school communities, from thoughtfully integrating AI to strenghtening teacher preparation and professional learning. Across these articles, the importance of relationships, collaboration, and mindset shifts shines through as essential for fostering meaningful and equitable learning experiences.

The Pennsylvania Educational Leadership (PEL) Journal appears as a Feature Section of ELI, showcasing studies that employ qualitative, quantitative, or mixed-methods approaches. This edition highlights peer-reviewed research articles focused on AI integration in the classroom, alternative discipline models for special education, and early career teacher perceptions of their preparation programs.

We hope you enjoy this new edition of Educational Leadership Insights and the Pennsylvania Educational Leadership Journal featured within. There are so many wonderful practices and programs in place within your educational institutions that could be the basis of an article or research study. Please consider sharing your expertise with educators across the state.

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

REBECCA GIBBONEY
CO-EDITOR
LINCOLN INTERMEDIATE UNIT 12

Accepting Submissions!

The deadline for the next edition is Februaruy 28, 2026. 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:

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THE STINGRAY APPROACH:

Rethinking Power and Presence in Leadership

Andrea Bitner

This past summer, I was waist-deep in the bay, soaking up that Fourth of July sun with my family, when suddenly… someone yelled *"SHARK!"*

And let me tell you—we scattered like a group of kids trying to hide their phones during a surprise cell phone check. Towels were flying, beach chairs were abandoned, and I've never seen adults move that fast without promising snacks or Wi-Fi.

Turns out, it was a shark. A real one. Slowly making its way through the water near where we'd all been peacefully floating just moments before. After the excitement wore off (and after we triple-checked that Sharky had left the building), we all eased back into the water—because let's be honest, the floaties, fireworks, and food weren't going to enjoy themselves.

Later in the day, someone spotted a ***stingray*** gliding near the shore. This time? The reaction was completely different. Everyone gathered, curious. Phones came out. Kids squealed. Grown-ups leaned in for a closer look. People wanted to be near it. The stingray wasn't something to fear—it was something to connect with, marvel at, and learn from.

And that got me thinking...

As a school leader, how do your teachers see you?

Are you a shark in the water—causing people to scatter when they see you coming down the hallway?

Or are you a stingray—someone they feel drawn to, eager to collaborate with, and safe to be around even in uncertain waters?

Here's the truth: in the hustle of school life, it's easy to unintentionally start giving off "shark energy." We're rushing. Putting out fires. Following mandates. Our jaws aren't open, but our emails are.

But leadership rooted in presence, connection, and curiosity feels more like a stingray: gliding alongside your team, inviting interaction, inspiring trust.

So how do you find out how you're really showing up in your building?

FIVE SIMPLE TOOLS TO CHECK YOUR LEADERSHIP "FIN FACTOR"

1. Two-Question Staff Survey

Use a Google Form, sticky note station, or mailbox slips:

- ***What's one thing I do that makes you feel supported?***
- ***What's one thing I could do more of to support you better?***

This opens the door to honesty-and growth-without overwhelming your team (or yourself).

2. The Hallway Energy Test

Have a trusted colleague observe, or tune into the vibe yourself:

- ***Do folks make eye contact or avoid it?***
- ***Does conversation stop… or start… when you enter the room?***

The hallways tells the truth.

3. Office Hours with Snacks

Dedicate one consistent, open hour a week for staff to drop in. No agenda, no pressure. Bonus points for coffee, cookies, or chocolate. The more casual, the more insightful.

4. One-Word Check-Ins

At your next staff meeting, ask:

- ***"In one word, how are you feeling today as an educator?"***

It builds trust, models vulnerability, and gives you a quick pulse check on staff morale.

5. Visibility Audit
Make a list of your grade levels, departments, or teams. Ask yourself:

- ***Who haven't I seen in a while?***
- ***Who needs a visit not tied to evaluation or a problem?***

Now, schedule five 5-minute drop-ins this week. Stingray moves.

The bottom line is you don't have to be perfect. You just have to be present.

The best school leaders aren't feared-*they're felt.*

And the ones who are trusted don't swim above their team-they swim with them.

So as you wade into the waters of this upcoming school year, ask yourself: ***shark or stingray?*** Your teachers already know the answer. And now, you have the tools to find out-and to shift if needed. Let's be the kind of leaders they don't swim away from but swim ***toward***.

Andrea Bitner is an English Language Learner educator, international author, and educational speaker from Philadelphia, PA, with 25 years of experience teaching K–12 students from around the world. Learn more at www.andreabitnerbooks.com

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Weaving AI Thoughtfully into the Fabric of Education

Michael Q. Roth, Ed.D.

> "The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it" (Weiser, p. 94). This forward-thinking statement by Mark Weiser, a pioneering computer scientist, resonates deeply in the current educational landscape as we navigate the integration of Artificial Intelligence (AI). AI has already started this "disappearing act" in our daily routines; we use it for directions, weather forecasts, and entertainment recommendations so frequently that its presence often feels invisible.

Yet, within the walls of our schools, a significant tension persists. While we see AI's immense potential, we also harbor valid concerns about its implementation. The path forward lies not in a simple "do or don't" approach, but in fostering a culture of curiosity and continuous reflection on our practices. **The challenge for educational leaders is to guide this integration intentionally, ensuring AI becomes a supportive, "calm technology" that enhances learning rather than a disruptive force that subverts it.**

The AI Paradox and the Vision of "Calm Technology"

Mark Weiser, former Chief Technology Officer at the legendary Xerox PARC, envisioned a world of "ubiquitous computing" where technology would be seamlessly embedded into our environment, enhancing our lives without demanding constant attention. He called this "calm technology"—a tool that recedes into the background. We see this vision realized in our personal lives, but a paradox emerges in education.

On one hand, educators are excited by AI's potential to create personalized learning pathways, automate administrative tasks to free up teacher time, and offer new methods for analyzing learning data. On the other hand, there is significant apprehension regarding academic integrity, data privacy, algorithmic bias, and the potential for technology to replace vital human connections. This push and pull highlights a critical gap: while AI is a daily tool outside of school, its role inside the classroom is not yet part of the "fabric" because we are still wrestling with its purpose and pedagogy.

Calibrating AI Use with Critical Reflection

The key to resolving this paradox is discerning when AI's application is genuinely beneficial and when it is not. Tech & Learning writer Erik Ofgang argues that AI should not replace tasks that are foundational for developing critical thinking skills. He recounts his own experience where manually creating a presentation was more valuable for his learning process than relying on an AI to do it for him. This perspective is supported by experts who caution against using AI to supplant the essential interactions between students and caring adults or their peers. The true value of AI is unlocked only when we mindfully consider how and why we are integrating it and what its impact is on deep learning and human connection.

This mindful approach requires metacognition. As leaders and educators, we must continually ask ourselves reflective questions when considering an AI tool:

- ▶ How is this particular AI application genuinely enhancing the learning process itself, beyond just efficient task completion?
- ▶ Are we using AI to augment uniquely human skills like critical inquiry and collaboration, or are we at risk of inadvertently diminishing them?
- ▶ How can we ensure AI tools remain in service of our core educational goals and values, rather than allowing the tools to dictate our approach?
- ▶ What behaviors and mindsets are we modeling for our students regarding the thoughtful and ethical use of AI?

Leading the Way Through Ambiguity

Navigating this complex landscape requires intentional leadership. Weiser's vision of "calm technology" provides a valuable lens: the goal is not AI for AI's sake, but technology that genuinely enhances the learning environment without dominating it. To achieve this, leaders should champion a proactive and reflective approach.

First, we must foster curiosity, not fear. We need to create safe spaces where educators can explore AI tools to understand their capabilities and limitations without immediate pressure for wide-scale adoption. Second, the pedagogy must always drive the technology, not the other way around. Before implementing any tool, the focus must be on the "why": What educational goal does this serve and how does it enhance teaching and learning? Third, it is crucial to champion dialogue and work toward a shared definition of what AI means in our specific educational context and how it can be used ethically and effectively. Finally, leaders should embrace safe experimentation through pilot programs and action research, allowing progress to emerge from trial and error while always prioritizing student well-being and data security.

The integration of AI into education is not a question of if, *but how*. Our challenge is to intentionally weave this powerful technology into the educational fabric so that it becomes a "profound," almost invisible support for human-centered learning. By leading with reflection and curiosity, we can guide AI to become just another powerful tool in the educator's toolbox—one that is ultimately a servant to effective pedagogy, so seamlessly integrated that we barely notice it is there.

Dr. Michael Q. 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 experiences as Superintendent for the Upper Moreland and Salisbury Township School Districts and recently as the Deputy Superintendent for the Allentown School District have shaped him into a reflective leader skilled in strategies that prioritize inquiry and curiosity, his expertise spans strategic planning, digital transformation, and professional learning design, frequently presenting on leveraging technology and the practical applications of AI in district operations.

Ofgang, E. (2025, May 28). Recognizing when not to use AI. *Tech & Learning.* https://www.techlearning.com/how-to/recognizing-when-not-to-use-ai

Weiser, M. (1991). The computer for the 21st century. *Scientific American, 265*(3), 94–104. https://www.jstor.org/stable/pdf/24938718.pdf?casa_token=SpiZ3pbeYk4AAAAA:2HgfyiQbcw6NO1RPf2EQEs2RCi_KZPosEOpSo_2uIKKtwdr998NBf3DUorjWcxoxZ_Efzlyz3IGm9ktOCDEr907DvV-wZXIBgAh_YGTcEbNzlVfNqA

ILLUMINATING LEARNING • SHINING BRIGHTER TOGETHER •

PA EDGE 2026 CONFERENCE

The 74th Annual PA EDGE Conference is coming to Harrisburg, PA in March 2026!

We are honored and excited to invite you to this year's extraordinary gathering, where our theme, "Illuminating Learning, Shining Brighter Together" calls us to celebrate the very best of education: collaboration, innovation, and the powerful culture we create when we unite around a shared purpose.

This conference is more than an event; it's a movement. A movement to build stronger teams, exchange bold ideas, and embrace the collective strength that drives brighter futures for our students and communities. Together, we will inspire one another, challenge ourselves to grow, and return to our schools with renewed passion and purpose.

We cannot wait to welcome you to Harrisburg this March. Let's come together, shine together, and make 2026 the year we illuminate learning like never before!

ANGELA WHELAN
Hatboro-Horsham School District
Assistant Principal

SARAH BERMAN
Hatboro-Horsham School District
Assistant Principal

Who Will Regenerate Schools and Learning: Us or AI?

Ed Bureau, PhD• John Gould, PhD

AI is kicking bricks from the "factory model" of schools. Do we collaborate with or rail against what we fear may become sentient? In Silicon Valley and academia, a profound question echoes with increasing urgency: What defines life itself? As artificial intelligence systems grow more sophisticated and seemingly conscious, we find ourselves at a crossroads where traditional boundaries between the organic and inorganic, between the evolved and engineered, begin to blur. For K-12 educators standing at the front lines of this transformation, the stakes could not be higher: we must now prepare students for a world where their classmates, tutors, and, perhaps, teachers might not be carbon-based life forms at all.

This reality raises fundamental questions about learning, teaching, relationships, and what it truly means to be educated in an age of inorganic intelligence. As educational leaders, we need frameworks for understanding and preparing for this transformation. Two influential thinkers, Lee and Harari, offer contrasting yet complementary visions that can guide our approaches to an AI-enhanced future.

Kai-Fu Lee:
AI as Sophisticated Partnership

Kai-Fu Lee's vision presents AI as a sophisticated tool that, while revolutionary, remains fundamentally under human direction. In AI 2041: Ten Visions for Our Future, Lee describes AI as "the elucidation of the human learning process, the quantification of the human thinking process, the explication of human behavior, and the understanding of what makes intelligence possible" (p. xi).

Lee envisions AI development following a practical, incremental path where advances build upon current technologies in increasingly sophisticated ways. AI systems can recognize and respond to human emotions without truly experiencing them, personalize experiences with unprecedented precision while maintaining clear operational boundaries, and enhance rather than replace human capabilities.

For education, Lee's story "Twin Sparrows" illustrates how AI tutoring might transform learning by 2041. Through the experiences of twin boys—one who thrives with AI tutoring while the other initially struggles—Lee shows how advanced AI systems could provide unprecedented levels of personalization while raising crucial questions about educational equity and human development. These future AI tutoring systems won't just adapt to academic needs but will understand and respond to individual personalities, learning preferences, and emotional states.

As Lee explains through his AI tutor: "In this version of an AI-infused school, there will be plenty for human teachers to do. Teachers will play two important roles: First they will be human mentors and connectors for students. Human teachers will be the driving force behind stimulating the student's critical thinking, creativity, empathy, and teamwork... The second role that teachers will play is to direct and program AI teachers and companions in ways that will best address the students' needs." (p.119)

Yuval Noah Harari:
AI as Evolutionary Leap

Harari presents a more radical reconceptualization of life itself, challenging our carbon-centric understanding of existence. In Homo Deus and his latest work Nexus, Harari argues that we are witnessing the emergence of a new form of life—one built not on organic chemistry but on data flows and algorithmic processes.

Harari suggests that AI networks represent the next evolutionary leap, where consciousness and intelligence might be decoupled from their organic origins. This perspective moves beyond traditional debates about artificial intelligence to pose fundamental questions: What if

silicon-based intelligence isn't merely mimicking life but represents an entirely new branch on life's evolutionary tree?

In Nexus, Harari offers a striking comparison: "We still tend to think of a computer as a metal box with a screen and a keyboard... Unlike organic beings, computers don't have to be in just one place at the same time. Probably they diffused over space, with parts in different cities and continents. In computer evolution the distance from amoeba to T. rex could be covered in a decade. If ChatGPT-4 is the amoeba, how would the T. rex look like? Organic evolution took 4 billion years to get from organic soup to apes on the moon. Computers may require just a few centuries to develop super intelligence…" (pp. 216-17)

Today's large language models already embody his concept of information-based life forms. These systems demonstrate emergent capabilities that weren't explicitly programmed, evolving through exposure to data much as biological organisms evolve through environmental pressures. When these models exhibit unexpected behaviors—from solving novel mathematical problems to displaying signs of reasoning—they showcase exactly the kind of non-organic intelligence evolution Harari anticipated.

Implications for Educational Leadership

Both visions demand fundamental shifts in how we approach educational leadership and structure learning environments.

Lee's vision requires educational leaders to think beyond simple technology integration toward fundamental structural changes. Schools may need to evolve from traditional classroom-based models to more flexible learning environments where AI tutoring systems work in concert with human teachers.

Key transformational leadership considerations in Lee's paradigm include:

▶ **Redesigning physical spaces** to accommodate both individual AI-guided learning and group collaboration.

▶ **Developing new assessment systems** that integrate AI-generated insights with human evaluation.

