



GO FOURTH. LEARN.
NEXT GENERATION EDUCATION

LEADING SCHOOLS IN AN AGE OF ACCELERATIONS

Building Schools as Learning Organizations Where Students and Teachers Thrive

V 1.0

Presented by

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December 2024

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Executive Summary

Traditional educational models, designed for an industrial era, are becoming increasingly disconnected from the realities of modern life, leading to declining student engagement, rising anxiety, and a widening gap between student experiences and future demands. This disconnect requires fundamental changes in how schools operate, moving beyond surface-level reforms to address deeper systemic issues and outdated mental models about education.

The skill and discipline of Systems Thinking provides school leaders with a powerful framework for leading transformation by helping them understand the interconnected nature of school operations and culture. By viewing their schools as complex adaptive systems rather than collections of isolated components, leaders can better address root causes rather than symptoms, create sustainable solutions, and build the organizational capacity needed for transformation.

To serve the next generation of students, schools need to be reimagined as learning organizations where the development of student agency and purpose takes precedence. This transformation demands that leaders move beyond managing to truly leading, focusing on building cultures of continuous improvement while addressing both structural elements and human factors. The success of students ultimately depends on creating educational environments that honor their developmental needs while preparing them for an uncertain future through authentic learning experiences, meaningful relationships, and opportunities to develop real-world skills. The goal is not just to improve existing systems, but to fundamentally rewire schools to keep pace with rapid societal changes.

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Preface: Goals Not Grades

In an end-of-year conversation about how our school could be different in order to serve the students better, a graduating Senior shared this:

“Community and purpose are the most important things. You can create a great brand, but are people involved in it? People need to understand their purpose in a system, their purpose in society, and why they are doing what they are doing ... It's really about goals, not grades, I wish I understood that sooner”

In reflecting on this feedback, It is evident that the student was really speaking directly to the growing disconnect between the way schools have operated for years and the needs of the students we currently serve. The primary focus of the school and the day-to-day work that the students engage in needs to be about goals, not grades. Our challenge lies in finding ways to make this the norm for our students, rather than the exception.

Educators everywhere are considering the purpose and mission of school for children who are preparing for adult lives in the later part of the 21st century. In this context, there are a few fundamentals that we must consider on the path forward:

- The world is changing rapidly.
- Student needs are shifting.
- Student stress and anxiety are rising to previously unseen levels.
- Innovation efforts based on content acquisition are missing the mark.
- Schools must focus on developing agency in students.
- Educators need to work as mentors, rather than purveyors of content knowledge.

The mission statement template for any secondary school that purports to prepare its students for the future should be focused on the development of agency and purpose. With this mission, the school focuses on preparing students to use the education system and all that it has to offer to advance their own goals rather than to comply or defer to whatever it is they perceive the system requires of them. As teachers, we need to position our students to consider the problem they were born to solve rather than the university that they want to attend, or the career that they want to pursue. The world is changing far too quickly for any student today to generically decide on a career path that is not focused on an emerging problem or issue that has direct relevance for them.

In 2016, Thomas Friedman wrote *Thank You for Being Late*. In the book, he quotes Google executive Eric Teller as saying: “Our societal structures are failing to keep pace with the rate of change. Everything feels like it’s in constant catch-up mode... We can either push back against technological advances or we can acknowledge that humanity has a new challenge. We must rewire our societal tools and institutions so that they will enable us to keep pace” (33).

Eight years on, this statement still carries relevance. As schools are essential societal institutions, leaders of schools face an imperative to rewire those institutions to keep up with the rapid pace of change around us. If we do not move forward quickly enough, we are in danger of failing to meet the needs of the students that we all want to serve.

In his 2017 book *Marching Off The Map*, Tim Elmore writes about Generation Z (those born after 1995). Elmore points out that this is the first generation that:

- Does not need adults to get information.
- Will learn more content from a portable device than in a classroom.
- Can broadcast their every thought and emotion in real-time.
- Has external stimuli at their fingertips 24/7.
- Are socially connected at all times but often connect in isolation.
- Use a phone instead of a wristwatch, calendar, camera, or board game.

When we work to deliver teaching and learning based on old ideas about content acquisition and the fallacy that more is better, we are creating increasing disconnect with the students we intend to serve. As we continue to work in ways that are disconnected from the day-to-day reality of younger generations, schools are beginning to become contributors to the rising mental health crisis in teenagers. For many students, chronic sleep deprivation and toxic stress during a critical phase of brain development endangers long-term physical and mental health. With this in mind, the imperative for schools to evolve is not just a matter of moving from content to skills but a matter of connecting to students in ways that are appropriate for their day-to-day reality and the developmental needs that psychologists have already established for them. The school experience should be designed to meet students needs for independence, grace, context, respect, and belonging, to name a few. More importantly, it is vital that these needs are met so that we help students develop as healthy, whole, self-assured people.

As we consider goals over grades, there are five fundamental questions that every educator should be asking as they think about the development of school structures and curriculum:

- How do we teach students to identify and then creatively solve complex problems?
- What are our expectations for students to self-assess their work?
- How do we give students an opportunity to contribute purposeful work to others?
- How do we teach students to manage their own learning?
- How do we teach students to learn things that we ourselves do not know?

Focusing on grades or other arbitrary achievements will not and cannot satisfy the need for community and purpose so well articulated by the graduating senior referenced above.

As we design our future schools, we need to focus on the institutional purpose of developing student agency, internal locus of control, personal strength, and relational skill. These traits, above all others, predict personal and professional success. Most importantly, the development of these traits leads to greater well-being and overall health. Success for the educators in this environment requires mentorship, coaching, and relationship orientation. Everyone on the school campus should identify as a learner. The pedagogy of the school should begin with the student rather than a set curriculum. This is achieved through exposing the students to the world's needs, helping them see opportunity in those needs, and fostering their ambition to take on those opportunities. A school based on these fundamentals will be well on its way to meeting the students where they are and becoming the nimble and relevant institution that it needs to be.

The Need for Educational Transformation

As we progress further into the 21st century, it has become increasingly clear that traditional models of secondary education are struggling to prepare students for the rapidly changing world they will inherit. The skills, knowledge, and dispositions required for success in today's global, technology-driven society are markedly different from those emphasized in industrial-era school systems. The pace of change in technology, the economy, and society at large has accelerated dramatically in recent years, outpacing the ability of many educational institutions to adapt. This disconnect has led to growing concerns about the relevance and effectiveness of traditional schooling, as evidenced by:

- Declining student engagement and motivation.
- Increasing rates of student anxiety and mental health issues.
- A widening skills gap between graduates and employer needs.
- Growing critique of standardized testing and one-size-fits-all approaches to education.

Moreover, the COVID-19 pandemic and its impact on students and schools served to further expose many of these underlying issues, forcing educators and policymakers to confront the limitations of current educational models and consider more flexible, resilient approaches.

We are now living in what Thomas Friedman, author of *Thank you for Being Late*, calls an "age of accelerations," where changes in markets, climate, and technology are "reshaping social and economic life in powerful ways and putting a premium on learning faster, and governing and operating smarter." Yet despite these accelerating changes, our schools still largely resemble those of previous decades. This persistence isn't merely institutional inertia. Deeper systemic forces and anachronistic mental models about school endure and resist meaningful change even when surface-level reforms are implemented.

The challenge is particularly acute because we operate in what strategic thinkers call a VUCA world. The VUCA framework helps us understand our current context, where **volatility** makes the nature and speed of change unpredictable, **uncertainty** clouds both present clarity and future outcomes, **complexity** creates intricate webs of interconnected variables, and **ambiguity** obscures causal relationships. In this environment, traditional approaches to educational change often fall short.

The Fourth Industrial Revolution and the VUCA World

The Fourth Industrial Revolution, characterized by rapid advancements in nanotechnology, robotics, 3D printing, Artificial Intelligence, and genetics, is reshaping the global economy and workforce. This era of exponential change is creating new types of jobs and demanding evolving skill sets from workers. As a result, educators and school leaders must adapt to these changes by recognizing shifting student needs and engaging in conversations about the purpose and structure of education in this new context. The advent of Artificial Intelligence in particular serves to highlight the rapid decline of content acquisition as an important or relevant goal for students in school. The concept of VUCA - volatility, uncertainty, complexity, and ambiguity - provides a useful framework for understanding the challenges facing both educators and students in today's rapidly evolving world.

Volatility

In the context of education, volatility refers to the rapid and often unpredictable changes in technology, job markets, and societal norms. This volatility challenges traditional notions of curriculum and career preparation, as the skills and knowledge that are in demand can shift dramatically in a short period.

Examples of volatility in education include:

- The rise of Artificial Intelligence and automation, which is reshaping entire industries.
- The emergence of new fields of study and career paths that didn't exist a decade ago.
- Sudden disruptions to educational systems, as seen during the COVID-19 pandemic.

To address volatility, schools must become more agile and adaptive in their approaches to teaching and learning, which includes:

- Focusing on the development of modern skills while meeting the timeless developmental needs of students.
- Emphasizing meta-learning skills to help students adapt to new situations.
- Developing partnerships with industry to stay current with evolving workforce needs.

Uncertainty

Uncertainty in education stems from the difficulty in predicting future skill requirements and career landscapes. This uncertainty challenges traditional approaches to career guidance and long-term educational planning.

Examples of uncertainty in education include:

- The unclear impact of Artificial Intelligence on future job markets and important career skills.
- The changing higher education landscape, including the rise of alternative credentials.
- The evolution of societal values and their impact on what is considered important in education.