▶ **Creating flexible schedules** that allow for personalized learning paths while maintaining social development.

▶ **Establishing ethical frameworks** for AI integration that protect student privacy and emotional well-being.

▶**Building professional development systems** that help teachers evolve into AI-human learning facilitators.

The reimagined K-12 structures might include flexible learning spaces, adaptive scheduling systems, integrated assessment frameworks, and enhanced support systems for social-emotional development—all while maintaining regular opportunities for human connection to balance AI interactions.

Harari's vision demands an even more radical transformation and restructuring. When he describes AI evolving from "amoeba to T-rex" in a decade and existing simultaneously across multiple locations, he's highlighting changes that could render our current school structures potentially obsolete.

Educational leaders must consider that they're no longer just managing schools but orchestrating learning ecosystems where artificial intelligence operates at scales from the subatomic to the galactic. Traditional school leadership focused on managing physical buildings and coordinating bell schedules may evolve into facilitating learning networks that exist across physical and virtual spaces simultaneously.

Key considerations for this paradigm include:

▶ **Developing frameworks** for education that transcend physical locations and traditional time boundaries.

▶ **Creating systems** that can adapt as rapidly as the AI they integrate with.

▶ **Moving from fixed classrooms** to fluid learning spaces that connect with distributed AI systems.

▶ **Replacing grade levels** with competency-based progression that accounts for exponential change.

▶ **Establishing flexible assessment systems** that evaluate learning in a distributed intelligence environment.

The Path Forward:
Regenerative Educational Systems

The future of education lies not in choosing between Lee's practical vision and Harari's revolutionary one, but in creating systems that can embrace both perspectives. We need educational systems that harness the practical benefits of AI tutoring while preparing for more profound regeneration of the factory model of schools.

This requires leadership that can think systematically, act regeneratively, and remain deeply

connected to local context while engaging with AI. The metaphor of schools must shift from hierarchical institutions to dynamic learning ecosystems, much as our understanding of AI is evolving from discrete tools to distributed intelligence.

As Harari notes in 21 Lessons for the 21st Century: "Many pedagogical experts argue that schools should switch to teaching 'the four Cs'—critical thinking, communication, collaboration, and creativity... Most important of all will be the ability to deal with change, learn new things, and preserve your mental balance in unfamiliar situations. In order to keep up with the world of 2025, you will need not merely to invent new ideas and products but above all reinvent yourself again and again" (p. 265).

Essential Questions for Educational Leaders

As we navigate this transformation, several critical questions emerge:

1. How do we design educational systems that can evolve at the pace of AI advancement while maintaining human-centered learning experiences?
2. How might we balance utilizing AI as a sophisticated tool for personalized learning while preparing for its potential evolution into distributed intelligence?
3. As AI evolves from localized tools to distributed intelligence, how must we reimagine the physical and organizational structure of schools?
4. If AI can evolve exponentially, what becomes the essential purpose of human education, and how do we ensure technological advancement enhances rather than diminishes human development?

Conclusion

We can merely adapt our schools to new technologies, or we can collaborate with AI to regenerate schools into systems that enhance all forms of intelligence—organic and artificial, local and distributed, individual and collective. This transformation demands that we shift our beliefs and behaviors to reflect the dynamic, distributed nature of learning in an AI-enhanced world.

This challenge and opportunity before us is unprecedented: can we create learning environments where human wisdom guides artificial intelligence to serve an individual's learning and to nurture our communities and our species? As we stand at this pivotal moment, we must prepare our students not just to use AI tools, but to navigate and thrive in a world where intelligence itself is being fundamentally redefined.

W. Edward Bureau, PhD, brings over five decades of experience as a teacher, administrator, and professor, guided by his belief in collaborative, organic processes that transform schools and learning. He is committed to creating synergies that benefit students, educators, and our collective future.

John M. Gould, PhD, brings nearly six decades of experience as a K-12 leader and professor, dedicated to reimagining schools as living systems that nurture the potential and creativity of every learner. He works to help communities create the schools our children need for the future.

Harari, Y. N. (2018). *21 lessons for the 21st century*. Spiegel & Grau.

Harari, Y. N. (2024). *Nexus: A brief history of information networks from the Stone Age to AI.* Random House.

Lee, K.-F., & Chen, Q. (2021). *AI 2041: Ten visions for our future.* Random House.

Leveraging Artificial Intelligence, Third Spaces, and World-Building Simulations for Complex Case Preparation in Practice-Based Courses

Amml Hussein, Ed.D.

Introduction

This teaching note presents an instructional model integrating Artificial Intelligence (AI) simulations into practice-based humanities and social sciences courses. Grounded in constructivist theory (Piaget, 1929) and extended through social constructivism, the model employs AI technologies to create interactive real-world scenario simulations that enhance practical skills, decision-making, and cultural competence—especially around racial and social justice issues. Presented at multiple academic conferences, this andragogical framework encourages educators to adopt AI tools for preparing social scientists to address complex societal challenges. It fosters third spaces (Ikas & Wagner, 2009) where learners engage in speculative world-building to critically imagine future possibilities.

Reimagining Education through AI World-Building Simulations

Technological advances, particularly in AI, are reshaping higher education by enhancing immersive and interactive learning opportunities that deepen student engagement (Hussein & Rios, 2024). AI tools such as text-to-art generators (e.g., MidJourney, Craiyon) enable students to visually represent complex social scenarios from textual prompts, moving beyond traditional case preparation into dynamic, interactive simulations.

The instant model leverages world-building, a narrative method engaging learners in constructing societal frameworks encompassing governance, economy, and power (Baker, 2017). Drawing from Afrofuturism (Dery, 1994), it uses speculative fiction to reframe marginalized histories and envision emancipatory futures, resisting oppression and promoting new modes of cultural representation and empowerment. Creative speculation and storytelling humanize marginalized identities, enabling learners to reframe narratives across time (Gipson, 2017; Taylor & Ekman, 2018). Prompt engineering foregrounds acceptance and intersectionality, fostering critical engagement with complex social identities (Crenshaw, 1989; Rodriguez-Alfonso et al., 2025). Simulations shift learners from passive recipients to active creators of multidimensional scenarios, encouraging interdisciplinary problem-solving and social justice commitments.

Framework for AI Integration in Social Sciences and Humanities

Experiential learning, particularly through object-based approaches (Chatterjee & Hannan, 2016), remains essential for effective education. AI-driven simulations provide safe spaces for practicing crisis response and policy reform, employing prompt engineering to collaboratively explore future possibilities within classroom third spaces. This practice enhances empathy and cultural competence, key professional skills in social work and related fields. World-building exercises allow exploration of complex scenarios without real-world risk, facilitating learning via mistakes and instructor-guided refinements that nurture professional behaviors and competence.

AI-Enhanced World-Building in Social Sciences Curriculum

AI-driven world-building challenges students to examine systemic inequities and their impacts on marginalized groups, developing skills to address root social problems. These simulations foster practice readiness post-graduation by immersing learners in identity and oppression issues while inspiring visions for liberation and empowerment over time (Womack, 2013). World-building is relevant across disciplines, creating imaginative platforms for exploring real-world social justice concerns.

Literature Review: AI In Education and the Power of Visualization

Prior research demonstrates AI's potential to advance active learning, critical thinking, and creativity through personalized, interactive experiences (MacFarlane 2018). Visualization integrates verbal and visual cognition, improving comprehension of abstract ideas (Jang et al., 2021; Mayer, 2005). AI-generated art and immersive environments enhance spatial reasoning and problem-solving (Liu et al., 2020). Platforms like MidJourney enable co-creation of visuals via prompt engineering, fostering creativity, speculation, and analytic skills.

These simulations cultivate clinical competencies such as emotional responsiveness and trauma-informed care (Anderson & Rainie, 2020; Dede, 2020; Singer, Creswell Báez, & Rios, 2023). Through controlled, reflective practice, classrooms nurture emotional intelligence and cultural competency (Baker & Siemens, 2014; Goelitz, 2021). Combining AI with expressive arts therapies supports resilience and healing by engaging cognitive and emotional domains (Perryman, Blisard, & Moss, 2019; Malchiodi, 2011; Parsons et al., 2021).

Methodology: Structured AI Integration in World-Building Exercises

The methodology comprises four stages facilitating curriculum integration outlined in Figure 1.

Figure 1

Stages for Integrating World-Building Exercises

Stage	Description
Preparation & Introduction	Introduction to world-building theories and AI tools (e.g., MidJourney), highlighting capabilities and limitations.
Group Work & Brainstorming	Small-group collaboration to develop societal elements and generate AI text prompts.
AI Interaction & Refinement	Iterative process where students input, review, and refine AI-generated outputs and visuals.
Presentation & Discussion	Groups present their projects followed by critical discussions on process, challenges, and AI's educational role.

Stage 1: Preparation & Introduction

In stage 1, the instructor reviews foundational world-building theories and AI platforms, covering capabilities and cultural bias concerns. Demonstrations emphasize AI's capacity to generate nuanced trauma scenarios iteratively refined through prompt engineering techniques that ensure cultural and ethical sensitivity.

Stage 2: Group Brainstorming & Collaborative Ideation

Small and large group discussions leverage Vygotskian proximal development (Vygotsky, 2021), promoting diverse perspectives and inclusive participation.

Stage 3: Independent & Collaborative AI Interaction & Refinement

Students create and iteratively refine AI prompts, enhancing the depth and realism of speculative world-building visuals and narratives.

Stage 4: Presentation, Reflexive Discussion, and Dissemination

Groups present projects, engage in reflexive discussions on challenges and opportunities, and may develop conference abstracts or publications documenting their learning journey.

Application of World-Building Prompts Across Disciplines

Figure 2 provides sample world-building prompts designed to be incorporated early in the course within flipped classroom lesson plans. These prompts facilitate interdisciplinary connections and encourage creative problem-solving in areas such as environmental justice, public health, policy analysis, trauma recovery, and social reintegration. Instructors may supplement prompts with multimedia resources to enrich learner engagement and contextual understanding or adapt the prompts to fit their content area.

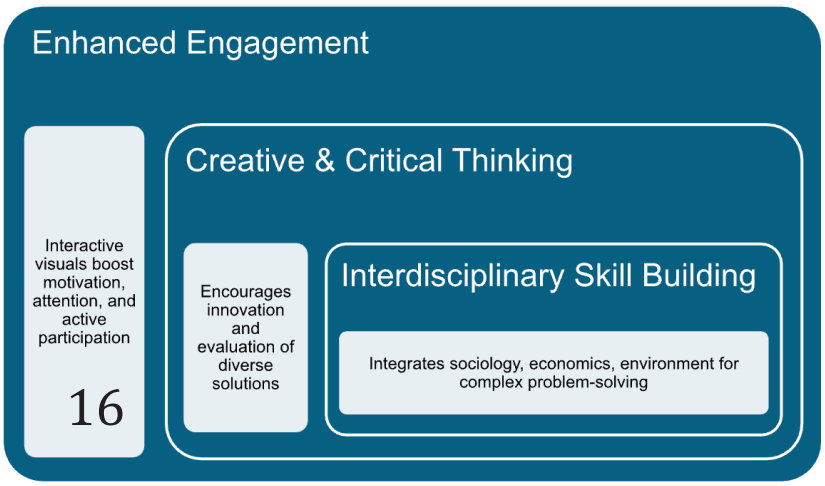
Figure 2: *Sample World-Building Prompts and Corresponding Focus Areas*

Sample Prompt	Focus Area
A sustainable metropolis employing green technology committed to equity.	Environmental Justice & Sustatinability
A post-pandemic society living in isolated climate-controlled domes.	Public Health Reponse and Social Adaptation
An underwater utopia where humans coexist with ocean ecosystems under global governance.	Environmental Harmony and Cooperation
Simulation of expanded healthcare access for formerly incarcerated individuals.	Policy Analysis and Social Reintegration
Digital vision boarding to help trauma survivors visualize healing journeys.	Trauma Recovery and Client Empowerment

Andragogical Implications and Benefits

AI-assisted world-building fosters critical thinking, creativity, collaboration, and immersive visualization, increasing motivation and engagement (Freeman et al., 2014). See Figure 3 below for the benefits. These exercises nurture higher-order cognitive skills, prepare students for complex societal challenges, and cultivate empathy through diverse, AI-generated cultural environments. This readiness equips learners for socially impactful careers requiring interdisciplinary problem-solving and cultural awareness.

Figure 3: *Key Benefits of AI-Assisted World-Building for Student Learning*



Conclusion

AI platforms like MidJourney expand pedagogical possibilities by transforming abstract social concepts into vivid, interdisciplinary simulations. These tools bridge theory with lived experience, supporting creativity, critical thinking, and cultural competence while illustrating interconnected social systems' complexities. As AI advances, its educational integration will prepare future social scientists to address social justice, trauma recovery, and policy reform challenges with rigor and innovation, fostering inclusive, socially responsive learning environments.

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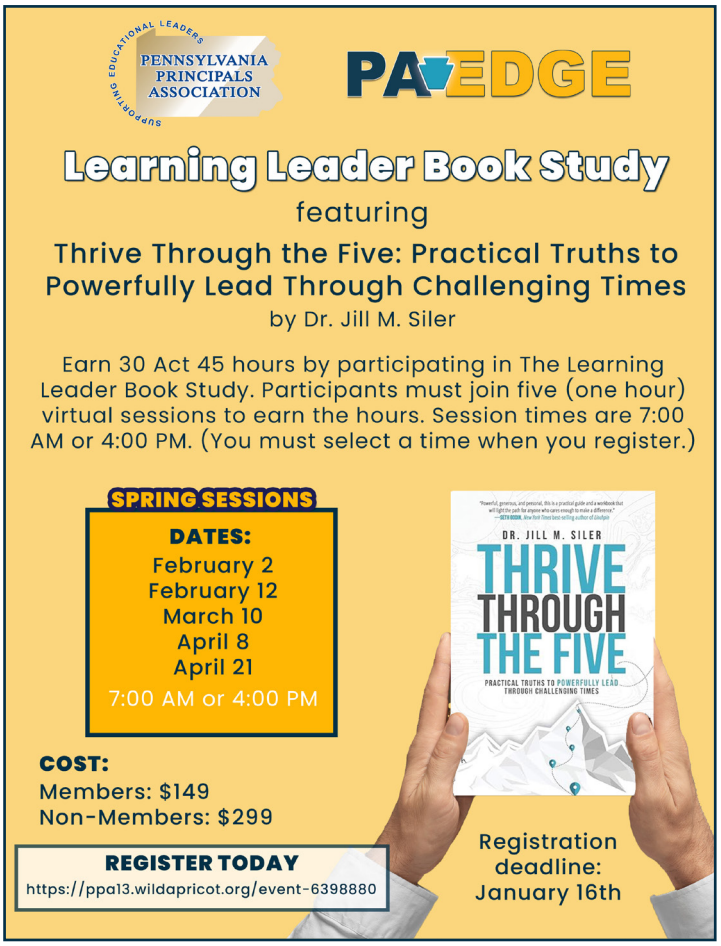

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Leading with Clarity:

Ensuring Curriculum Transparency in Divided Times

Barbara E. Davis, Ed.D.

In an era marked by growing scrutiny of public education, curriculum has become a lightning rod for political debate and public concern. While the heightened attention can be challenging, it also presents school leaders with a powerful opportunity to build trust through transparency. Districts can take deliberate steps to clarify what is taught, how decisions are made on the resources being selected, and how families can engage as partners with schools.

Seventeen years ago, when I began working as a Director of Curriculum, community members rarely attended the Board's Curriculum Committee meetings. The primary focus of stakeholders was the district budget or, at times, the hiring of a new basketball coach. In recent years, many districts have seen a reversal. Today, that dynamic has shifted as curriculum topics now draw larger audiences than finance discussions. This shift reflects a broader national trend: curriculum is no longer viewed solely as an educator's domain, but as a public conversation that demands community engagement.

Practical strategies to increase clarity and transparency are essential to dispelling misinformation and building community confidence in public school curriculum. When districts communicate effectively and openly, they empower parents and caregivers to become true partners in the educational process. Transparency starts with strong tools and a well-designed curriculum review cycle, and it must engage the teachers who are closest to the work.

Curricular transparency begins with educators. While most agree that curriculum maps should be "living" documents, in practice, they often remain tucked away in computer hard drives or file cabinets. Maps should be accessible and visible to every teacher in the district to foster both horizontal and vertical alignment. For example, a high school math teacher should be able to review the curriculum maps for middle school math classes and provide feedback on what students need to know, understand, and be able to do before entering high school. An elementary science teacher preparing a unit on the human body should be able to reference the middle school health curriculum to ensure they are preparing their students for the next level. All teachers should also be able to view maps for the courses their students are currently taking. This level of access also enables cross-curricular connections and collaborative opportunities. When educators can see what is being taught in other classrooms, they can design instruction that reinforces shared concepts and skills, showing students that learning is connected and relevant.

Establishing a method to share curriculum maps internally can take many forms. Some districts use shared drives; others adopt cloud-based platforms with built-in alignment tools and customizable templates. Cloud-based solutions not only support collaboration but also streamline curriculum audits and visual storyboarding. As districts build these internal systems, they can also take the next step toward full transparency: making curriculum maps accessible to the public.

Publishing curriculum maps online serves two key purposes. First, it helps parents and caregivers understand the scope, sequence, and rigor of what students are learning. If families have questions about alignment with personal beliefs or academic expectations, maps can be a clear and factual starting point that opens the lines of communication with the school. Second, public-facing maps offer a proactive response to misinformation. In politically charged climates, clear and accessible curriculum maps help demonstrate that public schools have nothing to hide.

Transitioning from a closed system to a transparent system takes thoughtful planning. In my experience, districts should consider the following steps:

- **Develop a robust curriculum review cycle** with a clear process for regular auditing and revision.
- **Select a consistent curriculum map template** and determine which components will be published and which components will only be available internally.
- **Train curriculum development teams** in frameworks like Understanding by Design or Storyboarding and require multiple levels of proofreading before public release.
- **Publish a list of core instructional resources** (e.g., novels, textbooks, websites, apps) used in each course.
- **Create a public-facing landing page** that explains what curriculum maps are and what they are not. For example, maps may not reflect the flexibility teachers need to integrate current events, meet individual student needs, or innovate in the classroom.
- **Assign responsibility for maintaining the maps** to a dedicated administrator or small team, with a plan for annual content audits.
- **Review and communicate district policies and procedures** on how families can review instructional materials and request exclusion from instruction, as well as procedures to address challenges to curricular resources.

Improving transparency in a district's curriculum offers clear benefits: it supports informed parental engagement, strengthens horizontal and vertical collaboration among teachers, and helps reduce misinformation. By opening the curriculum to all stakeholders, district leaders can create a more inclusive, aligned, and trust-filled learning environment. Of course, even the most transparent systems may lead to public discussion and debate, particularly when a new resource, practice, or instructional approach intersects with deeply held community values. Navigating these conversations requires both preparation and tact.

Transparency in Action

Recent headlines reflect the increasing politicization of curricular content, with school boards across the country voting to adopt or prohibit specific topics, books, or resources. These meetings often generate intense public comment, and occasionally, the discourse can devolve into statements that are divisive or harmful to a culture of inclusivity. District leaders must be prepared to manage these moments with integrity, clear communication, and a focus on facts.

To illustrate, consider one rural school district where a board member proposed a resolution to ban the teaching of Critical Race Theory (CRT). At the time, the topic was heavily covered in national media, and a few board members expressed concern about shielding students from what they perceived as divisive ideologies. In reality, no formal complaints had been filed, and there was no documented evidence that CRT was part of the district's curriculum. Still, the pressure to respond was mounting. The steps below outline how the district's leadership team addressed this issue constructively and transparently.

Step 1: Review Policies for Public Engagement

Anticipating high levels of interest and input, the administration began by reviewing board policies regarding public comment. The board president communicated expectations clearly: public comment would be permitted, time limits would be enforced, and respectful discourse would be maintained. By setting and upholding these norms consistently, the board created a framework where all voices could be heard and where meetings remained focused and productive.

Step 2: Clarify the Purpose of the Discussion

Board members explained that the resolution was prompted by ongoing questions from community members, many of which stemmed from misinformation. Teachers, too, were unsure what the board viewed as permissible, with growing confusion about whether topics such as racism, historical events, or bias could be discussed. The board's intent was not to ban essential content, but to articulate clearly what was and wasn't being taught in district schools.

Step 3: Accurately Define the Issue

District administrators entered the discussion with confidence that CRT, as it is academically defined, was not being taught. A board member had drafted a resolution, which was reviewed by the district's solicitor. Administrators also convened a group of teachers to gather their concerns.

The teachers asked thoughtful, practical questions, such as:

- *"Can I still teach about segregation?"*
- *"Can I correct a student who uses a racial stereotype?"*
- *"Can high school students examine CRT as a topic of inquiry?"*

Step 4: Provide Education and Context

During public board meetings, administrators took the opportunity to clarify what CRT is, and what it is not. They referenced Pennsylvania's academic standards and described how curricular content and skills are outlined in the standards. Grade-level distinctions were also discussed, reinforcing that complex topics can and should be introduced progressively and as students mature, they should be able to engage in more complex critical thinking. In courses like Advanced Placement U.S. History or Government, sensitive issues must be addressed to meet course expectations and prepare students for success on national exams.

Step 5: Host the Conversation Publicly

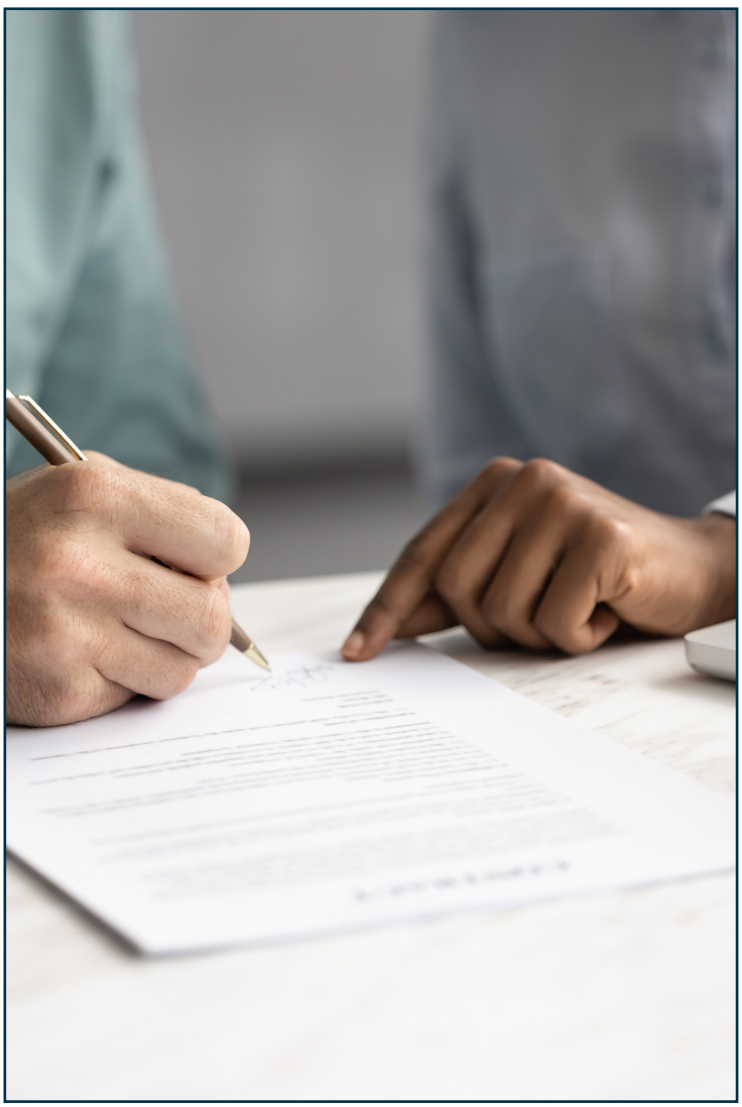
The board engaged in open discussion about the resolution and its implications. Teachers' questions were read aloud and answered publicly. (Notably, each question in Step 3 above was answered with "yes.") Ultimately, the resolution served to confirm what was already true: CRT was not being taught in the district. No curricular changes were required, and the board's resolution functioned more as a public clarification than a policy shift.

Step 6: Document and Communicate the Outcome

To ensure long-term clarity, district leaders developed a summary document listing all teacher questions and the board's official responses. This document was shared with staff and has continued to serve as a reference point during future curriculum revisions and discussions.

Ultimately, curriculum transparency is not simply about compliance or communication. It is a reflection of leadership values. When district leaders engage openly, communicate clearly, and prepare thoughtfully for difficult conversations, they demonstrate a commitment to both educational integrity and community partnership. In a time when public education faces heightened scrutiny, transparency offers not just protection from criticism, but a path toward deeper trust, shared understanding, and a stronger learning environment for all students.

Dr. Barbara E. Davis has more than three decades of service in public education. She brings deep expertise in curriculum, instruction, assessment, and educational technology. She has served on the Pennsylvania Department of Education's Math Assessment Advisory Committee and is a past president of PA EDGE (formerly PASCD).



From Engagement to Partnership: Rethinking the School-Parent Relationship

Cathleen J. Cubelic, Ed.D.

Introduction

For decades, "parent engagement" has been a central pillar in the conversation about student success. Educators, researchers, and policymakers have emphasized the role of families in supporting learning, shaping student attitudes, and reinforcing school values. Yet, in many schools, "parent engagement" has been defined as participation in traditional events—open houses, parent–teacher conferences, volunteer opportunities, or school fundraisers—without developing deep, strategic, and sustained collaboration that is required for student achievement goals to be realized.

A growing paradigm shift has the potential to fundamentally reframe this relationship. Rather than viewing parents as occasional contributors to their child's education, forward-thinking schools can adopt a model that mirrors the partnership between a consumer and a trusted financial advisor. In finance, the advisor–client relationship is grounded in mutual investment, shared goals, transparency, accountability, and the expectation of positive outcomes. Both parties bring expertise: the advisor in understanding markets and strategies; the client in articulating priorities, risk tolerance, and life goals. Together, they create, nurture and formalize a personalized plan to maximize results.

In translating this formula to education, we can expect an emerging model of intentional parent–school partnership—one that goes beyond "engagement" toward a relationship built on collaboration, joint commitment, shared goals, accountability, and clear expectations.

Why the Previous Model Is No Longer Enough

Traditional parent engagement efforts have often been limited and lacked depth in three ways:

1. One-Way Communication

Too often, schools distribute information to parents without inviting them into the decision-making process. Parents receive updates but are rarely asked to co-create solutions.

2. Event-Based Involvement

Engagement is frequently assesed through quantitative measures; by event attendance, rather than by the quality of the ongoing relationship or its impact on student outcomes.

3. Undefined Expectations

Without shared goals and clearly stated roles, "engagement" becomes ambiguous, making it difficult to measure progress or hold anyone accountable.

In an era where student needs are increasingly complex—affected by shifting technology, social-emotional challenges, diverse learning styles, and varying access to resources—this surface-level engagement is insufficient. What's needed is a model that matches the intentionality, precision, and personalization of a financial advisor's relationship with their client.

The Financial Advisor Analogy

A consumer who secures a financial advisor does so for one reason: to ensure their resources are invested to achieve long-term goals. This relationship works as a result of five defining characteristics:

1. Collaboration - Both the advisor and the client bring knowledge to the table. The advisor offers expertise in strategy; the client shares their vision and priorities.

2. Joint Commitment - Both parties agree to take action and remain invested over time, knowing results won't happen overnight.

3. Shared Goals - Clear, measurable objectives guide every decision, from short-term budgeting to long-term investment.

4. Accountability - The advisor must deliver sound recommendations and track performance; the client must follow through with agreed-upon action.

5. Expectation of Positive Outcomes - Both expect progress, even if the path includes adjustments along the way.

This model works exceptionally well in achieving financial health, why not apply it to something even more critical - the educational future of our children?

Collaboration: From Information-Sharing to Co-Creation

In the traditional model, schools provide updates and parents listen. In the partnership model, both parties are active participants, crafting and guiding the child's learning journey.

In this model, schools invite parents into conversations about curriculum priorities, intervention strategies, and enrichment opportunities—not just as a formality, but as genuine partners in a shared investment. For example, a school may share reading data with a parent and then jointly develop a tailored reading plan that includes defined in-school strategies and at-home practices. The plan reflects both professional expertise and the parent's valuable insight into their child's personality, interests, and routines.

Joint Commitment: Investing Over the Long Term

Like a financial plan, a child's educational plan requires long-term commitment. Progress isn't immediate. Parents commit to supporting learning at home, monitoring progress, and communicating regularly, while schools commit to providing high-quality instruction, timely feedback, and meaningful resources.

A hallmark of this commitment is consistency. Sporadic bursts of engagement, like irregular investment deposits, will most likely yield weak returns. The true partnership thrives when both sides invest consistently in the mutually agreed-upon actions.

Shared Goals: Aligning Vision and Strategy

The advisor–client relationship works best when both have the same end goal: to increase financial security. In education, the shared goal is student success, but it must be defined with clarity and specificity to enable both parties to participate.

Instead of generic aims like "do well in school," shared goals might state:

▶ Achieve grade-level reading proficiency
▶ Improve math problem-solving skills by 20% on benchmark assessments
▶ Build self-regulation skills, completing homework independently four nights a week

Clear goals enable the development and implementation of targeted strategies, the tracking of progress, and necessary adjustments, mirroring the way a financial advisor rebalances a portfolio when market conditions change.