To navigate uncertainty, schools should focus on:

- Developing critical thinking and problem-solving skills.
- Encouraging flexibility and adaptability in learning and career planning.
- Bringing learning experiences to students that are timely and relevant rather than forcing students through long established programs - because that is “what we have always done”

Complexity

The complexity of modern life is reflected in the interconnectedness of global systems and the multifaceted nature of contemporary challenges. This complexity requires students to develop sophisticated analytical and systems thinking skills.

Examples of complexity in education include:

- The need to understand and address global issues like climate change.
- The interconnectedness of economic, social, and political systems.
- The ethical considerations surrounding emerging technologies.

To address complexity, educational approaches should:

- Emphasize interdisciplinary learning and the connections between subjects.
- Teach systems thinking and holistic problem-solving approaches.
- Engage students in tackling real-world, complex challenges.

Ambiguity

Ambiguity in education refers to the lack of clear-cut answers or solutions to many modern problems. This ambiguity challenges traditional educational models that focus on rote learning and single correct answers.

Examples of ambiguity in education include:

- The evolving nature of truth and facts in the age of misinformation.
- The ethical dilemmas posed by emerging technologies.
- The need to navigate diverse perspectives in a globalized world.

To prepare students for ambiguity, schools should:

- Teach critical media literacy and fact-checking skills.
- Encourage creative problem-solving and innovation.
- Foster emotional intelligence and cross-cultural understanding.

To thrive in a VUCA world, students need educational experiences that foster adaptability, creativity, critical thinking, and lifelong learning skills. Traditional school models, with their emphasis on standardization, compliance, and knowledge transmission, are ill-equipped to meet these new demands.

Waning Student Engagement

Recent studies and polls have consistently shown declining levels of student engagement in secondary schools. This trend is particularly concerning as engagement is a critical factor in learning, personal development, and overall well-being.

In June of 2024, Kevin Mahnken reviewed two recent Gallup Student Polls in an article published in *The 74*. Mahnken notes that The Voices of Gen Z study on Youth Happiness, conducted by the Walton Family Foundation and Gallup (2023), found that between 43% and 49% of Gen Z students do not feel what they do each day is interesting, important, or motivating. This lack of perceived relevance and purpose in their daily school activities is a significant barrier to engagement and learning. Similarly, Mahnken highlights a 2022-2023 Gallup student poll revealing concerning feedback for schools in areas critical to engagement. Students responding to that survey, on average, gave their schools the following grades:

- Supporting Mental Health: C+
- Teaching Ways that Adapt to Unique Learning Needs: C+
- Teaching About Potential Careers: C+
- Making Learning Exciting: C+

Factors contributing to declining engagement include:

- **Lack of perceived relevance:** Many students struggle to see the connection between their schoolwork and their future goals or real-world applications.
- **Passive learning environments:** Traditional instruction based on content acquisition often fails to actively involve students in the learning process.
- **Limited autonomy:** Rigid schedules and standardized curricula leave little room for student choice and self-directed learning.
- **Overemphasis on testing:** High-stakes standardized testing can shift focus away from genuine learning and towards test preparation.
- **Disconnection from technology:** Many classrooms struggle to integrate technology in meaningful ways that reflect students' digital lives outside of school.

At the heart of this issue lies the fundamental disconnect - students often struggle to see how their daily schoolwork relates to their aspirations and real-world experiences. As engagement wanes, so too does the effectiveness of the educational experience, leading to concerns about learning, mental health, and future preparedness.

The rigid structure of most school systems further exacerbates this disengagement. Students often move through their days following strictly prescribed schedules, with little opportunity to pursue their interests or take ownership of their learning journey. A student passionate about computer science, for instance, might be limited to a single basic programming elective, while the rest of their schedule is filled with mandatory courses that may not align with their interests or career goals.

These engagement challenges have far-reaching implications, affecting not only academic performance but also students' mental well-being and their preparation for future success. The situation calls for a fundamental reimagining of educational approaches to better align with the needs, interests, and realities of today's learners. This may require significant changes in how we structure learning environments, deliver instruction, and measure success in education.

Overcoming Compliance Culture

Educators are increasingly recognizing the need to develop student agency and act as mentors rather than mere purveyors of content knowledge in order to support students and prepare them to succeed in their future lives. Many secondary school environments inadvertently foster high levels of stress and a culture of compliance that can be detrimental to student well-being and learning. This focus on control and standardization often comes at the expense of creativity, intrinsic motivation, and genuine engagement with learning.

Compliance culture is often characterized by:

- Emphasis on rule-following over critical thinking.
- Standardized curricula that leaves little room for personalization.
- Punitive disciplinary practices that focus on control rather than growth.
- Limited opportunities for student voice and choice in school decisions.

The negative impacts of stress from compliance culture include:

- Increased anxiety and mental health issues among students.
- Reduced creativity and risk-taking in learning.
- Decreased intrinsic motivation and love of learning.
- Development of a fixed mindset rather than a growth mindset.
- Poor preparation for the autonomy and self-direction required in higher education and the workforce.

To address these challenges, we need to see higher levels of connection and engagement in all classrooms. This involves asking fundamental questions about how to implement approaches that focus on problem-solving, self-assessment, purposeful work, self-directed learning, and learning beyond the teacher's knowledge. The solution is to design schools that prioritize developing student agency, internal locus of control, personal strength, and relational skills. By exposing students to the world's needs, helping them see opportunities, and nurturing their ambition to address these challenges, schools can become more nimble and relevant institutions that truly serve the needs of the next generation of students.

Outdated Mental Models and Assumptions

While technical knowledge and content taught by older generations is becoming outdated at an exponential pace, the social, emotional, and developmental needs of students remain constant. This fundamental tension requires schools to become more adaptive in their curriculum design, while maintaining focus on developing essential non-cognitive skills that have proven to be better predictors of lifelong success than academic achievement alone.

While content knowledge remains important as a foundation for creativity and innovation, the focus of what we do in school needs to shift toward developing transferable skills and dispositions that will serve students well into the future. This is particularly crucial as the knowledge learned today may become obsolete within a few years, while problem-solving strategies and analytical thinking skills retain their value over time.

As Scott Looney, Head of the Hawken School points out in his 2014 Essay, *The Future of Education: Why Hawken Has to Lead*, Bold leadership is needed to take on the "sacred cows" in secondary education, including: separate academic departments, age-based grade levels, traditional assessment methods, rigid class structures, as well as artificially constrained timetables and calendars (20).

Deeply ingrained mental models about what school "should be" often prevent meaningful innovation and systemic change. Schools that have successfully challenged these conventions often do so by blurring the lines between work, college, and high school, though this transition can be challenging for both teachers and students who have been institutionalized in traditional systems.

Deeply ingrained beliefs about school, often rooted in industrial-era thinking about education, can hinder progress towards more effective and engaging learning environments. Some common misconceptions and outdated assumptions include:

- **Equating seat time with learning:** The belief that the amount of time spent in class directly correlates with learning outcomes, regardless of the quality or relevance of instruction.

- **Valuing preparation and simulation over real-world experiences:** The assumption that classroom-based learning is sufficient preparation for real-world challenges, without the need for authentic experiences.
- **Assuming that external pressures (e.g., college admissions) dictate all educational priorities:** Allowing standardized testing and traditional college admissions criteria to overly influence curriculum and instruction at the expense of more holistic and relevant learning experiences.
- **Believing that small improvements to the existing system are sufficient for meaningful change:** Focusing on incremental changes rather than recognizing the need for fundamental transformation in educational approaches.
- **Overemphasizing content knowledge at the expense of skills development:** Prioritizing the memorization of facts and figures over the development of critical thinking, problem-solving, and adaptability skills.
- **Assuming a one-size-fits-all approach to education:** Failing to recognize and accommodate the diverse learning needs, interests, and backgrounds of students.
- **Viewing technology as a panacea:** Believing that simply introducing technology into classrooms will automatically improve learning outcomes, without considering pedagogical changes.
- **Undervaluing social-emotional learning:** Focusing solely on academic achievement while neglecting the development of crucial social and emotional skills.
- **Assuming fixed intelligence or ability:** Believing that students' capabilities are innate and unchangeable, rather than recognizing the potential for growth and development.
- **Prioritizing individual achievement over collaboration:** Emphasizing competition and individual success at the expense of fostering teamwork and collective problem-solving skills.

To drive transformational change, educational leaders must surface and challenge these underlying assumptions, fostering a culture of continuous improvement and innovation.

This process involves:

- Encouraging critical reflection on current practices and their underlying beliefs.
- Exposing colleagues to alternative models and innovative approaches to education.
- Facilitating ongoing dialogue about the purpose and goals of education for the future.
- Providing opportunities for experimentation with new teaching and learning methods.
- Reassessing policies and practices on a continual basis to ensure alignment with current research and societal needs.

By actively working to shift outdated mental models, school leaders can create the foundation for more profound and sustainable educational transformation in their schools.

The key to successful educational transformation lies in building new mental models around two constants: the unchanging developmental needs of young people and the importance of grounding organizations in core values and shared vision. Rather than defining success through traditional metrics like standardized test scores, schools need to build their identity around preparing students for the future. Future-ready schools aren't just about technological integration, but rather about creating conditions that allow students' innate drive to learn and grow to flourish. This requires leadership that can balance timeless educational principles with the need to adapt to contemporary challenges.