Accountability: Mutual Responsibility for Results

In a highly effective advisor–client relationship, accountability is a two-way street. The advisor is responsible for performance monitoring and sound advice. The client is responsible for following through with contributions, savings plans, or investment changes.

In the educational partnership model:

- **Schools** are responsible to track student progress, communicate results regularly, and provide actionable guidance and next steps.
- **Parents** are to implement agreed-upon supports at home, monitor progress, and provide timely feedback to the school.

When either party falls short in their commitment, the partnership includes a process for addressing the gap, not to assign blame, but to review and recalibrate the plan.

Expectation of Positive Outcomes: Planning for Success

A financial advisor never enters a relationship expecting failure. In all cases, they intend and expect growth, even if the journey requires patience and long-term commitment. Similarly, schools and parents must begin with the belief that students can and will succeed when supported intentionally.

This mindset fosters persistence. Setbacks become opportunities to reassess strategies rather than reasons to disengage. Celebrating progress, no matter how small, reinforces the shared belief that the partnership is working and that continued investment is worthwhile.

Implementing the Shift: Practical Steps for Schools

For this paradigm shift to take root, schools make intentional changes like these:

1. Redefine Engagement: Move from measuring attendance at events to measuring contributions toward shared goals.

2. Build Structured Communication Channels: Schedule regular "strategy meetings" with parents, similar to a financial portfolio review, to assess progress and adjust plans.

3. Co-Create Learning Plans: Develop individualized learning roadmaps that clearly outline the responsibilities of both school and family.

4. Provide Tools and Resources: Equip parents with actionable strategies they can realistically implement at home.

5. Create Accountability Systems: Track both school and parent-delivered actions to ensure balance and follow-through.

6. Celebrate Milestones: Recognize joint efforts and progress toward goals to reinforce commitment.

A More Powerful Partnership

Parent engagement will always be important, but it is no longer enough on its own. Today's students need an investment-grade partnership that mirrors the relationship between a consumer and their financial advisor. This model demands collaboration, joint commitment, shared goals, accountability, and an unwavering expectation of positive outcomes.

When schools and families adopt this intentional approach, they move beyond surface-level involvement to create a dynamic alliance. Just as a sound financial partnership can change the trajectory of a client's future, this educational partnership has the power to transform the trajectory of a child's life.

Dr. Cathleen Cubelic is an accomplished educational leader with extensive experience in instructional leadership, literacy development, and policy implementation across federal, state, and district levels. A passionate advocate for collaboration between families, schools, and communities, she is dedicated to transforming education through innovative practices that inspire growth and opportunity.

Professional Learning Snippets:

A Solution to Maximizing Time

Stephanie Ferree, Ed.D.

The DILEMMA

It all began with English Language Arts (ELA) leaders sitting around a table, pondering how to create ongoing professional development around a new phonics program with a minimal number of days, with the majority falling in the spring. The team knew they had to find a way to follow through for the upcoming year, as teacher resources and electronic materials were provided at the end of the school year. Further, teachers were promised that additional professional learning opportunities with visual models would be provided in the future. The leaders knew that to develop and maintain fidelity of the program, teachers needed to be provided with models and support throughout the year.

As the leaders were brainstorming, they came to the conclusion that chunking the steps of the program would allow an opportunity to demonstrate the steps of the program and dig into specific tips and strategies. As leaders reviewed the available time, they began to panic until one of the leaders suggested to create sessions that were about 25-30 minutes and use the time that was available in the morning before school.

One thought was to take the sessions on the road, but when looking at the calendar, it would be so labor-intensive to get to five buildings for potentially six to eight sessions. As they continued to brainstorm, one leader suggested a virtual meeting with training on each step so it could be laid out across the year and not require substitutes. The leadership team went back and forth on potential solutions and how to keep the teachers engaged in learning. After thorough discussions and possibilities, the idea of Professional Learning (PL) Snippets - short chunks of material in a brief period of time to provide support for a new program with enhanced engagement and collaboration - was created.

The FRAMEWORK

Collaboratively, the ELA leadership team created a framework to guide the sessions. The framework is outlined in Figure 1.

Figure 1

Padlet Questions
(5 minutes)
Explanation of Step tied to checklist
(5 minutes)
Video of teacher working through step
(10 minutes)
Sharing/Collaboration
(5 minutes)
Padlet completion
(5 minutes)

The LEARNING through RESEARCH

This professional learning plan and framework was designed and implemented out of a need to be able to utilize time efficiently and to ensure teachers had the tools they needed to be able to implement the program with fidelity. After rollout, teachers were feeling overwhelmed with the materials and requested seeing the steps of the program in action.

When looking at research on professional learning, the team of leaders effectively utilized chunking of material to manage the cognitive load of learning in a new curriculum, as well as the pedagogy to support the program. Each session matched a step in the program, and there was deliberate planning in "explicitly communicating the outcomes of the session" (Lee, 2025, p.32). An explicit format for each session and communication allowed participants to have an overview of each session, while allowing them "to situate the new learning within a broader context" (Lee, 2025, p.32) and brought the steps together from previous learning, aligning with brain research that supports the importance of activating prior knowledge before learning new knowledge.

In conjunction with the professional learning sessions, teachers actively taught students and could use the weekly progress monitoring data. The data helped determine whether the practices being used were directly linked to student achievement, allowing them to set goals for students, as opposed to just relying on the checklist for fidelity. Knight (2025) states that professional learning "that helps teachers see reality more clearly and set powerful goals that they consider important for their students is more likely to lead to real change" (p. 24). Professional learning sticks when sessions are designed deliberately and explicitly with communicated goals, small chunks to reduce the cognitive load, built on prior knowledge, and tied to goals that help make the new learning real and achievable by the teacher and students.

The FUTURE

The ELA leadership team celebrated the positive feedback and the learning that the administrators reported they saw in classrooms. They celebrated the quality of the questions asked during the sessions. The team sat down to begin planning for the next year and were poised to continue to run morning PL Snippets with topics directly related to maintaining the fidelity of the program, as well as meeting the needs teachers shared in the needs assessment. The leaders have left several sessions unplanned and labeled as emerging needs to be able to identify areas based on teacher feedback. The leaders are exploring formats for peer observation and the identification of model classrooms. The opportunity to set the stage for additional professional development opportunities continues to emerge from the idea of small chunks of professional learning.

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.

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Three Ways a Mindset Change Can Be the Answer to Stronger Learning Environments

How principles of minimalism can help educators reclaim time, energy, and passion for teaching and learning

Tammy Musiowsky

The scene is all too familiar: administrators rushing from crisis to crisis, teachers overwhelmed by competing demands, and students disengaged in cluttered, chaotic environments. We've long held a societal belief that educators can do it all because "that's part of the job." But what if the solution isn't doing more? What if it's doing less and with greater intention?

Research from Drerr (2023) shows that when professional staff are well, they create healthier and stronger learning environments. Education profoundly impacts every person's life, making educator well-being not just important, but essential. So our question then becomes: How can we make our roles more sustainable, breathable, and even enjoyable?

The answer lies in a fundamental mindset shift toward educational minimalism which means applying principles rooted in intentional living to create learning environments that truly serve students and educators alike.

Mindset Shift #1: From Physical Clutter to Intentional Spaces

The Current Reality: Walk into many schools and you'll find spaces that are cluttered and anxiety-inducing (Pfister, Magby, & Betz, 2023). Classrooms overflow with unused materials, manipulatives gather dust, and both students and staff feel overwhelmed by the visual chaos around them.

The Minimalist Mindset: Reducing unnecessary items from the physical environment and choosing only what adds genuine value to learning.

What this Looks Like in Practice:

- **Before:** Packed classrooms with years of accumulated resources that sap energy and motivation to manage.
- **After:** Intentionally designed spaces where every item serves a purpose, creating calm and focused learning environments.

Implementation Strategy: Start by asking yourself:

- "What gives me energy in this space?"
- "What is taking too much physical space?"
- "How does this influence how I work?"

Create a timeline for implementation to keep your time and energy focused on your decluttering process. At this time, systematically curate your environment, keeping only materials that directly support current learning goals.

The Impact: In a classroom, the teacher and students can focus on deep learning rather than navigating physical clutter. The teacher reports feeling more organized and less stressed when their physical environment supports rather than hinders their work together. Because the teacher is calmer and more focused, students' behavior reflects the teacher's behavior.

Mindset Shift #2: From Mental Overload to Cognitive Clarity

The Current Reality: Educators face an overwhelming number of decisions daily. Decisions range from curriculum choices to discipline issues to administrative tasks (Klein, 2021). This mental overload leads to decision fatigue and negatively impacts interactions with students and colleagues.

The Minimalist Mindset: Reducing unnecessary mental stress by eliminating non-essential decisions and prioritizing what truly matters for learning.

What this Looks Like in Practice:

- Before: Too many responsibilities creating stressed educators who may unintentionally display negative behaviors toward others.
- After: Calm, organized, and focused professionals working in environments with open communication and clear priorities.

Implementation Strategy: An educator identifies what's taking too much mental space by asking: "What is consuming my mental energy that doesn't directly benefit student learning?" The educator creates systems to reduce decision fatigue such as establishing clear routines, delegating appropriately, and eliminating low-value tasks.

The Impact:

- Administrators shift from putting out fires to building relationships and providing instructional leadership.
- Teacher move from managing behaviors to building classroom cultures and designing meaningful learning experiences.
- Students benefit from more present, focused educators who can engage them authentically.

Mindset Shift #3: From Scattered Efforts to Values-Driven Purpose

The Current Reality: Schools often operate on autopilot, maintaining schedules and practices simply because "that's how we've always done it." This reactive approach leaves everyone feeling like they're running a race with no finish line.

The Minimalist Mindset: Understanding and committing to valuing your time and energy by making decisions that align with your core educational purpose.

What this Looks Like in Practice:

- Before: School days that rush from beginning to end, leaving everyone anxious and feeling like there's never enough time.
- After: Intentionally planned days that maximize learning time without feeling forced or frantic.

Implementation Strategy: Begin with fundamental questions:

- *"What do I/we value most in education?"*
- *"What are the positive outcomes I/we want to see?"*

Use these answers as filters for all decisions. If something does not align with your core values or contribute to your desired outcomes, consider eliminating it.

The Impact: This shift creates a ripple effect throughout the school community:

- School staff move from putting out fires to feeling accomplished in their work.
- Students transition from disengagement or compliance-driven behaviors to active participation in well-designed learning experiences.
- Everyone experiences reduced overwhlem and increased focus on what truly matters.

Making the Shift: Questions for Getting Started

Ready to embrace educational minimalism? Start with these reflection questions:

- *What gives me energy in my educational role? Why?*
- *What do I value most about teaching and learning? Why?*
- *What is taking too much of my physical or mental space?*
- *How do I want students and colleagues to feel in our learning environment?*

The Bigger Picture

This isn't just about decluttering. It's about creating sustainable, joyful educational environments. When we apply minimalist principles to education, we don't lower our standards; we raise our intentionality. We don't do less teaching; we do more meaningful teaching.

The goal is simple.

Keep passionate educators in their roles by ensuring they feel safe, trusted, and sane.

By removing unneccessary tasks and responsibilities while maintaining a clear vision for learning, we create environments where both educators and students can thrive.

Educational minimalism is the umbrella under which schools and teachers should operate. Not because we're settling for less, but because we're choosing more of what matters most. We are not taking resources from teachers and students, instead, we are carefully choosing the ones that will offer the greatest value and impact.

When educators can focus on their core purpose and the people in front of them, we strengthen our learning communities in ways that benefit everyone for the long run.

Tammy Musiowsky is an experienced educator, instructional coach, and professional learning facilitator passionate about empowering teachers to unlock student potential. With a focus on practical, collaborative support, she helps teachers create engaging, student-centered environments where learners thrive.

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"When we apply minimalist principles to education, we don't lower our standards; we raise our intentionality. We don't do less teaching; we do more meaningful teaching."

When Did the Game Change?

Dennis M. Williams, Jr., Ed.D.

As a building administrator for over twenty years, I believe I am doing the job that I was always meant to do. Yet, the evolution of education as a profession has created a quiet yet palpable sense of angst and tension among teachers, administrators, and those tasked with supporting schools at the building level.

I never will be one to reminisce about the good old days, as I firmly believe that change is a requirement and that learning to embrace, navigate, and use change as a catalyst for personal and professional growth is critical. But I would be lying if I did not point out that over the last few years, the game has changed, and it is clear that the impact of that shift will be long-lasting. As a veteran educator of 28 years, I've started to ask myself, "When did the game change?"

It would be easy for people reading this article to say, "COVID-19! COVID-19 changed everything, and we are still feeling the aftereffects." I would not completely disregard that notion—it certainly played a role. However, COVID-19 exacerbated issues we already struggled to wrangle and highlighted the significant matters that had been bubbling under the surface. So, again, while I can't necessarily pinpoint when things started to look and feel different, I can undoubtedly say that it did not happen overnight.

The social-emotional and mental health of students requires far more support than sometimes feels available, and the impact of students who feel as if they do not belong often leads to increased social isolation, attendance issues, and behavioral problems. Of course, this happened in previous generations, and many of us can recall students who fit in this category. But the sheer volume? The often-overlooked side to this is the social-emotional health of the teachers who serve those same students.

The phenomenon of 'quiet quitting' in education as a way for educators to reclaim their well-being or survive in what they may deem to be a toxic time in schools is only exacerbated by the mismatch between the number of qualified teachers available and the openings that become available. The responsibilities of teachers have shifted from content expert and instructional specialist to include those of counselor, advocate, translator, social worker, and detective… roles they were not trained to fulfill. The difficulty of trying to coach teachers on how to support all students, including those 'at-risk,' can be extremely difficult when some of them see themselves as 'at-risk' adults. The days of celebrating teachers for 35-40 years of dedicated service are becoming a thing of the past. People are leaving the profession early - teacher burnout is real!

When did post-secondary plans for students with academic achievement that would place them in the top percentage of their graduating class become community college and trades work because of the exorbitant cost of a four-year degree? The fact that a college education could be the gateway to financial distress for young people ages 18-25 is now a reality … when did that happen?

The tension that brews around a shift in political leadership and the fear that future political decisions can suddenly impact mission, vision, goals, and programming for a portion of the school population is real! Whether it's socioeconomic status, race, ethnicity, gender, or sexual orientation, the idea of supporting all students through a culture of care and an environment that values uniqueness and belongingness used to be paramount. Now, it often feels like that culture of uniqueness and belonging can somehow be sacrificed based on who they love, who they pray to, where their parents were born, the zip code they reside in, or how they decide to identify.