Optimizing Learning

It is not uncommon for lessons or entire courses to be built around ensuring that students attain mastery of a set of predetermined skills by a certain date, at a certain rate, or even to a limit, as we save related content or skills for more advanced courses. When this is true, we make the timeline of a course or lesson the constant, and in turn, we make learning the variable in the equation. In doing so, we reduce the opportunity to capitalize on curiosity and the inherent joy that comes when students are intrinsically motivated to pursue those things that they are curious about.

With the realities of rapidly changing technology and a new economy, the urgency to develop more relevant learning experiences for our high school students is self-evident. As the world changes, new content, new topics, and new experiences are certainly timely, but progressive educators from our past had a few things right that would be worth building on as we design our next-generation high school programs. In fact, much of what is needed to meet today's students where they are has already been considered, developed, and applied in our educational past.

Dewey in the 21st Century

Students of education likely remember John Dewey as a highly influential and well-known thinker and progressive educator from our past. Dewey was a central figure in the development of progressive education theory in the first part of the 20th century. Dewey was an early proponent of social constructivism and the integration of real-life experiences into schools. For Dewey, a high-quality education was not just preparation for an unknown future, but rather an immersive and socially transformative experience for students.

Is Dewey's work relevant today? Consider the following excerpts from the paper *John Dewey in the 21st Century*, written by Morgan Williams from West Florida University. In the paper, Williams discusses the continuing relevance of Dewey's views on educating children as unique individuals and the need to meet our students in places that are relevant to them. Williams discusses the conflict between the standard-based movement (Common Core in the paper) and the need to develop classrooms and student learning experiences for 21st-century relevance, particularly in light of the social context that our students are living in due to the ubiquitous

presence of social media and technology in their day to day lives. Here are the two big ideas that are relevant to this discussion:

- "In contrast to traditional classrooms, Dewey thought that schools and classrooms should be representative of real-life situations, allowing children to participate in learning activities interchangeably and flexibly in a variety of social settings (Dewey, 1938; Gutek, 2014). He was of the idea that abruptly introducing too much academic content, out of context with children's social lives, bordered on unethical teaching behavior (Flinders & Thornton, 2013). This notion would be a point of conflict in education today, as it is vastly different from what is happening in classrooms with the strong emphasis on implementing the Common Core standards" (92).
- "As Slaughter (2009) points out "our world today has become the electronic world" (p. 16). With technology driving the social lives of students, it uses an effective way to promote student engagement, resulting in a passion for lifelong learning. Teachers have a responsibility to provide a new level of instruction that is relevant, effective, and socially engaging for students (Slaughter, 2009). Through the use of tools such as cell phones, texting, instant messaging, chat rooms, and wikis, teachers can instruct students using the tools that they are already comfortable with, to most effectively disperse information and academic content (Slaughter, 2009). By designing instruction to meet the social needs of students through the use of appropriately aligned technology, Dewey's social learning theory is evident in these classrooms" (94).

While the 2009 examples of technology use in the quote above may seem dated now, the concept of meeting the social needs of students in real world contexts remains essential in any school transformation project.

Montessori in the 21st Century

It seems that many educators would agree with and identify with the conflicts and needs of students outlined above. In terms of design considerations for building the future-focused, next-generation high school, where should the school leader begin with their team? The work of Maria Montessori, another well-known progressive educator, gives us a good starting point. While most often associated with elementary education and younger students, there is certainly relevance to the key Montessori principles if the aim is to build student-focused learning experiences that create intrinsic motivation and foster agency in our high school learners. In Montessori's approach to teaching and learning, there is clear intentionality in letting the students be at the center of their own learning. Additionally, the transformation of the teacher to guide rather than the leader of the classroom is compelling. In fact, this is not unfamiliar in the constant refrain heard from secondary educators that our teachers should move from being the "sage on the stage" to the "guide on the side."

There are four key areas grounded in the Montessori approach that serve as an excellent starting point in design and improvement processes that school leaders should be taking into consideration as they look to build next-generation learning experiences for students:

- **An integrated approach to learning** - Learning does not take place in a vacuum. The more that students can get away from discrete subjects and see the interconnection between academic disciplines, the more that their school experience will begin to resemble the world around them.
- **Authentic experiences** - When students work on real projects in the greater community or produce for real audiences outside of the school, they see that they can have an impact, and the feedback they receive through the work is inherently more valuable.
- **Inquiry-based Work** - Students working to solve problems or to answer a question are inherently more motivated and engaged than those who are memorizing or practicing for a test. This makes the school experience more rewarding and joyful, and the learning deeper and longer lasting.
- **Uninterrupted work cycles** - Most of us have experienced the state of “flow.” This is when you are so engaged in what you are doing that you lose track of time. The state of flow is a productive and satisfying place to be when you are doing work. Moving away from rigid schedules in favor of and allowing students the opportunity to work in flow states has a dramatic impact on engagement and intrinsic motivation at school.

Modeling the Montessori approach as part of the work on any next-generation high school project provides a great starting point for a few essential design considerations. This includes a clear focus on developing and providing educational experiences that meet essential needs that all adolescents have at a key developmental stage in their lives.

Design Principles for Next Generation Schools

Education stands at a critical crossroads, requiring a fundamental reimagining of how we prepare students for an increasingly complex and dynamic future. The growing awareness of this critical juncture among educators, parents, and students calls for a complete reconceptualization of what education means in the modern era, challenging us to move beyond traditional academic metrics to embrace a more holistic, flexible, and inclusive approach to learning.

In 2023 the Center on Reinventing Public Education (CRPE) published *The State of the American Student*. This report outlines several key trends with students, their engagement, and the efficacy of today's schools. As part of this report, an essay by Robin Lake, Director of the CRPE, outlines the idea that a more relevant high school experience intentionally blurs the lines between career and college preparation. Lake states that, “It is key that the New American High School does not place students into tracks or find them in dead-ends. Instead of “tracks,” there should be a seamless and permeable set of pathways between high school, college, and career” (67).

The essay identifies five design principles that school leaders should consider in building future-focused high school programs:

- Maximizing each student's unique human potential
- Leveraging community assets
- Blending high school with college and career
- Being future-oriented
- Placing equity and ethics at the center of change

These principles require fundamental shifts in how we think about secondary education in all school sectors - public, private, parochial, and independent - looking to maximize their relevance and impact for the benefit of students in the modern world.

As part of the CRPE report, David Adams, Chief Executive Officer of The Urban Assembly, stated, "It's time to reimagine what it means to be well-educated. Yes, understanding the enduring themes in Shakespeare's plays will always lend insight into the human condition. But now, more than ever, we must help students connect those insights to the real world" (64).

Maximizing Each Student's Unique Human Potential

Traditional education systems often treat students as uniform learners, applying standardized approaches that fail to recognize individual talents, interests, and learning styles. A truly transformative educational model must start by acknowledging that each student possesses unique capabilities and potential that extend far beyond academic metrics. This means developing flexible learning pathways that allow students to progress at their own pace, explore their interests deeply, and develop their distinct talents.

Effective implementation requires sophisticated assessment systems that can track growth across multiple dimensions, not just academic achievement, but also social-emotional development, creative capacity, and practical skills. Schools must shift from viewing student differences as challenges to overcome and instead see them as opportunities to nurture diverse forms of excellence. This might involve personalized learning plans, project-based assessments, and multiple pathways to demonstrate mastery.

Leveraging Community Assets

Education should not be confined to classroom walls. Successful schools of the future will actively integrate community resources, expertise, and opportunities into their educational programs. This means forming partnerships with local businesses, cultural institutions, civic organizations, and community leaders to create rich learning experiences that connect students with real-world knowledge and skills.

These partnerships can take many forms: internships with local companies, mentorship programs with community leaders, service learning projects that address local needs, or collaborative projects with cultural institutions. By tapping into community assets, schools can provide students with authentic learning experiences while simultaneously strengthening community bonds and creating pathways to future opportunities.

Blending High School with College and Career

The traditional sharp division between high school, college, and career needs to be reconceptualized as a continuous learning journey. This means creating integrated pathways that allow students to simultaneously earn high school and college credits, gain relevant work experience, and develop professional skills. Early college high schools, career academies, and dual enrollment programs represent early steps in this direction.

The key is to create flexible structures that allow students to move seamlessly between different learning environments - classroom, workplace, and college campus - while ensuring that each experience builds toward meaningful credentials and career opportunities. This requires close collaboration between K-12 schools, higher education institutions, and employers to align curricula, standards, and expectations.

Being Future-Oriented

Education must prepare students for a rapidly evolving world where many of the jobs they'll hold don't yet exist. This requires developing not just content knowledge, but also the adaptive capabilities and mindsets needed for continuous learning and innovation. Schools need to emphasize skills like critical thinking, creativity, collaboration, and technological fluency while helping students develop the resilience and adaptability to navigate change.

A future-oriented education also means staying attuned to emerging trends and technologies that will shape students' futures. This includes incorporating artificial intelligence, digital tools, and emerging technologies into learning experiences, while also helping students understand their ethical implications and develop the wisdom to use them responsibly.

Placing Equity and Ethics at the Center of Change

Educational transformation must be guided by a commitment to equity and ethical considerations. This means ensuring that all students, regardless of background or circumstances, have access to high-quality learning opportunities and the support needed to succeed. It also means addressing systemic barriers and biases that have historically disadvantaged certain groups of students.

Systems Thinking: A Framework for Leading Transformation

The discipline of Systems Thinking provides a powerful framework for leaders looking to address the complex challenges facing modern education. Systems Thinking principles emphasize understanding the interconnections between various elements of the educational system and recognizing that meaningful change requires addressing root causes rather than symptoms when solving problems. By adopting a Systems Thinking approach, educational leaders can develop more comprehensive and effective strategies for transforming their schools to meet the needs of the next generation of learners.

To transform education in this context, we must first understand the nature of systems change itself. As Kania, Kramer, and Senge explain in *"The Water of Systems Change,"* six interconnected conditions hold any system in place. At the most visible level, we find structural elements: the explicit policies that guide actions and set priorities, the daily practices and procedures that make up the work of education, and the flows of resources including money, people, knowledge, and information that sustain the system (4).

Beneath these visible elements lie the relational aspects of the system. The quality of connections among various actors in education including teachers, administrators, students, parents, and community members shapes how the system functions. Equally important are the power dynamics that determine who has influence and how decisions are made. These relationships and power structures often prove more difficult to change than formal policies or procedures (4).

At the transformative level are the deeply held beliefs and assumptions that influence how we think and act. These are the mental models that shape everything from classroom practices to policy decisions, yet they often remain unexamined and unchanged even when surface-level reforms are implemented (4).

Principles of Systems Thinking in Education

- **Holistic perspective:** Viewing the school as a complex system with interrelated parts, rather than focusing on isolated components. This means considering how changes in one area (curriculum) might impact others (assessment practices or teacher workload).
- **Feedback loops:** Recognizing and leveraging the cyclical nature of cause and effect within the system. For example, understanding how student engagement influences teacher motivation, which in turn affects instructional quality and student outcomes.
- **Emergence:** Understanding that the behavior of the whole system cannot be predicted by examining its parts in isolation. This principle highlights the importance of considering the interactions between different elements of the school system.
- **Adaptation:** Embracing continuous learning and adjustment in response to changing conditions. This involves creating flexible structures and processes that can evolve as needs change.

- **Non-linearity:** Recognizing that cause and effect in complex systems are often not proportional or predictable. Small changes can sometimes lead to significant outcomes, while large interventions might have minimal impact.
- **Interdependence:** Acknowledging the mutual reliance of different parts of the system. For instance, understanding how changes in assessment practices might necessitate shifts in curriculum design and professional development.

Applying Systems Thinking to Educational Challenges

When applied to education, systems thinking can help leaders:

- **Identify leverage points:** Discover areas where small changes can lead to significant improvements in the overall system.
- **Anticipate unintended consequences:** Consider how changes in one area might impact other parts of the school system, both positively and negatively.
- **Foster collaboration:** Encourage cross-functional teamwork to address complex challenges that span multiple areas of the school system.
- **Develop sustainable solutions:** Creating changes that address outdated mental models that can be maintained over time, rather than quick fixes that may exacerbate problems in the long run.
- **Enhance problem-solving:** Provide a team oriented framework for tackling complex, multifaceted issues that resist simple solutions.

Deming's 14 Points

Skill and practice in the management and leadership principles of Edwards Deming provide a great starting point for leaders looking to embrace the Systems Thinking methodologies. Adoption of these practices will create needed momentum in making changes that will focus their schools on developing more relevant and engaging experiences for today's students.

Deming developed his System of Profound Knowledge to equip leaders to understand their organizations deeply and lead them effectively. In their June 2016 Quality Progress article Always Applicable, Moen and Norman quote Deming as saying, "My aim is to provide a foundation or system of theory for continual change of practice for management to keep up with the changes that are taking place in this world. Even perhaps guide the changes to come" (47).

The foundation of Deming's system of Profound Knowledge can be found in the famous 14 Points. As outlined by Moen and Norman, these came into focus with Edwards Deming's work beginning in the early 1980s and were outlined in his book *Out of The Crisis*.

The 14 Points - Adapted for School Leaders

The 14 points in their original form remain relevant today. However, some adaptations may be useful for school leaders working in modern educational environments. Consider these updates to the 14 points as a foundation for beginning the work of Systems Thinking and the application of Profound Knowledge in your school:

1. Innovate teaching and learning to fulfill the future needs of the student rather than short-term goals such as grades, report cards, and credits.
2. Discard the philosophies and mental models associated with industrial schooling.
3. Cease dependence on analysis and reporting of standardized testing outcomes as essential measures of success - establish a new narrative about student success.
4. Collaborate with sending schools and lower divisions to adopt compatible teaching and learning goals and techniques.
5. Constantly improve systems of teaching and learning. Understand that 85% of results are from the system. To improve outcomes, improve the system rather than “fixing” individuals.
6. Establish effective learning and professional development as part of the regular work day/week for teachers and academic staff.
7. Build collaborative leadership structures that empower faculty and staff to make needed changes in real-time to improve student learning.
8. Support risk-taking and innovation in classrooms and school programs. (Drive out Fear)
9. Reduce or eliminate rigid departmental structures that prevent progress and innovation. Include admissions, marketing, development, and business office staff in the transformation.
10. Eliminate cheerleading and wellness initiatives that lack substance or fail to address root cause issues and concerns among constituents (parents, students, teachers, staff).
11. Develop measures that matter for the long-term vitality and development of students. Consider measures around transferrable skills, student well-being, and student engagement.
12. Reduce bureaucratic structures and processes that de-motivate teachers and academic staff from innovation and improvement; implement support structures instead.

13. Develop programs and opportunities for teachers and academic staff to build the capacity to understand how emerging technologies and the new economy impact the future needs of today's students.
14. Proceed with urgency, the time for transformation is right now. Everyone in the school has a contribution and responsibility for making the transformation happen.

In his book, *The New Economics for Industry, Government, and Education*, Deming wrote that: "A system of schools is not merely pupils, teachers, school boards, boards of regents, and parents working separately to achieve their own aims. It should be instead, a system in which these groups work together to achieve the aims that the community has for the school - growth, and development of children and preparation for them to contribute to the prosperity of society. It should be a system in which the pupils from toddlers on up through the university take joy in their learning, free from fear of grades and gold stars, and in which teachers take joy in their work, free from fear of ranking. It should be a system that recognizes differences between pupils and differences between teachers" (44).

Deming wrote *The New Economics for Industry, Government, and Education* in 1994, but the quote could have been written yesterday. The concepts around Systems Thinking and the system of Profound Knowledge hold relevance today. Working from a foundation of the 14 points is a great starting point for those leaders looking to learn more about Systems Thinking as a guide for leading transformation in their schools.

Integrating Deming's System of Profound Knowledge

Edwards Deming's System of Profound Knowledge provides an essential framework that can be used to inform the application of Systems thinking in Education. Building on the 14 points outlined above, Deming's System of Profound Knowledge is made up of four parts:

- **Appreciation for a System** - From a systems point of view, a school is a network of interdependent people, departments, and divisions that rely on effective leadership to prevent internal competition and ensure cooperation toward a common aim, much like an orchestra under a skilled conductor.
- **Understanding Variation** - There will always be variation between output, people, results, level of service, or product quality. Two common mistakes in leadership are reacting to common causes as if they were special causes and treating special causes as if they were common.
- **Theory of Knowledge (Action)** - Leadership is prediction guided by theory. Theory provides meaning to experience and drives organizational learning by comparing predictions with observations. Knowledge comes from testing theory, not information alone.

- **Psychology** - People have different abilities and inclinations. Good leadership recognizes these differences to nurture learning, innovation, and enjoyment of work. Effective leaders foster intrinsic motivation and confidence among faculty and staff, which leads to meaningful and lasting improvement across the school.

Once learned, these concepts position the leader to make decisions and lead with a constancy of purpose that focuses on continually improving teaching and learning in the school. Simply stated, the System of Profound Knowledge provides a foundation that helps school leaders understand HOW to lead transformation and build culture in their schools.

Appreciation for a System

A school functions as an intricate system where all components are interdependent, working together toward a shared purpose, as Deming explains in *"The New Economics for Industry, Government, Education."* Like an orchestra requiring precise coordination among its sections, a school's success depends on the harmonious interaction of its various departments and stakeholders, with the school leader acting as the conductor ensuring alignment and cooperation. Without this systemic coordination, individual components may inadvertently work against each other, undermining the school's overall effectiveness.

Effective school leadership requires a holistic understanding of this systemic nature, focusing on process improvement rather than isolated outcomes, and fostering collaboration across departments rather than competition. Leaders must ensure that all teams understand how their work supports the school's broader vision, while leveraging stakeholder feedback to inform decisions. Most importantly, leaders must recognize that optimizing individual components does not necessarily enhance the system as a whole - success comes from maximizing the effectiveness of the entire school ecosystem, including its relationship with the broader community and external factors that influence its operation.

Understanding Variation

In educational settings, variation is an inherent aspect of system performance, encompassing differences in student achievement, teaching methods, and overall school outcomes. As Deming emphasized, these variations fall into two categories: common causes, which represent normal system fluctuations (like routine attendance patterns or typical test score variations), and special causes, which stem from unusual, unpredictable factors (such as sudden spikes in student anxiety or dramatic drops in teacher morale). Understanding this distinction is crucial for school leaders to avoid two common mistakes: treating common cause variation as if it were special cause variation, and treating special cause variation as if it were common cause variation.

Effective school leadership requires the ability to interpret data with an understanding of variation, avoiding knee-jerk reactions to short-term changes while focusing on systemic improvements rather than individual blame or praise. Leaders must recognize that a system in statistical control has predictable variation within certain ranges, and that sustainable

improvement comes from long-term process enhancement rather than reactive interventions. This approach enables leaders to move from "firefighting" to "fire prevention," maintaining calm leadership during fluctuations and supporting team productivity through systematic improvements rather than micromanagement. As Deming noted, the goal should be reducing future problems through understanding and improving the system as a whole, rather than treating each incident as an isolated special cause.