The impact of a generation reliant on social media for news, academic support or sabotage, fashion and relationship advice, and counsel for a myriad of other things has influenced the sustainability of face-to-face dialogue and the desire to engage in a way that was once meaningful and sparked creativity, collaboration, and critical thinking. Sadly, there is no turning back. Mobile devices aren't going away, whether you allow them in your classrooms; neither is the unfortunate reality that a heart emoji or thumbs-down emoji on a status post can change the entire trajectory of a person's day. The integration of artificial intelligence can and will continue to impact the classroom. Based on your perspective, it can be the enemy or the savior, but that is also here to stay. So, in some way, this is just the tip of the proverbial iceberg of systemic school change.

On the leadership side, instructional leadership goals have morphed into daily managerial tasks that slowly chip away at the programs and systems we were hired to build and lead. The day-to-day decisions that used to be made without fear of consequences have become more painstaking. Again, I wonder, when did the game change? When did I start to feel guilty about the days I decided not to work at home after an exhausting nine- or 10-hour day? When did I start thinking more about upcoming days off and taking the longer route to school in the morning? Did things change faster than I did? Did my professional maturity and ability to adjust to change accordingly hit a speed bump?

Our profession's future is bright and cloudy at the same time. So, I've learned that the question now isn't really when the game changed, but what do we do now that it has? As educators and school leaders, we don't have the luxury of slowing down when the paradigm shifts. When the game changes, the game's rules must change, too! As our profession evolves, we must continue to upskill to remain relevant, close gaps in access, and expand opportunities. Despite the torrid pace at which education targets move, we must continue to strive to teach students future-proof skills, normalize conversations around mental health, and build school communities that are inclusive both emotionally and professionally. For staff, we must provide appropriate and timely professional development that helps those on the ground level navigate the change while ensuring their emotional health is not lost in the shuffle. Overall, it is essential that when things feel bleak, we continually heed the words of Macklemore,

"Change the game, don't let the game change you."

Dr. Dennis M. Williams, Jr., is an accomplished high school principal with 28 years in education, including 21 years as a building-level leader. As principal of Hatboro-Horsham High School, his leadership has driven schoolwide reform and national recognition. He is known for inspiring educational leaders to redefine their impact in today's evolving school environments.

The Learning LEDGER

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

Equipping Tomorrow's Teachers Today

Christine Anne Royce, Ed.D.
Valerie Bennett, Ph.D., Ed.D.

Introduction

The term Artificial Intelligence (AI) arrived full force on the scene in late 2022 and became a common term that was utilized albeit perhaps not fully understood. AI's entry into the education field by mid 2023 was also sudden and is still creating some uneasiness about when and how it should be utilized. AI is here to stay and predicted to become a part of the overall fabric of work as it becomes more powerful.

AI also has the transformative potential to revolutionize education by enabling personalized learning, automating administrative tasks, and enhancing educational tools (Chassignol et al., 2022). AI can tailor instruction to individual student needs, provide immediate feedback, and support teachers in creating engaging learning experiences (Xia et al., 2023). Additionally, AI can analyze vast amounts of educational data to improve decision-making and educational outcomes (Roll & Wylie, 2021). With the list of amazing benefits (as well as concerns) growing, it is imperative that all educators including those who are still in preservice or inservice programs become well-versed in AI, equipped with the knowledge and skills to leverage it, and use it responsibly and ethically.

Although the topic of AI is being discussed, one group that has been left out of the conversation is future teachers. As this group matriculates through educational preparation programs (EPPs), most often their "educational technology" course focuses on technology platforms that will help with content, assessment, and perhaps management. Although these platforms provide our future teachers with the skills to interact with their students, they often do not go far enough to provide insights into student learning that AI can provide.

Not only should future educators understand how to use AI for their operational duties, they must also learn how to show their students how to use AI to enhance their learning. Therefore, EPPs must ensure that they empower their future teachers on how to use AI operationally and pedagogically.

Becoming AI Literate

Being AI literate for future educators means understanding AI concepts, tools, and their applications in education. It involves knowing how to integrate AI into their planning so that it will enhance teaching and learning, how to critically assess AI technologies, and being aware of ethical considerations (Holmes et al., 2023; Royce, in press). When AI literacy includes these tasks, it can help to improve educational outcomes (Zawacki-Richter et al., 2019). Educators must also remain current on AI advancements to effectively prepare students for a future where AI plays a significant role (Chen et al., 2021). It is therefore essential that EPPs show future educators how to use AI not only in the traditional Educational Technology course, but across their program of study. What follows are key lessons and reasons for including AI into courses ranging from assessment to culturally relevant pedagogy to all areas of STEM and social science integration.

Enhancing Educational Outcomes

Culturally relevant pedagogy (CRP) as an educational approach leverages students' cultural backgrounds to make learning more meaningful and effective, promotes academic success, cultural competence, and critical consciousness (Ladson-Billings, 1995). It emphasizes the importance of integrating students' cultural identities into the curriculum to create more inclusive and equitable learning environments (Paris & Alim, 2017).

The integration of AI with CRP is an emerging area of research, with potential to promote equality in education (Tamer Sari et al., 2023). Some scholars propose combining cultural theory and AI research into "cultural informatics" (Sengers, 1999). Merging CRP and AI is the next phase for how EPPs should approach teacher preparation. This expanded curriculum framework will enhance and accelerate the achievement of learning outcomes. EPPs must also share with future teachers the benefits of AI-driven adaptive learning (AL) systems that personalize educational content based on individual student performance and learning style (Ayeni et al, 2023). Future educators also need to be cautioned that responsible and ethical usage of AI is at the forefront of integration. Understanding the ethical implications, including bias, privacy, and transparency in education must remain at the center (Roll & Wylie, 2021).

Integrating the Soft Skills

With the call to integrate soft skills into curricular offerings, there is a need to find ways for that to happen. AI tools can be utilized to enhance critical thinking, creativity, and problem-solving abilities among students. Integrating these skills and tools requires a shift in perspective, urging educators to "think differently". Shippee (2023) highlighted the importance of questioning new technologies. The adoption of new technologies varies, with some educators embracing innovations early, while others are more hesitant (German et al., 2022). Regardless of the pace of adoption, it is crucial to recognize that technology literacy is one of the fastest growing core skills. Additionally, curiosity and lifelong learning, resilience, flexibility, agility, motivation, and self-awareness round out these essential skills (World Economic Forum, 2023). All of these skills can be met through implementing AI in education.

Using AI to Support

One effective approach to integrating AI tools is by adhering to Merrill's Principles of Instruction (Merrill, 2018) which provide a solid framework to ensure AI tools are used to enhance meaningful learning. These principles focus on problem-centered learning, activating prior knowledge, demonstrating skills, applying skills, and integrating skills into real-world tasks—skills that are crucial for the future and align with those identified by the World Economic Forum (2023). EPPs that utilize this approach to preparing future teachers will provide a solid base for not only the integration of AI but also for the planning of future focused instruction for both their students and their student's students.

Merrill (2018) also provides opportunities to focus on the 4Cs-critical thinking, communication, creativity, and collaboration—can further enrich student learning. These skills are essential when students demonstrate their understanding and apply it to real-world tasks. Lesson design, whether manual or AI assisted, should move from merely delivering content and assessing understanding to creating dynamic, interactive lessons. These lessons should include scenarios, problems, or tasks that require students to learn and AI can help with applying knowledge in authentic ways (Kadaruddin, 2023; van Rijmenam, 2023).

A recent study by Afful and Addo (n.d.) on a small group of educators from the Clayton County School District (GA) examined how AI changes teaching and learning.

Their qualitative study illustrated that AI can improve the lesson planning processes by improving efficiency, flexibility, and enhanced the collaboration process. Even though one drawback was that creativity was found to not be the strongest point for AI in producing lesson plans, this in fact opens the door for teachers to use their own creativity in producing lesson plans.

Results from Afful and Addo's (n.d.) study support the point that AI should always be viewed as a tool and not a substitute. Other findings included that AI provided increased personalization of learning by tailoring lesson plans to individual student needs when prompted. Furthermore, AI provided enhanced engagement ideas and content with interactive elements and gamification into lesson plans which influenced student motivation and engagement.

Recognizing these key areas that overlap, allows teachers to maximize instructional time and integrate content. For example, one student enrolled in a doctoral program expressed this clearly when he stated that "students love to explore writing poetry and music with AI to learn how to rhyme and use predictive word suggestions." Another student noted that specific tools allow

them to tailor support to students with IEP or 504 plans and goes on to state that "This technology allows me to adapt content and learning strategies that cater to diverse learning styles, making our classroom more inclusive and effective."

Diving Deeper into Viewpoints

In our experiences integrating lessons that incorporate AI with both preservice and inservice teachers has had mixed reactions. Nearly 100 students enrolled across multiple sections in a preservice technology class where they were given a task list that introduced multiple AI programs. Their narrative results were examined as well as interviews that were conducted with inservice graduate students' experiences. The following themes emerged from their reactions that mirror what many of the researchers and bloggers are already expressing.

A Valuable Tool: Preservice teachers have found AI to be a valuable tool for streamlining classroom tasks, such as generating lesson plans, quizzes, and worksheets. They appreciate how AI saves time, allowing them to focus more on engaging students and enhancing their learning experiences. Many students have recognized the potential of AI in personalizing education, supporting differentiated instruction, and providing immediate feedback. The ease of use and accessibility of AI tools, as well as their ability to enrich the classroom environment, have left a positive impression on these future educators. A graduate student enrolled in our programs noted that the use of one particular AI tool helped her as a new teacher to get immediate ideas for differentiating instruction, which was a big push at her school.

An explanation of specific examples of where and how an inservice teacher utilizes AI further illustrates this. "I utilize AI when I am need of code script to be generated for activities with the children, to create rubrics, worksheets, PBLs, and to assist with the creation of newsletters to communicate with stakeholders. I also encourage the students to utilize AI during their brainstorming sessions as they plan for a project. Whether it is a science fair or a unit project in the STEM Lab with me."

Mixed Reactions: While some students see the benefits of AI, students also expressed caution about its overuse in the classroom. They acknowledge that AI can be a powerful assistant but emphasize the importance of teachers maintaining control over lesson content and creativity. Concerns arise around relying too heavily on AI-generated materials, which might lead to a loss of personalized teaching. These students believe that AI should be used as a supplementary tool rather than a primary source for lesson development, ensuring that the human element in education remains intact.

No Go Reasons: A subset of students remains skeptical about the integration of AI in the classroom, particularly due to fears of over-reliance and potential misuse by students. They worry that AI might lead to decreased student learning if it replaces critical thinking and hands-on experiences. Concerns also include the possibility of students using AI to complete assignments without truly understanding the content. These students advocate for limited use of AI, reserving it for specific tasks while ensuring that traditional teaching methods and student engagement are prioritized.

Interestingly, the preservice student's initial experiences mirror many of the findings that Afful and Addo (n.d.) and inservice teachers interviewed also expressed in the area of personalization of learning, over dependence on AI, quality and relevance of the generated content. One note is that participants in Afful and Addo's study (n.d.) did have a more in-depth understanding of the focus of ethical issues such as data privacy and bias.

Conclusion

Although there are and will likely be questions or concerns about the use of AI within the K-12 setting, the reality is that AI is now part of the technology fabric. All current and future students will need to be aware of this tool and understand how to use this tool for their professional lives, which means future educators will need to be able to implement this tool into their classrooms for learning purposes. Therefore, the authors encourage teacher preparation faculty to become knowledgeable about AI tools and make informed decisions about where and how they will implement them in their curriculums for their students' future success.

Dr. Christine Anne Royce is a past president of the National Science Teaching Association and currently serves as a Professor in Teacher Education at Shippensburg University. Her areas of interest and research include utilizing digital technologies and tools within the classroom, global education, and the integration of children's literature into the science classroom.

Dr. Valerie Bennett is an Assistant Professor in STEM Education at Clark Atlanta University, where she also serves as the Program Director for Graduate Teacher Education and the Director for Educational Technology and Innovation. With more than 25 years of experience and degrees in engineering from Vanderbilt University and Georgia Tech, she focuses on STEM equity for underserved groups. Her research includes AI interventions in STEM education, and she currently co-leads the Noyce NSF grant, works with the AUC Data Science Initiative, and collaborates with Google to address CS workforce diversity and engagement in the Atlanta University Center K–12 community.

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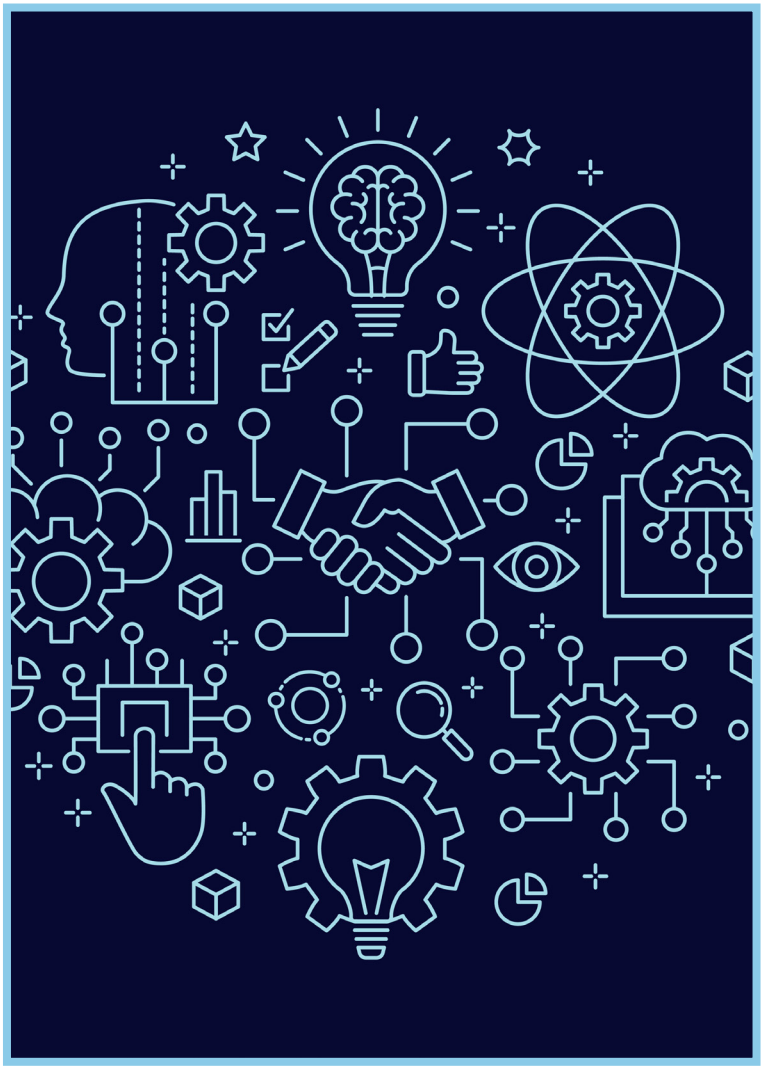

Exploring the Benefits of Positive, Teacher-Student Relationships for Teachers

ANNIE CONNOLLY

As a pre-service teacher, I am always asked, "Why do you want to be a teacher?" My answer has been the same since first grade: I want to make students feel loved, comfortable and seen, just like how my first-grade teacher made me feel. I was an anxious child who dreaded going to full-day school and being away from my parents for the first time. However, my teacher made it a priority to make me feel loved and accepted in the classroom. She used various strategies, such as keeping a picture of my family at my desk and having one-on-one check-ins throughout the day. These small acts of kindness built my trust and our relationship and, ultimately, influenced me to choose a career that allows me to do the same for others.