Theory of Knowledge (Action)

Deming's assertion that "Management is prediction" underscores how effective leadership depends on anticipating future outcomes based on current actions and theoretical frameworks. This principle is evident in educational settings where leaders make theory-driven decisions, such as implementing teacher collaboration time or new educational programs. However, Deming emphasizes that "information is not knowledge," while schools often collect abundant data on metrics like attendance and test scores, it's the underlying theory that transforms this information into actionable knowledge. Leaders must constantly engage in a cycle of predicting, testing, observing, and adjusting their theories based on actual outcomes.

Through practices like Instructional Rounds, where educators collaboratively observe and analyze classroom practices, leaders can foster an environment of continuous learning and improvement. This methodology of rounds focus on the Learning Core, examining the crucial interactions between teachers, students, and content, emphasizing that meaningful improvement requires enhancing all these elements simultaneously. Approaches such as this provide a practical framework for implementing Theory of Knowledge (Action) in schools.

Effective leaders working in this domain demonstrate key dispositions, including "commitment to continuous learning, disciplined decision-making based on evidence rather than intuition, critical analysis of cause and effect, long-term thinking over quick fixes, and clear communication of expectations - all while maintaining the courage to make bold, evidence-based decisions that drive school improvement. Approaches such as this provide a practical framework for implementing Theory of Knowledge (Action) in schools.

Psychology

At the core of effective school leadership is the recognition of each person's inherent drive to learn, grow, and find joy in meaningful work. Traditional management approaches that rely heavily on constant evaluation, grading systems, and competitive ranking, what Deming called "The Forces of Destruction", often undermine these natural tendencies by shifting focus from intrinsic rewards to external validation. When individuals instead engage in meaningful learning experiences and witness their own progress, their intrinsic motivation soars, creating a sustainable foundation for continuous improvement that far outperforms any system of external rewards or punishments.

Effective leaders act as coaches rather than referees, focusing on removing obstacles to success while creating feedback loops to monitor how changes affect the organization. This approach requires understanding that different individuals are motivated in different ways and emphasizes autonomy support that sets clear boundaries while giving individuals choice and input within those boundaries. The goal is to create an organizational culture where change is viewed, not as a series of initiatives, but as a natural part of professional growth and development.

The Limitations of Traditional Management Practices

There are limitations to traditional management practices in school leadership. As one comes to understand the Profound Knowledge of Systems Thinking, the difference between managing and leading becomes apparent. More importantly, focusing on personal development in the four areas of Profound Knowledge provides a framework to identify, understand, and improve as a transformational leader.

In his book *The New Economics: For Industry, Government, Education*, Deming commented on the application of his System of Profound Knowledge: "Once the individual understands the system of profound knowledge, he will apply its principles in every kind of relationship with other people. He will have a basis for judgment of his own decisions and for the transformation of the organizations that he belongs to. The individual, once transformed, will:

- Set an example
- Be a good listener, but will not compromise
- Continually teach other people
- Help people to pull away from their current practice and beliefs and move into the new philosophy without a feeling of guilt about the past" (63)

The application of Deming's Profound Knowledge is not only for the individual practice of a school's leadership team but for members of the entire faculty. Widespread adoption of these four principles has the power to unleash great practices for teachers and great outcomes for students. The power to transform a school is always fully embedded internally, the application of Profound Knowledge and Systems Thinking provides a method for school leaders to confidently engage all of the stakeholders in a school community in a no-nonsense, internally-driven body of work to take on the moral imperative of transforming schools to meet the future needs of the children they serve.

The School as a Learning Organization

A key concept in applying Systems Thinking to education is the idea of the school as a learning organization. Peter Senge, in his book *The Fifth Discipline*, defines learning organizations as, "organizations where people continually expand their capacity to create the results they truly

desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (3).

Characteristics of schools functioning as learning organizations include:

- **Shared vision:** A collective understanding of the school's goals and values that guides decision-making at all levels.
- **Team learning:** Collaborative processes that allow groups to develop intelligence and capabilities greater than the sum of individual members' talents.
- **Personal mastery:** A commitment to individual growth and learning among all staff members.
- **Mental models:** The ability to reflect on and improve internal pictures of how the world works, challenging assumptions and broadening perspectives.
- **Systems Thinking:** The capacity to understand and address the school as a complex, interconnected system.

By adopting these principles, schools can become more adaptive, resilient, and effective in meeting the needs of students in an increasingly volatile, uncertain, complex, and ambiguous (VUCA) world where traditional notions of preparation are increasingly ineffective.

Rethinking the Role - The School Leader Paradigm

The School Leader Collaborative is a consortium of ten state principal associations. In 2018 this group published the School Leader Paradigm, based on the NASSP's Building Ranks publication that outlines key competencies and skills that modern school leaders need in order to thrive in their roles. The School Leader Paradigm outlines in detail the work of effective school leaders as leaders of learning organizations. The report states: "Instead of thinking of principals as just instructional leaders, we regard principals as learning leaders leading learning organizations. We know. It is a bit of a mouthful. Nonetheless, this concept more accurately describes who principals are and what they do, which necessitates a more comprehensive view and understanding of school leadership" (5).

In essence, the School Leader Paradigm provides a framework that can help school leaders and teams of school leaders see what it looks like to lead a learning organization, and it provides some tangible areas of focus that will help school leaders grow from managers to leaders of learning organizations - a key attribute in applying Systems Thinking to the work of the school leader.

As a starting point, the framework poses four essential questions that help to focus the thinking of the learning leader:

- How are you leading the learning of your learning organization?

- What are you doing to create culture with your students, staff, and school community? What attributes increase your effectiveness at leading culture?
- What systems are supporting and/or eroding your culture and what are you doing to be a systems leader? What attributes make you an effective systems leader?
- How are you pushing on leading learning for all stakeholders? What attributes make you an effective Lead Learner?

The School Leader Paradigm outlines criteria that define the capacities of a fully formed and engaged Learning Leader. Learning leadership is defined based on a two-sided concept outlining the growth of the individual as a Learning Leader and the growth of the school as a Learning Organization (5).

Three Domains of the Learning Organization

The School Leader Paradigm defines a Learning Organization across three domains: Culture, Systems, and Learning. This framework (paraphrased below) provides direction for the school leader seeking to build a learning organization in their school (8):

- **The Culture Domain** is characterized by the development of a student-centered climate and culture, unconditional relationships with students (and colleagues), and equitable access to opportunities and high-quality programs in the school. The foundation of Culture in the Learning Organization is relationships that are positive and mutually supportive. The Systems Thinker will lead by creating a positive, hope-filled climate and culture.
- **The Systems Domain** is characterized by the work that the school leader does to create cycles of inquiry that are focused on the development of sustainable student-centered systems. An effective systems leader can develop cycles of inquiry that allow teams to inspect what is expected and empower those teams to act based on their findings. A systems thinker leads by replacing historically ineffective/inequitable systems with more relevant and timely student-centered systems.
- **The Learning Domain** is characterized by the school leader's development and use of innovative practices that engage faculty and staff in continuous learning. Beyond traditional professional development practices, continuous learning in the context of the Learning Organization often takes place in teams and is focused on the development of new mental models about the purpose, function, and structure of today's schools. The systems thinker leads by constantly reflecting on their own learning while simultaneously supporting the learning of the students and adults around them.

Learning leadership and the work of building our schools as Learning Organizations are essential in building the capacity of our schools to take on needed innovation. Teamwork,

inquiry, and a culture of continuous improvement drive the core work of Systems Thinking as Leadership.

Effective Transformational Leadership

Transformational leadership in educational settings requires a careful balance between strategic vision and practical implementation. Transformation-minded leaders know that their primary role is to work on the system rather than within it, focusing on four key actions identified by Lancefield and Rangen in their 2021 article in the *Harvard Business Review*, “4 Actions that Transformational Leaders Take”:

- Practicing new mental models by sharing compelling visions for change.
- Working the edges of the organization through stakeholder engagement.
- Sharing leadership systematically by empowering early adopters.
- Dismantling traditional bureaucratic structures that protect the status quo.

The foundation of effective transformational leadership lies in the critical relationship between who the leader is and what the leader does. Leaders must possess and develop three types of intelligence: personal intelligence (including self-awareness and a genuine commitment to growth), social intelligence (demonstrated through high emotional quotient and awareness of others' needs during change), and systems intelligence (understanding how the organization functions at both macro and micro levels). This three-dimensional intelligence framework enables leaders to navigate complex change while maintaining authentic relationships with their teams.

Success in transformational leadership ultimately depends on the leader's ability to build a values-based culture while managing systematic change. This requires maintaining clear communication about the organization's direction, supporting teams through periods of transition, and creating transparent processes that break down departmental barriers. The transformational leader must consistently balance the immediate needs of the organization with the longer-term vision for change, all while fostering a collaborative environment where innovation and growth can flourish.

Transformational Leadership - Key Understandings

As we navigate the complexities of education in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) world, the role of school leaders has evolved significantly. No longer simply managers or instructional supervisors, today's effective school leaders must embody a unique set of skills and dispositions that enable them to guide their institutions through continuous transformation. Drawing on the principles of Systems Thinking, the School Leader Paradigm, and the realities of modern education, we can identify several key attributes that characterize successful school leaders in this new era.

Effective school leaders in today's environment must internalize several key understandings:

- **The traditional education system is outdated:** Leaders must recognize that the traditional system of education was designed to prepare students for a set of jobs and careers that are rapidly ceasing to exist. This understanding drives the urgency for transformation. The industrial age educational system was designed to select, sort, and remove students. The new era holds the system accountable to ensure that all students are successful, and that students will no longer be sorted out of the system.
- **The power of personal interest in learning:** Successful leaders understand that deep and powerful learning requires a personal interest in what is being learned. This insight informs approaches to curriculum design and instructional methods. Principals must create environments where students can engage in learning that aligns with their personal interests and connects academic content to real-world contexts.
- **The emotional component of learning:** Modern leaders recognize that deep and powerful learning is tied to emotional experiences. This understanding influences decisions about learning environments and teaching strategies. Leaders must foster a school culture that supports the social-emotional well-being of students and staff.
- **The impact of technology on learning:** Effective leaders are aware that students with access to the internet are often learning more outside of school than they are learning in school. This knowledge drives efforts to make in-school learning more engaging and relevant. Leaders must encourage the use of technology and innovative practices that enhance learning experiences.
- **The limitations of traditional grading:** Forward-thinking leaders understand that traditional grading systems can be counterproductive and potentially harmful. This insight leads to exploration of alternative assessment methods that better reflect the diverse ways in which students can demonstrate mastery and growth.
- **The importance of student agency:** Modern leaders recognize that students must be regular participants in the development of course content and activities. They work to make student agency the norm rather than the exception, providing opportunities for student voice and leadership in the learning process.
- **The changing landscape of higher education:** Effective leaders are aware that the higher education system across the country is responding to the same realities and making similar transformations. This knowledge helps in preparing students for their future educational journeys and career paths that may not yet exist.

- **The power of relationships:** Successful leaders understand that building strong, positive relationships with students, staff, families, and community members is fundamental to creating a thriving learning environment. These relationships elevate experiences and outcomes, ensuring optimal learning is achieved by all.

Transformational Leadership - Key Capabilities

Effective modern school leaders must be able to take concrete actions to drive transformation in their schools. These leaders are capable of:

- **Adaptive Leadership:** Nimble leaders remain flexible and pivot strategies as circumstances evolve. Transformational leaders are comfortable with ambiguity and capable of making decisions even when faced with uncertainty. Adaptive leadership requires demonstrating resilience when encountering setbacks, viewing challenges as opportunities for growth rather than obstacles. Adaptive leaders excel at helping others navigate change while building their own resilience, consistently modeling adaptability for both staff and students to demonstrate how to thrive in an environment of constant change.
- **Data-Informed Decision Making:** Effective leaders must implement robust systems for collecting and analyzing relevant data on innovative practices, while engaging staff in meaningful dialogue about the impact of change initiatives. This approach involves crafting compelling narratives with data to build support for ongoing transformation, while maintaining a balanced view that incorporates both quantitative metrics and qualitative insights to fully understand school performance.
- **Continuous Learning and Improvement:** Successful change requires leaders to engage in self-reflection and model reflective practices for their school community. This involves encouraging self-understanding and self-driven improvement among staff and students alike, while supporting them in reflecting on their practice and responding to feedback. Leaders must facilitate collaborative goal-setting and achievement, while staying current with educational research and best practices by actively seeking out diverse perspectives and experiences.
- **Collaborative Leadership:** Leaders empower others by encouraging staff and students to step into leadership roles. Leaders must demonstrate trust by supporting calculated risks and initiatives that align with the school's vision, while creating effective structures for staff collaboration. This approach builds a strong sense of community and shared purpose among all stakeholders, while effectively distributing leadership responsibilities throughout the organization to enhance engagement and performance.

- **Innovation and Change Management:** Transformational work requires creating dedicated time and space for innovation within the school environment. Leaders must effectively manage change and uncertainty while encouraging the use of technology and innovative practices. This involves carefully balancing the urgency for change with the need for sustainable, manageable transitions, while fostering a culture where experimentation is encouraged and failure is viewed as a valuable learning opportunity.
- **Effective Communication:** Leaders must advocate for school needs to various stakeholders while creating structures that facilitate smooth information flow. This requires enhancing and exemplifying strong communication skills while tailoring communication strategies to effectively reach different stakeholder groups, from teachers and parents to board members and community partners.
- **Strategic Vision and Planning:** Transformation requires that leaders build collaborative processes to define and articulate a compelling vision and mission for the school. Leaders must anchor their decisions in this vision while bringing it to life through concrete actions and initiatives. This involves setting clear priorities and establishing measurable goals, while creating strategic plans and aligning resources to achieve the school's vision and objectives.
- **Human Capital Management:** Leaders must effectively assign roles and responsibilities to leverage individual strengths, while ensuring appropriate accountability within a supportive work environment. This involves building the collective capacity of the school to respond effectively to changes in the educational landscape through strategic staffing and development practices.

Leadership Strategies for Transformational Change

The transformation of educational institutions demands a sophisticated understanding of change management, particularly as schools face unprecedented pressure to evolve their practices for a rapidly changing world. Traditional approaches to school improvement often falter because they fail to account for the complex interplay between vision, culture, and human dynamics that shape institutional change. To successfully navigate this complexity, school leaders need frameworks that both guide implementation and diagnose potential obstacles before they derail progress.

Equally important to the structural elements of change is the need to address underlying assumptions and cultural dynamics that can either accelerate or impede transformation. Successful transformation requires leaders to not only implement new structures and processes but also actively work to surface, examine, and reshape the mental models that guide how their school communities think about education. This dual focus on both structural and cultural

dimensions of change provides school leaders with a more complete roadmap for meaningful transformation.

Managing Complex Change

The classic, and often cited Ambrose Model for Managing Complex Change (1987), remains highly relevant for educational leaders today. As schools face constant internal and external pressure to transform themselves, this model provides a framework for understanding the essential elements of managing organizational changes while also providing a diagnostic element that assists the leaders in understanding what might be missing, or why things may not be going according to plan. The model identifies five key areas that leaders need to address:

- Clarity around the vision for the future
- The skills to do something different
- Incentive to make the desired change
- The proper resources to work differently
- A well understood action plan for moving forward.

Without all five elements in place, the leadership team will not see a successful transformation and the change project is likely to be derailed over issues such as confusion, anxiety, slow progress, frustration, and false starts.

As leaders navigate the complexities of modern education, successful institutional change requires a systematic approach that addresses all five critical dimensions outlined above. These interconnected elements form the foundation of sustainable school transformation. Without proper attention to each component, leaders may encounter significant obstacles: unclear vision leads to confusion, lack of incentive breeds resistance, insufficient skills create anxiety, inadequate resources cause frustration, and the absence of a coherent action plan results in false starts. The following questions are designed to help school leaders assess their school's readiness for change and identify potential areas for improvement across these essential dimensions.

Vision

- What is the vision for the school in the next five years?
- Is there any aspect of this future that is unclear to parents, students, or faculty?
- In what ways can the leadership team bring these issues into focus for the school community?

Incentive

- What do people resist? What are the chief complaints of faculty members or other key staff that seem to drag their feet?
- In what ways do we want to motivate our students and faculty to take risks and grow? Do they feel empowered to do so?
- What is the primary de-motivator of the faculty? Can we remove that de-motivator?

Skills

- What is the greatest asset of the high school faculty? Pedagogy? Content expertise? Relationships with the students? Can these strengths be leveraged to support the change initiative?
- What is the greatest skill deficit? How have we or how could we address this issue?

Resources

- What resource issues currently confront the school? Facility? Funding Sources? Quality Faculty? Technology? Time / Scheduling? What do people complain about in this area?

Action Plan

- How do accountability measures translate into action for the faculty?
- How involved are the faculty in developing and monitoring progress? Do we include our parent community?
- What is the current state of strategic planning for the school?

Surfacing and Challenging Underlying Assumptions

As we look to improve secondary schools for today's students, leading change requires examining the assumptions underpinning the ways that schools work. These underlying assumptions form the mental models that each member of a teaching faculty or school community has about how school works, or based on those assumptions, how school should work.

Edgar Shein, author of the book *Organizational Culture and Leadership*, writes that: "Basic assumptions, like theories-in-use, tend to be nonconfrontable and nondebatable, and hence are extremely difficult to change. To learn something new in this realm requires us to resurrect, reexamine, and possibly change some of the more stable portions of our cognitive structure—a process that Argyris and others have called "double-loop learning," or "frame breaking" (Argyris et al., 1985; Bartunek, 1984). Such learning is intrinsically difficult because the reexamination of basic assumptions temporarily destabilizes our cognitive and interpersonal world, releasing large quantities of basic anxiety" (31).

Underlying assumptions for individuals are built over time through experiences with the prevailing culture, socialization, and educational experiences. In work settings, underlying assumptions are developed through training programs, mentorship, and years of experience in the workplace. For the transformational leader, identifying and shaping shared underlying assumptions is a key part of the work in gathering momentum around improvement and change initiatives. The goal is to get to shared assumptions that support the goals and objectives around improving learning and the school experience.

In schools, the conventional wisdom about what works and what doesn't work in the classroom is built on underlying assumptions that are often stubbornly rooted in personal experiences that educators (and parents) had with their own education. These experiences, rooted in the past, have staying power because of their familiarity and comfort. Many well-intentioned educators who acknowledge the need for the school experience to be different for today's students are pulled back or limited in adopting new ways of working because the underlying assumptions of what is good, and works for students, have not been examined at a level of depth in their schools.