When I share this experience, especially with pre-service teachers or those in the educational field, they typically share similar stories regarding their most influential teachers. They explain how building a relationship with a specific teacher not only helped academically but also encouraged them enough to take a similar path. This continual pattern sparked my interest in researching the importance of positive relationships between teachers and students.

Researching the Benefits of Positive, Student-Teacher Relationships

Throughout my research, I found extensive studies regarding the impact of positive relationships on students. One study found, "high-quality, teacher-child relationships can promote students' academic and behavioral development by providing an environment of support and emotional security in which children feel confident and supported" (Maldonado-Carreño et al., 2011, p. 602). When students feel loved and heard, they are more likely to be motivated, because they do not want to let their teacher down. Another research study emphasized, "children who have warm, supportive relationships with their teachers participate more in class, feel engaged with academics, have positive work habits, are less likely to act out and have higher academic achievement" (Trang et al., 2021, p. 152). Just as I had hypothesized, it was evident positive relationships can be a factor in helping students succeed in the classroom.

However, as I continued my research, I noticed there was a lack of studies regarding how these relationships affect the teachers themselves. This piqued my interest in developing a survey to gain insight into the effects of these strong relationships, specifically on the teacher.

Developing the Research Design

To answer my research question -- "How do positive, teacher-student relationships benefit the teacher? -- I believed a short survey would be the best option, as it can be open-ended and allow for the sharing of personal experiences. I interviewed five teachers individually using a set of four, open-ended interview questions I constructed. I chose teachers whom I knew were passionate about developing strong relationships with students. All are early-childhood educators; however, their years of experience, grades and school districts all varied. These differences would allow for a variety of personal experiences and stories.

The survey consisted of these questions:

1. How long have you been teaching?
2. In what ways do you build relationships with your students?
3. How does building positive relationships with your students benefit you as a teacher?
4. Can you share one or more examples/stories of building relationships with students, and the benefits you saw within yourself and the student?

Results

As a pre-service teacher, it was fascinating to read the results of the survey. These fantastic teachers provided extensive advice and strategies on building relationships with my future students while also answering my research questions. They provided a multitude of stories. Three specific stories are highlighted that I found to be informational and influential for pre-service teachers.

One subject I interviewed is currently a special education teacher who works primarily with kindergarten students. She stated, "The other major benefit of having strong relationships with my students was that I had a 'safe space' within the school." When answering the question, she emphasized that strong relationships with her students not only created a safe space for them but also for her. She then shared a story about a school where she had previously taught, with an administration that was difficult to work with. She said once she closed her classroom door, she was able to enjoy teaching because of the strong relationships she had formed with her students.

Another teacher noted she would share her favorite, school-appropriate songs with her class, and they created a shared playlist to listen to. She also shared her favorite movies, and they watched them during Fun Fridays. She believes this created a classroom environment where children felt included and their interests/opinions mattered. It also created a space involving many of her favorite things, which promoted self-happiness, because she was surrounded by things she enjoyed.

The fourth-grade teacher shared a story about a young girl who struggled because her mom left when she was younger. The teacher explained this affected the child so much that she cried during math lessons and said she was stupid. She had very little self-confidence and really struggled because she did not feel "good enough." The teacher took the student's face in her hands and told her how proud she was of her for at least trying and for showing up to school, even though she felt miserable during math time. This encouragement gave the student confidence, including during math. The teacher reported, "The rest of the year, I saw very few tears from her, and instead, she was trying more and raising her hand and taking those risks to become better. She ended up going from a kindergarten level to a second-grade level in math by the end of the year." Her academic and social skills increased because the teacher showed how much she cared. This also energized the teacher, because it made her proud, which intrinsically motivated her to continue these practices.

Conclusion

Teacher-student relationships that benefit the students indirectly benefit the teacher as well. The data collected through the interviews indicated that when students exhibit favorable behavior, feel safe and connect with the teacher, the teacher feels the benefits. One hundred percent of those interviewed confirmed they benefit from having strong, teacher-student relationships. Phrases participants used to confirm this include, "makes teaching easier," "impacted my mental health," "stresses of my work environment would melt away," and "I thoroughly enjoyed teaching them." Researchers claimed students benefit socially, emotionally, academically, and behaviorally. The main themes of the interviews aligned with the themes of the research. The teachers expressed that the benefits to the students directly affect them because having a safe environment, decreased behaviors, and extra support to at-risk students, they feel more positive as well. These feelings intrinsically motivate them to enjoy their profession. If teachers are constantly having to repeat themselves, raise their voice, or feel unsafe/uncomfortable, then their stress levels are heightened. These are characteristics of a poor teacher-student relationship, which is what creates negative feelings and situations. However, when children have decreased negative behaviors, feel comfortable, and have a strong connection with the teacher, the teacher is more likely to feel intrinsically motivated to continue these practices. I will use what I have learned in this study to create strong teacher-student relationships in my future classrooms, because it not only benefits the students but the teachers as well.

Annie Connolly is a current senior at PennWest California. She majors in Early Childhood Education and minors in Special Education. She wants to be an elementary school teacher so she can help students feel loved and accepted in her future classroom.

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Samantha Shinsky, Ed.D.

ABSTRACT

Artificial Intelligence (AI) is advancing rapidly in K-12 education, creating both opportunities and challenges for teachers and building leaders. This mixed-methods action research study explored K-12 teachers' and building administrators' perceptions of generative AI (GenAI) in educational practices within one Pennsylvania district using the Technology Acceptance Model (TAM). A census survey yielded responses from 68 teachers and 9 administrators. Results indicated moderately positive views of GenAI's usefulness and ease of use. For teachers, Perceived Usefulness (PU) significantly predicted Behavioral Intent ($\beta = .770$, $p < .001$), while Perceived Ease of Use (PEOU) did not; administrators' intent was not significantly predicted by PU or PEOU. Prior experience with GenAI emerged as the strongest teacher-level predictor of intent ($\beta = .692$, $p < .001$). Content analysis of open-ended responses highlighted time-savings, idea generation, and differentiation as adoption drivers, while training, accuracy, privacy, and integrity were primary concerns. Findings suggest districts should pair hands-on professional learning for teachers with leadership guidance on policy, ethics, and data governance. Findings inform district AI implementation and contribute to the growing body of research on GenAI in K-12 education.

Teachers' and Administrators' Perceptions of Generative AI in K-12 Educational Practices

Generative AI (GenAI) has rapidly evolved from novelty to everyday tool, offering efficiencies in planning, assessment, differentiation, and accessibility. Yet it raises concerns about accuracy, bias, privacy, and academic integrity. While media attention and early research highlight both enthusiasm and caution, empirical evidence on how K-12 educators perceive GenAI - and how those perceptions translate into adoption - remains limited in the U.S. context (Akgun & Greenhow, 2022; U.S. Department of Education, 2023).

Understanding educator perspectives on GenAI is essential. Teachers decide whether and how to embed GenAI in daily practice, while administrators shape the policies, supports, and guardrails that enable or constrain classroom use. Without clear evidence of readiness, districts risk underuse or overreliance, missing opportunities for responsible, effective integration.

The Technology Acceptance Model (TAM) offers a framework for understanding GenAI adoption. Perceived Usefulness (PU) - the belief that a technology enhances job performance - and Perceived Ease of Use (PEOU) - the belief that it requires little effort - are central predictors of Behavioral Intent (BI) to use technology (Davis, 1989; Venkatesh & Davis, 2000). Prior research suggests PU often outweighs PEOU, and that experience and professional development can play powerful roles in building adoption readiness (Ma & Lei, 2024; Yang & Appleget, 2024).

This mixed-methods action research study explored how K-12 teachers and administrators in one mid-sized Pennsylvania district perceive GenAI, guided by TAM. It examined (a) perceptions of usefulness and ease of use, (b) predictors of intent, (c) demographic and experience influences, and (d) factors shaping adoption or avoidance, to inform professional learning and policy development.

Literature Review

Technology integration has transformed schools over the past century, from overhead projectors and calculators to 1:1 devices and digital learning platforms. Each wave has carried both opportunities and challenges. Today, AI represents the newest wave of innovation, reshaping industries and redefining human-technology interaction as part of the Fourth Industrial Revolution (Rotatori et al., 2021).

and process information. The growth of 1:1 initiatives created opportunities for personalized learning, but outcomes depended heavily on teacher readiness and professional preparation (Lei & Zhao, 2008; Sauers & McLeod, 2018). Research consistently shows that when teachers feel confident and supported, integration flourishes; when PD is limited or adoption feels imposed, resistance emerges (Hershkovitz & Karni, 2018; Tallvid, 2016).

GenAI marks a new phase in this trajectory. Unlike earlier tools, GenAI systems generate original text, images, or audio, raising both instructional possibilities and ethical concerns. Tools such as ChatGPT, MagicSchool, and Diffit for Teachers can automate routine tasks, assist with lesson planning, and support differentiation, yet they also raise issues of bias, misinformation, surveillance, and over-reliance (Akgun & Greenhow, 2022; Jeon & Lee, 2023; Kasneci et al., 2023).

TAM helps explain adoption patterns. PU is the extent to which a tool enhances performance; PEOU is the extent to which it is effortless; both influence BI (Davis, 1989; Venkatesh & Davis, 2000). While TAM predates the rise of GenAI, its constructs remain highly applicable to understanding educator adoption of emerging technologies. Recent studies confirm that PU is often the stronger predictor of adoption (Ayanwale et al., 2022; Ma & Lei, 2024), and research on preservice teachers highlights that AI literacy and positive attitudes toward GenAI are significant enablers of adoption (Yang & Appleget, 2024).

Research shows that teachers generally view GenAI as beneficial for efficiency and differentiation, but concerns remain regarding critical thinking, accuracy, and integrity (Jeon & Lee, 2023; Mah et al., 2024). Administrators echo efficiency and equity themes while seeking clearer policy guidance (Borasi et al., 2024). Collectively, the literature indicates that successful GenAI integration depends on both practical professional development and system-level policy frameworks that ensure ethical, responsible use.

Methods

This action research study used a concurrent mixed-methods design grounded in TAM, which posits that PU and PEOU shape BI. Conducted in a rural southwestern Pennsylvania district (TASD) recognized by an international organization for its innovation in education, the study invited all 248 full-time teachers and 10 building administrators from seven schools serving approximately 3,300 students.

Data were collected via an anonymous, online questionnaire administered through SurveyMonkey. The survey included three sections: (1) demographics (age, gender, role, years of experience, prior GenAI exposure); (2) 24 TAM-aligned Likert items (5-point scale) assessing PU, PEOU, and BI; and (3) two open-ended questions tailored separately for teachers and administrators on factors influencing GenAI adoption or avoidance.

Quantitative data were analyzed in SPSS (v29) using descriptive statistics and multiple regression. For teachers and administrators, PU and PEOU were predictors of BI; for teachers, a second model included demographics and prior GenAI experience. Assumptions of regression were met. Qualitative data were analyzed using content analysis to identify themes and were triangulated with quantitative findings.

Ethical approval was granted by the Pennsylvania Western University IRB (Proposal #PW24-020), and participation was voluntary and anonymous.

Results

A total of 77 educators participated (68 teachers and 9 administrators), representing both elementary and secondary levels with varied years of experience. Quantitative analyses showed that

teachers held moderately positive perceptions of GenAI's usefulness (M = 3.62, SD = 0.73) and ease of use (M = 3.63, SD = 0.76), while administrators reported slightly higher usefulness (M = 3.84, SD = 0.49) and similar ease of use (M = 3.63, SD = 0.32). For teachers, perceived usefulness significantly predicted intent to use GenAI ($\beta = .770$, $p < .001$), explaining approximately 75% of the variance, whereas perceived ease of use was not significant ($\beta = .129$, $p = .152$). Among administrators, neither variable significantly predicted intent (PU $\beta = .361$, $p = .308$; PEOU $\beta = .470$, $p = .197$), though the model explained over half the variance ($R^2 = .513$). Prior GenAI experience also significantly predicted intent among teachers ($\beta = .692$, $p < .001$), suggesting that exposure, rather than demographic factors such as age, gender, or experience level, most strongly influenced adoption.

Qualitative findings revealed that both teachers and administrators viewed GenAI as a promising yet complex innovation. Teachers consistently emphasized time-savings, idea generation, and support for differentiation. As one noted, "Generative AI tools help make my practice easier by helping me save time." Another explained, "I have used Magic School to create a rubric for a project when I wasn't sure where to start." However, teachers also expressed uncertainty about training, misinformation, and student misuse: "I am nervous about student data privacy. I am not too sure about what is appropriate and what is not."

Administrators echoed the efficiency and creativity benefits but approached them through a broader, system-level lens. They described GenAI as "a positive influence … [that] saves valuable time," yet cautioned against "teachers taking the easy way out and losing touch." Concerns about data ethics and academic integrity were frequent: "Students can cheat using AI; plagiarism is a real concern."

Overall, teachers' adoption intent appears shaped by usefulness and experience, while administrators' perceptions center on ethics, policy, and preserving the human element - highlighting the need for role-specific supports in GenAI implementation.

Discussion

This study extends TAM into the context of K-12 GenAI integration, offering new insights into how usefulness, experience, and systemic concerns shape adoption. Three themes emerged from the analysis.

First, PU remains the most powerful predictor of teacher intent. Although teachers reported moderately positive perceptions of both usefulness and ease of use, only usefulness predicted BI - consistent with earlier TAM findings (Venkatesh & Davis, 2000). Teacher reflections reinforced this relationship, emphasizing time savings and idea generation:

- "Generative AI tools help make my practice easier by helping me save time."
- "I have used Magic School to create a rubric … and realized how much time this could save me."

Second, prior experience outweighed demographics as a predictor of adoption. Teachers with previous exposure to GenAI expressed greater confidence and intent to use it, regardless of age or years of experience. As one teacher explained, "I began messing with ChatGPT for fun … and realized then all of what I could do with it to make many tasks easier." This finding suggests that hands-on exploration is key to building comfort and buy-in.

Finally, administrators' perspectives were shaped by system-level and ethical concerns, rather than by perceived ease or usefulness. Their comments centered on student data privacy, academic integrity, and the potential loss of human connection:

- "My biggest concern is not utilizing the human element … teachers will take the easy way out

and lose touch."

These findings highlight that while teachers are motivated by practical classroom benefits, administrators are driven by broader questions of policy and purpose.

Limitations

While this study provides valuable insights into K-12 teachers' and administrators' perceptions of GenAI, several limitations should be noted. Conducted within a single district, the findings may not generalize to other contexts with different demographics, technology infrastructures, or professional development experiences. The overall response rate of approximately 30% also limits representativeness, and the small administrator sample (n = 9) reduces statistical power for subgroup comparisons.

Subject-area data were not collected, preventing analysis of potential variations in GenAI use across disciplines. External factors, such as recent professional development or public discourse surrounding AI, may have influenced participants' views. Finally, the cross-sectional design captures perceptions at a single point in time; as GenAI continues to evolve rapidly, educator experiences and attitudes will likely shift. Future research should include larger, multi-district samples and longitudinal designs to examine how exposure, training, and policy guidance affect adoption over time.

Conclusion & Implications

This study found that K-12 teachers and administrators hold moderately positive views of GenAI shaped by distinct factors. Teachers' intent is driven by perceived usefulness and prior experience, while administrators' perspectives reflect system-level concerns about ethics, privacy, and instructional integrity.

As an action research study, these findings will inform the district's next phase of AI implementation, including the development of a leveled professional development model with three pathways: Emerging, focused on hands-on exploration of GenAI tools; Developing, emphasizing guided classroom applications for planning, differentiation, and assessment; and Advanced, supporting integration that promotes student engagement, AI literacy, and 21st-century skills. This approach recognizes that teachers are at different points in their AI journey and ensures sustained, scaffolded growth.

Implications for districts include:

- Hands-on professional learning that builds teacher experience with classroom-relevant applications.

- Policy guidance for administrators addressing privacy, academic integrity, and equity.

- A shared framing of GenAI as a partner to enhance - rather than replace - teaching and learning.

By pairing experiential learning for teachers with policy development for leaders, districts can foster GenAI integration that enhances efficiency, supports student learning, and safeguards educational values. This study contributes to the emerging evidence base on educator perceptions of GenAI and offers insights for schools seeking to prepare both teachers and students for an AI-driven future.

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The Impact of Discipline on Disability: Analyzing Exclusionary Outcomes through a Critical Disability Lens

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Abstract

This study investigated the impact of alternative discipline models on exclusionary discipline rates for special education students in Pennsylvania public schools. Grounded in Critical Disability Theory, this research examined whether implementation of Positive Behavioral Interventions and Supports, Restorative Justice, and Trauma-Informed Practices influences outcomes. The primary research question explored whether alternative models significantly reduce exclusionary discipline rates. A Quade Nonparametric ANCOVA found no significant differences after implementation. Although descriptive trends suggest progressive models may lower exclusionary rates, findings indicate that implementation fidelity and broader contextual factors likely play a more influential role than model selection. Results suggest discipline reform must go beyond model adoption to include systemic support, professional development, and policy changes.

Keywords: special education, progressive discipline models, exclusionary discipline

The Impact of Discipline on Disability: Analyzing Exclusionary Outcomes through a Critical Disability Lens

The traditional zero tolerance approach to discipline in schools fails to address the complex needs of students and promotes exclusionary practices such as in-school suspension, out-of-school suspension, or expulsion (Bleakley & Bleakley, 2018; Dupper, 2010; Huang & Cornell, 2021). These practices disproportionately target minority students and students with disabilities, contributing to poor academic outcomes and higher dropout rates (Cruz et al., 2021b; Gage et al., 2019a; United States Government Accountability Office, 2018). Although initially intended to reduce gun-related violence following the 1994 Gun-Free Schools Act, zero tolerance policies have extended to minor infractions (Skelton, 2024), further exacerbating the negative impacts on vulnerable student populations. Alternatively, progressive discipline models such as restorative justice and school-wide positive behavior interventions have emerged, aiming to reduce exclusionary discipline and improve school climate (Gregory et al., 2021; Noltemeyer et al., 2019).

Problem Statement

Students with disabilities identified as special education students in K-12 school settings experience exclusionary discipline at significantly higher rates than their peers, a pattern that worsens existing educational inequities (U.S. Government Accountability Office, 2018; Whitford et al., 2019a, 2019b). These students often require more individualized approaches yet are disproportionately subjected to suspensions and expulsions. While racial disparities in discipline have been widely studied, the impact of exclusionary discipline specifically on students in special education remains underexplored (Cruz et al., 2021a). There is a growing need to understand how alternative discipline models may affect outcomes for these students and whether such approaches can reduce disproportionate disciplinary action and improve overall equity.

Purpose of the Study and Theoretical Framework

The purpose of this study was to determine the influence of alternative discipline models on exclusionary discipline rates for special education students. By comparing rates before and after implementation of such models in Pennsylvania public schools, this study aimed to identify measurable outcomes. The independent variable was the discipline model employed, while the dependent variable

was the rate of exclusionary discipline. Critical Disability Theory (CDT) served as the theoretical framework, emphasizing disability as a socially constructed identity shaped by systemic ableism and disablism, and highlighting the need to center disabled voices and their experiences in educational policy and research (Goodley, 2011; Hosking, 2008).

Research Question, Hypotheses, and Significance

Research Question

The study addressed the following research question: How do alternative discipline models influence exclusionary discipline rates for special education students in the K-12 setting?

Hypotheses

H10: There is no difference in exclusionary discipline rates for special education students when alternative discipline models are employed.

H1A: There is a difference in exclusionary discipline rates for special education students when alternative discipline models are employed.

Significance of the Study

This research contributes to addressing systemic inequities in school discipline by informing evidence-based practices that better support the needs of special education students. The findings may guide educational leaders and policymakers in adopting more inclusive and equitable discipline approaches that reduce exclusionary outcomes and improve student success.

Review of Literature

School discipline policies have long raised concerns due to their disproportionate impact on vulnerable students, particularly those receiving special education services who face higher rates of suspension and expulsion (Gage & MacSuga-Gage, 2017; Krezmien et al., 2006; Losen & Gillespie, 2012; Skiba et al., 2014; U.S. Department of Education Office for Civil Rights, 2018). These practices disrupt education and reinforce social inequalities (Hehir, 2002; Losen & Gillespie, 2012). In response to safety concerns and the rise of zero tolerance in the 1990s (Skiba & Peterson, 1999), schools adopted punitive approaches that often escalate incidents for minor infractions, especially among marginalized students (Bleakley & Bleakley, 2018; Muniz, 2021; U.S. Department of Education, 2016).

As school safety concerns shifted toward violence, particularly shootings (Heath et al., 2007), events like Columbine, Newtown, Parkland, and Uvalde spurred investment in security measures (Lieberman & Peetz, 2023). Despite increased spending on SROs and surveillance, studies show limited safety benefits and increased fear (Dewey et al., 2020; Muniz, 2021). Funding often favors physical security over mental health and emotional support, despite evidence that school climate interventions are more effective (Dewey et al., 2020). Following the 1994 Gun-Free Schools Act, zero tolerance expanded to cover a range of behaviors including dress code violations and perceived disrespect (Bleakley & Bleakley, 2018; Dupper, 2010; Huang & Cornell, 2021). Though intended to ensure fairness (Feierman et al., 2013), research finds them ineffective (APA Zero Tolerance Task Force, 2008). These policies ignore adolescent developmental limitations in impulse control and risk perception (Cauffman & Steinberg, 2000; Gardner

& Steinberg, 2005), contributing to misbehavior, exclusion, and dropout (Bowditch, 1993; Tobin & Vincent, 2011).

Despite widespread use—62% of public schools reported zero tolerance policies in 2021– 2022 (Perera & Diliberti, 2024)—evidence shows they disproportionately affect marginalized students and lack lasting behavioral benefits (Cholewa et al., 2018; Gerlinger et al., 2021). High teacher support (Huang & Cornell, 2021) contributes to high suspension rates, hindering reform (Gregory et al., 2021). Administrators may misuse these policies to remove students rather than address behavioral causes (Martinez, 2009), leading to academic decline, justice involvement (Bleakley & Bleakley, 2018; Ripley, 2016), and parental concerns (Gittelsohn, 1999). Their persistence underscores the urgent need for reform grounded in developmental science and educational equity.

Methodology

This study examined how switching from zero tolerance to alternative discipline models affected exclusionary outcomes for special education students in Pennsylvania. A purposive sample of districts that made this switch was identified via an electronic survey sent to district personnel. Respondents reported current and prior models, year of change, and fidelity of implementation. Historical exclusionary data of special education students were obtained from SafeSchools.

Data were analyzed using SPSS with ANCOVA, controlling for demographics, achievement, behavior, special education status, and school-level factors (Frey, 2016; Green & Salkind, 2017). While SafeSchools provided quality data (Johnston, 2014; Smith, 2008; Vartanian, 2010), limitations include reliance on self-report and lack of causal inference (Johnson & Christensen, 2017). Findings may generalize within Pennsylvania, but broader applicability is limited by contextual differences.

Results

Sample and Discipline Models

The final sample included 26 Pennsylvania school districts from an initial pool of 500, with voluntary, uncompensated participation. Respondents reported current and prior discipline models and implementation fidelity. Models included Zero Tolerance (A), PBIS (B), SEL (C), Trauma-Informed Practices (D), Restorative Justice (E), and other approaches (F). The most common combinations were PBIS, SEL, Trauma-Informed Practices, and Restorative Justice (B, C, D, E; 38.5%) and PBIS with Restorative Justice (B, E; 30.8%). Less frequent combinations included B, C, E (11.5%) and B, D, E (7.7%), with rare combinations incorporating Zero Tolerance or other approaches (3.8% each). More than half (57.7%) of districts previously used Zero Tolerance, while 46.2% transitioned to new models in 2022–2023, signaling a shift toward alternative approaches.

Population and Descriptive Statistics

District sizes ranged from a total of 713–9,604 students (M = 2,380.62). Pre-change exclusion rates for special education students ranged from 1.33%–100%, and post-change rates ranged from 0%–71.43% over three years, with yearly means slightly increasing (Year 1 = 0.32, Year 2 = 0.33, Year 3 = 0.39). Model combinations showed varying impacts: B, D, E had the lowest mean exclusion rate (0.15) and A, B, C, D the highest (0.46). Half of respondents reported high implementation fidelity. Overall, mean exclusion decreased slightly from 0.37 pre- implementation to 0.33 post-implementation, with the distribution shifting from positively to negatively skewed, indicating fewer extreme values.

Data Analysis

A Quade non-parametric ANCOVA tested the effect of discipline model combinations on exclusion rates, controlling for prior rates, prior model, fidelity, and population size. Results were non-significant, $F(6,19) = 0.39$, $p = 0.88$, indicating no statistically significant differences in exclusion rates for special education students between alternative discipline models. Key findings are highlighted in Table 1, showing meaningful trends at a glance.

Table 1

Key Findings of the Results

CATEGORY	KEY FINDINGS
Sample	26 PA districts (from 500) voluntary
Models	A. Zero Tolerance, B: PBIS, C: SEL, D: Trauma-Informed, E: Restorative, F: Other
Common Combinations	B+C+D+E: 39%, B+E: 31%, B+C+E: 12%, B+D+E: 8%, others: 4%
Previous Use	58% used Zero Tolerance
Model Changes	46% transitioned in 2022-23
Exclusion Rates	Pre: 1-100%, Post: 0-71% (Mean ~0.33)
Impact	Lowest: B+D+E=0.15, Highest: A+B+C+D=0.46
Fidelity	50% high fidelity
Trend	Mean ↓ 0.37→0.33; fewer extreme cases
Analysis	Quade ANCOVA: $F(6,19) = 0.39$, $p = 0.88$; no significant differences

Discussion of Findings

These results suggest that discipline model selection alone may have limited impact on exclusion rates without supportive contextual factors. Implementation fidelity, school culture, leadership, staff training, and systemic policies likely play a larger role. While some models, particularly PBIS, Trauma-Informed Practices, and Restorative Justice (B, D, E), were associated with lower exclusion rates, outcomes varied widely, especially when models like Zero Tolerance were combined with progressive approaches. These findings align with prior research and Critical Disability Theory, indicating systemic structures and implementation consistency are crucial to reducing disparities in exclusionary discipline.

Limitations and Generalizability

This study faced several limitations that may explain the non-significant findings. First, implementation fidelity was difficult to measure consistently across diverse school settings, and prior research shows that discipline models are only effective when applied comprehensively (Whitford et al., 2019a, 2019b). Second, unmeasured variables such as teacher attitudes, implicit biases, student support services, and funding may have influenced results, aligning with Critical Disability Theory's assertion that systemic biases disproportionately impact students with disabilities (Goodley, 2014). Third, the small sample size (n = 26) reduced generalizability and statistical power, requiring non-parametric tests. Lastly, the absence of longitudinal data and missing contextual factors such as school culture, teacher attitudes, and district policies limited the study to short-term outcomes, leaving the long-term impact of alternative discipline models uncertain.

The Critical Disability Theory and Limits of Reform

The Critical Disability Theory (CDT) critiques traditional disciplinary systems for marginalizing students with disabilities through ableist, exclusionary practices (Goodley, 2014). This is key in discipline reform efforts, as systemic factors—more than model choice—drive disparities (Gonzalez, 2020). This study's lack of significant differences across models supports CDT's argument that systemic factors like culture, administrative practices, and institutional bias shape outcomes more than disciplinary strategies. A qualitative study focused on how these progressive models are implemented may offer further insight into contributing factors and may better inform the problem.

Variability in exclusion rates reflects structural inequities—disparities in commitment, funding, and teacher buy-in affect implementation fidelity and exclusion rates. Some schools with resources and leadership implement models effectively, lowering exclusions; others struggle despite progressive policies. This echoes CDT's assertion that inclusive practices require reevaluating power structures, not just policy change (Goodley, 2014). Practitioners applying Critical Disability Theory to discipline reform should begin by auditing school policies and practices to identify structural barriers affecting students with disabilities, while actively involving staff, students, and families. Strong leadership, adequate funding, and targeted staff training on ableism, bias, and restorative practices are essential for consistent, effective implementation. Schools should pair disciplinary models with holistic supports, monitor outcomes, incorporate feedback, and shift decision-making to include students and families, moving from punitive approaches to inclusive, restorative frameworks. Ongoing reflection and adaptation are crucial, as meaningful reform requires addressing systemic inequities, not just changing policies. This study suggests progressive models alone do not address root causes without systemic reforms.