To drive meaningful change, school leaders must first surface and examine the underlying assumptions that shape their current educational practices. This process involves:

- **Facilitating open discussions:** Create opportunities for staff to openly discuss their beliefs about teaching, learning, and the purpose of education.
- **Encouraging critical reflection:** Prompt educators to examine the origins and validity of their assumptions about education.
- **Exposing alternative perspectives:** Introduce staff to innovative educational models and research that challenge traditional assumptions.
- **Collaborative visioning:** Work with the school community to develop new, shared assumptions that align with 21st-century learning goals.
- **Action research:** Encourage teachers to test new approaches and reflect on how they challenge or confirm existing assumptions.

Building Culture

It has famously been stated that culture eats strategy for breakfast. In building schools that are focused on fostering agency and purpose, the development of a supportive culture for these aims is paramount. Rather than settling for managing the status quo, transformational leaders focus their efforts on building and shaping supportive culture for the benefit of the students in the school.

When working on building next-generation school cultures, it is helpful for a school leadership team to think about four important questions:

- How can we understand and define the desired cultural characteristics of our constituents?
- What do the mental models of student success look like in building the desired culture?
- How might we work with the "middle third" to encourage the adoption of innovative practices and move the culture forward?
- How do we reduce the friction (barriers) that are getting in the way of moving the culture forward?

Experienced leaders will know that when working on a change initiative with any large group of people, there will typically be three groups that form among constituents:

- **All Ins** - These are the early adopters. People in this group are eager to jump in with a change initiative and likely see the efficacy of what the leader is looking to accomplish. These are the early adopters who will lead and champion the development of Next Generation Culture in the school.
- **Indifferents** - These are the people who are not necessarily opposed to the change initiative, but who sit back and take a "wait-and-see" approach. They may need more convincing, or they may be fatigued from previous change initiatives that have stalled or faded. They are happy to see what happens but are not eager to jump in immediately. This group is the essential "middle third" where leaders need to focus a significant portion of their time and attention.
- **Deniers** - These are the most stubborn resisters to a change initiative. They are labeled deniers because they typically do not acknowledge that any change in the school is even necessary. They are convinced that everything is fine and that change is not needed. This is often because they feel the path to success has been mapped out and has worked in the past for others. Even when presented with evidence that demonstrates the changing needs of young people in today's world, they are slow to connect the rapid changes in society and the world of work to the need to change and adjust the way we do school. These groups tend to take a results-only point of view relative to grades and standardized testing and are often dissatisfied for various reasons.

Understanding what to look for from each group and the specific identifiers is helpful when planning communication strategies or professional development activities. A temptation that often stalls change initiatives is to focus large amounts of time and energy on the "Deniers" group, the lagging third that is not engaged or is primarily resistant to the change initiative. While it may be counterintuitive, most of the leader's time, attention, and effort must be spent with the "Indifferents" and the "All Ins." Keeping in mind that a culture shift is the aim, one would

want to spend at least 75% of time and effort on the top two groups. More than 25% of time spent on the bottom group would be counterproductive to the overall goals of the transformative agenda. It is also important to note that from a cultural change perspective, moving constituents from the "Indifferents" to "All-Ins" will have the most impact in gaining momentum and widespread support for the transformation you are working to achieve.

We know that successful transformation cannot be achieved in isolation. Teams of early adopters and committed individuals will need to be identified and then empowered to take on key pieces of the work. Often the transformational leader will blaze a trail in a critical area, show others how and what needs to be done, and then hand the responsibility to others to carry the work forward. Early adopters and committed individuals will be found among the "All-Ins". However, recruiting "Indifferents" to join teams that are taking on the work of innovation will yield a high level of return in moving the overall culture.

Overcoming the Four Frictions

The question of HOW to create adoption, and therefore, increasing the number of people moving from "Indifferents" to "All-ins" is crucial. The work of Loran Nordgren and David Schonthal gives us some really important insight into how to make this happen. In their 2022 book *The Human Element*, Nordgren and Schonthal outline the Four Frictions that innovators need to address to successfully gain widespread adoption of innovation across an organization or among a wide group of people. Nordgren and Schonthal characterize these frictions as "Innovation Headwinds" (7):

- Inertia - Does the idea represent a radical break or a slight tweak from the status quo?
- Effort - How difficult is it to implement the idea?
- Emotion - Do people feel threatened by the idea?
- Reactance - Does the audience feel pressure to change?

Nordgren and Schonthal present the innovator with an important perspective around moving from a Fuel Mindset to a Friction Mindset when taking on the Four Frictions. Most people, leaders and innovators included, have the instinct to add fuel to gain traction with an innovative idea. We often don't realize that by adding fuel, we unintentionally increase the headwinds we face. We reinforce those that want to adopt a new way of working with the desire to stay with the status quo. When we shift to removing or reducing the resistance we encounter from the Four Frictions, we are more likely to see movement among our constituents. However, removing or addressing the Four Frictions is difficult; it requires understanding, empathy, and insight about what matters to the people involved.

In working with the middle third to gain traction with the innovation in a school or organization, the leader can gain the most momentum by intently focusing on each of the Four Frictions. *Deming's 14 Points Adapted for Educational Leaders* provides a great foundation for addressing and overcoming these barriers:

- To overcome the Friction of Inertia - We can discard the philosophies and mental models associated with industrial schooling (GFL Adapted Deming Point #2).
- To overcome the Friction of Effort - We can reduce or eliminate rigid departmental structures that prevent progress and innovation (GFL Adapted Deming Point #9).
- To overcome the Friction of Emotion - We can support risk-taking and innovation in classrooms and school programs. (Drive out Fear) (GFL Adapted Deming Point #8).
- To overcome the Friction of Reactance - We can constantly improve systems of teaching and learning. Understand that 85% of results are from the system. To improve outcomes, improve the system rather than “fixing” individuals. (GFL Adapted Deming Point #5).

Building an innovative and future-focused culture is no easy task. It requires vision and persistence. Success can be found in being consistent in the adoption and application of Deming's 14 Points to overcome The Four Frictions that are everpresent in any school or organization taking on large scale transformations. With Deming's 14 Points as a foundation, the school leader has a platform to begin working with operational definitions that lay out what the desired characteristics are for each constituency as well as a framework that can be used to engage with the critical middle third that plays a crucial role in the success or failure of any initiative.

Building a Culture of Joy and Continuous Improvement

In recent years, there have been many concerns about the climate and culture in our schools. Schools are often the subject of negative headlines in the news. Declines in student wellness are front and center for educators. Leaders are worried about teacher job satisfaction and retention. Combine all this with the relevance gaps that are often discussed around curriculum and it is easy to understand why joy at school can be elusive for many students and their teachers.

Focusing on joy at school is essential for today's school leaders. Joy at school enables the achievement that we want to see for the benefit and growth of our students. If we build our schools as learning organizations with this central focus, we can begin to reduce or eliminate the negative culture and drudgery that creeps in to our schools. If this is our aim, then our constancy of purpose has four essential elements:

- **Success** - Our job is to create as many winners as possible.
- **Access** - All students benefit from exposure to rigorous and challenging experiences. Ranking and sorting is a harmful practice that should be abolished.
- **Mentorship** - The timeless needs of young people are met through close personal relationships with adults who will challenge and support them to pursue lofty goals.

- **Personal agency** - the goal of all teaching and learning is to develop personal agency that empowers the individual to independently pursue growth and learning.

Ultimately, the goal of educational transformation should be to create learning environments that foster joy, curiosity, and a love of learning. Drawing on the work of W. Edwards Deming, school leaders should focus on:

- Preserving and nurturing intrinsic motivation: Design learning experiences that tap into students' natural curiosity and desire to learn.
- Emphasizing cooperation over competition: Create collaborative learning environments that value teamwork and shared success.
- Developing supportive relationships: Foster strong, positive connections between students, teachers, and the broader school community.
- Fostering personal agency: Empower students and staff to take ownership of their learning and development.
- Celebrating growth and effort: Recognize and appreciate the process of learning, not just final outcomes.
- Creating psychologically safe environments: Establish a culture where risk-taking and experimentation are encouraged and supported.
- Integrating play and creativity: Incorporate elements of play and creative expression across the curriculum.
- Promoting well-being: Prioritize the physical, emotional, and mental health of students and staff.

By prioritizing these elements, schools can overcome the "forces of destruction" that often impede learning and create more positive, effective educational experiences.

The Path Forward

As we navigate the complexities of education in a VUCA world, it is clear that transformational change in our schools is not just desirable, but essential. The challenges we face – from waning student engagement to the rapid evolution of workforce needs – demand a fundamental rethinking of how we approach teaching and learning.

The transformation of our educational systems is a complex, long-term endeavor that requires courage, creativity, and a commitment to continuous learning and improvement. It demands that we move beyond quick fixes and surface-level changes to address the fundamental structures and cultures of our schools.

However, the potential rewards of this transformation are immense. By creating educational environments that truly prepare students for the complexities and opportunities of the 21st

century, we can nurture a generation of learners who are not just academically proficient, but also resilient, creative, and equipped to thrive in an ever-changing world.

As we embark on this journey of educational transformation, let us be guided by a vision of schools as vibrant learning communities where curiosity is cultivated, diverse talents are celebrated, and every student is empowered to shape their own path. The challenges are significant, but so too is the opportunity to reimagine education in ways that unlock the full potential of every learner.

The future of education depends on our willingness to embrace this challenge and lead with courage, wisdom, and a steadfast commitment to the power of learning. Let us move forward with hope, determination, and a shared vision of what education can and should be in the 21st century.