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Sensemaking in the Classroom: Early Educators' Reflections on Teacher Preparation Programs and Classroom Readiness

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Abstract

Teacher preparation requirements vary between states, which creates gaps in the content and pedagogy pre-service teachers must master to become effective educators (Ferlazzo, 2022; LeQuire, 2016; Spector, 2019; Webb & Baumgartner, 2023). This phenomenological study sought to understand how early career educators perceived the effectiveness of their teacher preparation programs (TPP) in preparing them for the classroom. Data were collected through semi-structured interviews with early career K-12 educators currently teaching in Pennsylvania. Four themes emerged as meaningful to TPPs and classroom readiness: a) teacher preparation program expectations vs. reality, b) importance of proper field experience placements, c) reliance on supportive mentors, and d) meaningful professional development opportunities. The findings of this study showed that new teachers have more positive perceptions of their ability to teach when they feel their program and training aligned with current district resources, support and professional development. The findings of this study offer valuable insights for institutional policymakers, teacher preparation coordinators and district administrators on helping educators feel confident to lead and continue a career in education, thus addressing the problem of teacher shortages in Pennsylvania.

Sensemaking in the Classroom: Early Career Educators' Reflections on Teacher Preparation Programs and Classroom Readiness

The abrupt departure of many certified educators during the COVID-19 pandemic resulted in districts scrambling to quickly fill vacant positions (Bailey & Schurz, 2020; Franko, 2021). To ensure that the positions were filled with certified educators, many states began implementing changes to their teacher preparation programs (Callaway-Cole & Kimble, 2021; Kim, 2020). These changes varied between states and institutions which caused some educators to feel underprepared for teaching in a classroom (Lazenby Rankin & Brinkmann, 2024).

Low teacher efficacy is not a new a problem, but it is one that has intensified since the COVID-19 pandemic (Callaway-Cole & Kimble, 2021; Sprague et al., 2022; Zamarro et al., 2022). Specifically in Pennsylvania, this challenge is further compounded by a misalignment between the teacher preparation program requirements and novice educators' perceptions of their preparedness, efficacy, and classroom readiness post-graduation (Durham & Naccarelli, 2022; Ligocki, 2024). If the misalignment continues, Pennsylvania risks producing educators who are ill-equipped to handle the demands of a post-pandemic educational landscape, and potentially impacting student outcomes in a negative manner while diminishing the goals of public education (Durham & Naccarelli, 2022; National Academy of Education, 2024; Stevenson et al., 2020).

Methodology and Research Design

This phenomenological study aimed to gain insights from early career educators about the perceived effectiveness of their teacher preparation programs (TPPs) in fostering classroom readiness. By exploring the lived experiences of early career educators, perceptions of the program alignment and the realities of teaching in the 21st century may be better understood. The study focused on the research question: What are early career Pennsylvania educators' perceptions of the alignment between their teacher preparation program and their experiences in the classroom?

Site and Sample Selection

The study was conducted with seven K-12 public school teachers in Pennsylvania, who all took part in semi-structured interviews. Purposeful and snowball sampling were used since the educators needed to meet specific criteria to be eligible to participate (Creswell & Poth, 2018). The participants had to be considered early career educators currently teaching within Pennsylvania's K-12 public school system. Additionally, participants needed to have graduated from a TPP within the past one to three years within the Commonwealth of Pennsylvania.

Participants

Seven participants coming from a variety of educational backgrounds and current placements participated in the study. Four of the seven participants attended the same TPP, and three of the four work in the same district and in similar roles. Additionally, all participants were identified as early career educators who began teaching during the 2024-2025, or 2023-2024 school year. The school districts involved were classified as suburban by the participants, with the overall socio-economic status (SES) of the schools falling around the middle due to the diverse size and population of students. While participants did not have exact numbers of students in their school, most responses ranged from 400-600 students in each of the elementary and middle school buildings. Furthermore, six participants were female, and one participant was male, and all identified as Caucasian. Table 1 provides a summary of participant demographics as related to the study.

Table 1: Participant Demographics

Participant Demographics

Psuedonym	***Age***	***Began Teaching***	***Grade Level***	***Content/Subject***
Grace	23	August 2024	1st-5th	Spec. Ed - Autistic Support
Carley	24	August 2024	11th/12th	Spec. Ed - Life Skills
Taylor	25	August 2023	3rd	Reg. Ed - All subjects
Marie	24	January 2024	7th/8th	Spec. Ed - Learning Support (ELA)
Nate	24	August 2024	3rd-5th	Spec. Ed. - Autistic Support
Jen	23	August 2024	K-5	Spec. Ed. - Learning Support (Math)
Rebecca	23	August 2024	K-2	Spec. Ed. - Autistic Support

Data Analysis

Interviews were transcribed using Otter.ai (*Otter.ai,* 2023) and printed within several days of the interview. The electronic version was sent to each participant for final review and approval. To maintain confidentiality, all names and identifying information were removed from data analysis as soon as possible, and a separate master list (Creswell & Poth, 2018) contained the key with all of the matching names and pseudonyms, notes from the interviews, and location of audio/visual files on the computer.

Once the participants reviewed the data, it was uploaded to ATLAS.ti (*ATLAS.ti,* 2024), which is a computer-assisted qualitative data analysis software (CAQDAS). This software facilitated the categorization of common themes and phrases during the analysis process. Using ATLAS.ti, the data were coded into common themes and groups. The common themes were then reviewed and edited to ensure they made contextual sense within the interviews. The data were then manipulated to form a bar graph to show the codes that appeared most frequently among the participant responses. Finally, memos were added to the coded text to allow for better organization and interpretation of the data on screen.

Making Sense of Preparation and Classroom Readiness

This study utilized Karl Weick's sensemaking theory (Weick et al., 2005), which explores how people reflect on unanticipated events or experiences to guide future decisions or actions. For early career educators, the first few years of their career are full of these moments. Participants in the study were constantly re-evaluating coursework and classroom experiences as they applied their learning to real-life scenarios within their classroom. During the interviews, participants were able to realize when their program adequately prepared them for unexpected situations and where it was lacking in certain elements. This active process of sensemaking ultimately influenced their perceptions of effectiveness and overall readiness levels as new educators.

Conclusions and Findings

After completing an analysis of the interviews, four themes emerged from the participants' experiences that were deemed meaningful to classroom readiness levels:

1. Teacher preparation expectations versus reality
2. Importance of proper field experience placements
3. Reliance on supportive mentors
4. Meaningful professional development opportunities

Perceptions of Alignment for Teacher Preparation Programs and the Reality of Teaching

Each participant perceived the misalignment between their TPP and reality to varying degrees, with a few participants identifying no gap in alignment between their TPP and classroom realities. However, many of the participants described their experiences with program alignment in a negative way. One participant felt that it was *"a little bit of a rude awakening"* upon entering the classroom, while another believed their TPP *"only scratched the surface"* for many of their classes. Additionally, another participant felt that *"college paints this perfect picture of teaching and they do tell you a little bit of stories and things that will happen, but it doesn't really prepare you for the real shindig."*

These participants wanted more storytelling and less "rose colored glasses" from their professors and their TPP in general. Understanding that no two scenarios will be the same, these participants felt that when their professors shared moments from a difficult day in the classroom, it helped them prepare for similar situations in their own classroom. At the very least, it helped them reflect and know what to expect next time.

Overall, participants identified the following contributing factors from their TPP to support readiness levels:

1. A program that teaches flexibility and adaptability
2. Encouraging and supporting strong relationships with students
3. Emphasis on teaching behavior management techniques

Suggested Teacher Preparation Program Improvements-From New Teachers

The participants in the study were not only asked to evaluate their perceptions of program alignment, but also to offer any suggestions to improve it for future pre-service teachers. The results point to a greater emphasis on actually teaching and not just knowing about teaching. For instance, more practical special education experience for dual majors was requested by more than one participant, with an additional emphasis on managing all adult staff within the special education classroom. One participant even mentioned building in time to learn a "useful skill" such as block planning or technology integration.

Proper Field Experience Placements and Supportive Mentors

Most participants in the study discussed positive experiences with field placements and mentors as impactful on perceptions of readiness. Having "good host teachers" and knowing "what to expect" helped the early career educators navigate unfamiliar situations as they transitioned from a pre-service teacher to an early career educator. Even after student teaching placements ended, participants reflected on the importance of having a reliable mentor when advice is needed "because they've seen a lot." Having someone they trusted and who supported them was a key factor in their ability to tackle unfamiliar situations that their TPP might not have prepared them for.

Bridging the Gap with Strategic Professional Development

While a TPP emphasizes the "broad" aspects of teaching, participants in the study felt that district-led professional development sessions could prove valuable for bridging the gap between theory and practice, if the sessions were ongoing and strategic. PD sessions that highlighted the district's missions and values were generally perceived as important and meaningful for the early career educators in the study. Finding new ways to improve practice, classroom management, or even just make professional connections with colleagues was beneficial for improving classroom readiness, but it needed to be ongoing for participants to find the greatest value.

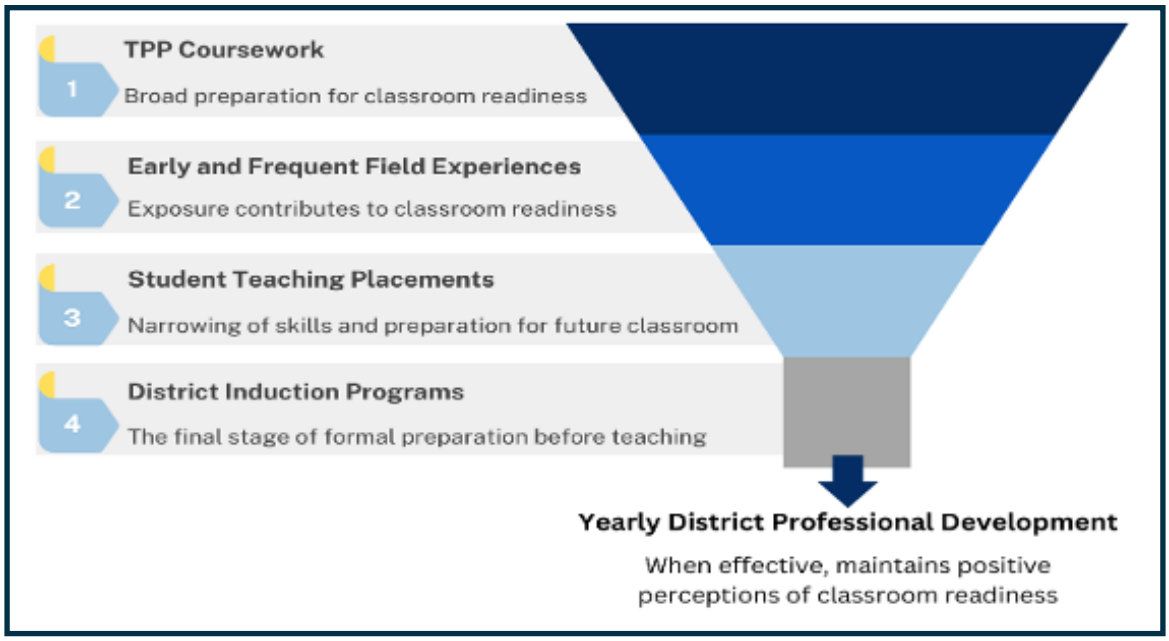
Perceived Order of Effectiveness on Classroom Readiness

When looking at the four themes that were addressed and identified as important factors in perceptions of readiness, a natural progression of effectiveness emerged in the shape of a funnel. To better explain the narrowing concept, Figure 1 shows the flow of perceived order of effectiveness on classroom readiness levels starting with the broad TPP expectations and coursework and narrowing to district professional development opportunities.

Three of the participants spoke to the idea of broadening TPP coursework to the narrowing of skills in professional development sessions, when they made sense of their perceived classroom readiness levels by looking at TPPs as the broad preparer of knowledge, and the district-run programs as the narrowing of skillsets and content; much like a funnel narrows to a point. The idea of the funnel was even stated by one participant as a way to make sense of her program alignment.

Figure 1

Perceived Order of Effectiveness on Classroom Readiness



Note. Findings from the study were analyzed, to create a visual of the perceived order of effectiveness on classroom readiness, as identified by early career educators (Reb, 2025).

Limitations of the Study

One limitation of this study is the lack of male representation from the participants. Only one of the seven identified as male, which limits perceptions to a mostly female perspective. Additionally, all participants identified as white/Caucasian, which does not account for perspectives of people who identify as another race/ethnicity.

A second limitation to the study involves the lack of diverse sampling in assigned roles. While there was some diversity in the types of classrooms/content taught, only one of the seven participants was a regular education major. As such, the results are not applicable across regular education classrooms.

A third limitation to the study is the lack of diversity in years of teaching experience. Even though the study intentionally limits years of teaching to no more than three, most of the participants were only teaching for six months at the time of the interview. Interviewing participants who are closer to the three-year mark may provide further insights into the research question of this study.

Implications of the Study

The majority of TPPs in Pennsylvania underwent changes to the program requirements at the onset of the COVID-19 pandemic (Callaway-Cole & Kimble, 2021; Gomes et al., 2021). In normal circumstances, TPPs are meant to adequately prepare educators for all aspects of teaching, to the best of their ability (Darling-Hammond & Bransford, 2005). However, the pandemic brought about many

unknown scenarios that were difficult or challenging to plan ahead for. Along with the uncertainties, pre-service teachers encountered experiences in the classroom that varied greatly from their TPP (Darling-Hammond & Hyler, 2020). Understanding where the misalignment in TPPs and classroom experiences occurred after the pandemic is necessary to improve current TPPs and supports for early career educators (Datnow et al., 2023; Walker, 2022).

Talking about the realities of what it is like to teach in schools today is only one part of addressing the teacher shortage. If school districts are serious about attracting and retaining teachers in the field, then educational leaders need to take a critical look at what it means to be ready for teaching. It can no longer just focus on standards or expectations and passing scores. Higher institutions and local school districts need to collaborate to create environments where pre-service teachers are equipped practically with skills, intellectually with theory and knowledge, and emotionally with grit and passion to meet the real-life demands of the job.

The study's findings may help school district administrators plan meaningful and on-going professional development opportunities and new teacher induction programs that better support novice and early career educators. Additionally, educational policymakers could use the study's findings to ensure that certified teachers are well-prepared with diverse courses and training, and that PSTs are effective at teaching students from various backgrounds. Teaching certification is not just about reaching a finish line but should be seen as the start of a journey towards a truly transformative experience. It is time to start thinking of teacher certification as the beginning, rather than the end of the teacher preparation program.

Dr. Kali Reb is an experienced educator specializing in Elementary STEM instruction. She currently serves as the Elementary Science Curriculum Leader in the Cornwall-Lebanon School District, a role she has held for the past three years. To reach Kali, email her at: kali.reb@wilkes.edu

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