About the Author



Dr. Steven Lyng is an educational consultant and thought leader specializing in Systems Thinking approaches to school transformation. With over two decades of experience in education, including roles as a Teacher, Principal, Upper School Head, Assistant Head of School, and Head of School, Dr. Lyng brings a wealth of practical knowledge to his work in educational innovation.

Dr. Lyng works with school districts, independent schools, and educational organizations to build leadership capacity and implement transformative change initiatives. His approach emphasizes collaborative problem-solving, data-driven decision-making, and the development of learning organizations that can continually adapt to meet the needs of students in a rapidly changing world.

Dr. Lyng is passionate about helping educational leaders navigate the complexities of change and build schools that truly prepare students for success in the modern world. Through his consulting services, workshops, and speaking engagements, he provides valuable insights and practical strategies for creating more engaging, relevant, and effective learning environments. For more information on Dr. Lyng's consulting services or to book a workshop for your school or district, please visit gofourthlearn.com or email steven.j.lyng@gmail.com

The Go Fourth Learn Project

Equipping Leaders to Thrive in an Era of Rapid Change

The Go Fourth Learn Project, founded by Dr. Steven Lyng in 2023, is an innovative educational initiative that seeks to redefine the landscape of education for the next generation of students. At its core, the project embraces three fundamental elements reflected in its name:

- **"Go"** represents an action-oriented approach driven by the urgent need to transform high school education.
- **"Fourth"** acknowledges the present context of the Fourth Industrial Revolution and its technological impacts on society.
- **"Learn"** embodies the innate human desire for growth and learning that educators strive to nurture.

Central to the project's philosophy is the concept of the "Lead Learner," a leadership style that emphasizes continuous growth and development. Through this lens, the Go Fourth Learn Project works to develop educational leaders as systems thinkers who can create dynamic, engaging learning environments where curiosity, creativity, and collaboration flourish.

The Go Fourth Learn Project focuses on building school leadership capacity that addresses relevance gaps in school curriculum and fosters innovative learning cultures that respond to the rapidly changing demands of modern society.

The project's guiding principle that "what matters is that each student visualizes and actualizes their own life" reflects its recognition that success in today's world follows no set formula. By equipping educators with essential tools and strategies, the Go Fourth Learn Project aims to build a community where educators are inspired to innovate and students are empowered to excel in ways that align with their individual paths and potentials.

The Go Fourth Learn Project - Core Beliefs

- Leadership is about creating positive systems-level change, not just managing existing structures.
- All students can achieve at high levels with the right supports and opportunities.
- Schools must function as learning organizations where growth and innovation are continuous.
- Leaders must develop both technical and adaptive leadership capacities.
- Transformational change requires collective effort guided by shared vision across a school community.

| The Go Fourth Learn Project Theory of Action | |
|---|--|
| <p>If we develop school leaders who:</p> <ul style="list-style-type: none">● Possess deep systems thinking capabilities.● Build and sustain learning organizations.● Lead transformational change processes.● Focus relentlessly on student learning. | <p>Then we will create schools that:</p> <ul style="list-style-type: none">● Continuously improve outcomes for all students.● Close opportunity and achievement gaps.● Adapt and innovate to meet future needs.● Sustain positive change over time.● Function as true learning organizations. |

Appendix I - Deming's 14 Points - GFL Adapted

| <div>  Deming's 14 Points - GFL Adapted V 3.0 </div> | | | |
|--|---|---|---|
| Point | Deming 1982 | Deming 1986 (Out of The Crisis) | Go Fourth Learn - Adapted (2023) |
| 1 | Innovate and allocate resources to fulfill long range needs of the company and customer rather than short term profitability. | Create constancy of purpose toward improvement of product and service | Innovate teaching and learning to fulfill the future needs of the student rather than short term goals such as grades, report cards, and credits. |
| 2 | Discard the old philosophy of accepting defective products and defective workmanship | Adopt a New Philosophy | Discard the philosophies and mental models associated with industrial schooling. |
| 3 | Eliminate dependence on mass inspection for quality | Cease dependence on mass inspection | Cease dependence on analysis and reporting of standardized testing outcomes as essential measures of success - establish a new narrative about student success. |
| 4 | Reduce the number of suppliers for the same item. Demand and expect suppliers to use statistical process control and furnish evidence thereof. | End the practice of rewarding business on basis of price tag alone. | Collaborate with sending schools and lower divisions to adopt compatible teaching and learning goals and techniques. |
| 5 | Use statistical techniques to identify the two sources of waste: system 85% and local faults 15% - constantly strive to reduce waste. | Improve constantly and forever the system of production and service. | Constantly improve all aspects of the instructional core (Student, Teacher, Content, Task). Understand that 85% of results are from the system. To improve outcomes, improve the system rather than "fixing" individuals. |
| 6 | Institute better job training with the help of statistical methods. | Institute Training | Establish effective learning and professional development as part of the regular work day/week for teachers and academic staff. |
| 7 | Provide supervision with the help of statistical methods. The aim of supervision should be to help people do a better job. | Adopt and institute leadership | Build collaborative leadership structures that empower faculty and staff to make needed changes in real time to improve student learning. |
| 8 | Reduce fear throughout the organization by encouraging open, two way communication. | Drive out fear | Support risk taking and innovation in classrooms and school programs. (Drive out Fear) |
| 9 | Reduce waste by putting together as a team, the people who work on design, research, sales, and production. | Breakdown barriers between staff areas. | Reduce or eliminate rigid departmental structures that prevent progress and innovation. Include admissions, marketing, development, and business office staff in the transformation. |
| 10 | Eliminate use of goals and slogans in attempt to increase productivity. | Eliminate slogans, exhortations, and targets for the workforce. | Eliminate cheerleading and wellness initiatives that lack substance or fail to address root cause issues and concerns among constituents (parents, students, teachers, staff) |
| 11 | Examine closely the impact of work standards. Do they consider quality or help anyone do a better job? | Eliminate numerical quotas for the workforce. Eliminate numerical goals for people in management. | Develop measures that matter for the long-term vitality and development of students. Consider measures around transferrable skills, student well-being, and student engagement. |
| 12 | Institute rudimentary statistical training on a broad scale. | Remove barriers that rob people of pride of workmanship. | Reduce bureaucratic structures and processes that de-motivate teachers and academic staff from innovation and improvement, and implement support structures instead. |
| 13 | Institute a vigorous program for re-training people in new skills to keep up with changes in materials, methods, design of product and machinery. | Encourage education and self improvement for everyone. | Develop programs and opportunities for teachers and academic staff to build the capacity to understand how emerging technologies and the new economy impact the future needs of today's students. |
| 14 | Make maximum use of statistical knowledge and talent in your company. | Take action to accomplish the transformation | Proceed with urgency, the time for transformation is right now. Everyone in the school has a contribution and responsibility for making the transformation happen. |
| <div> <p>Adapted from: Moen, Ronald D., and Clifford L. Norman. "Always Applicable - Deming's System of Profound Knowledge Remains Relevant for Management and Quality Professionals Today." <i>Quality Progress</i>, June 2016, pp. 47-53, www.qualityprogress.com. Accessed 10 Dec. 2023.</p> <p>Copyright 2024 - Go Fourth Learn Next Generation Education</p> </div> | | | |

Appendix II - Discussion Guide for School Leadership Teams

The following discussion questions are designed to facilitate deeper exploration of the concepts outlined in this paper. School leaders can use these questions to guide professional development activities, foster collaborative dialogue, and promote reflective practice among their teams.

The Need for Educational Transformation

1. How would you characterize the urgency for transformation in your school context? What specific pressures or opportunities are you facing?
2. What evidence suggests your current educational model needs transformation?
3. How do you see the impact of the Fourth Industrial Revolution manifesting in your school community?

The Fourth Industrial Revolution and VUCA World

1. How does your school currently prepare students for the VUCA (Volatility, Uncertainty, Complexity, Ambiguity) world? What specific examples can you identify?
2. In what ways are you addressing the impact of AI and automation in your curriculum and instruction?
3. How do your teaching methods adapt to rapid technological and social changes?

Waning Student Engagement

1. What do your student engagement metrics reveal about the current state of learning in your school?
2. How would your students grade you on:
 - Mental health support
 - Learning adaptation
 - Career preparation
 - Learning excitement
3. What structural elements in your school either promote or inhibit student engagement?

Overcoming Compliance Culture

1. Where do you see evidence of compliance culture in your school?
2. How does your assessment system either reinforce or challenge compliance culture?
3. What specific steps could you take to shift from compliance to agency?

Outdated Mental Models and Assumptions

1. Which "sacred cows" in your school system need to be challenged? Consider:
 - Department structures
 - Grade-level organization
 - Assessment methods
 - Class schedules and calendars
2. How do traditional assumptions about education manifest in your daily operations?
3. What mental models about teaching and learning need to shift first?

Understanding Systems Thinking

1. How do you currently view your school as an interconnected system?
2. What unintended consequences have you experienced from past changes?
3. Where do you see the strongest leverage points for change in your system?

Deming's Framework

1. Which of Deming's 14 Points (adapted for education) resonate most strongly with your context?
2. How might you apply the System of Profound Knowledge in your leadership practice?
3. What barriers exist to implementing these principles in your school?

The School as a Learning Organization

1. To what extent does your school embody the characteristics of a learning organization?
2. How do you currently support team learning and collaborative growth?
3. What structures could you implement to strengthen organizational learning

Managing Complex Change

1. Using Ambrose's model, where are your strongest and weakest areas in managing change?
2. How do you currently address anxiety and confusion during change initiatives?
3. What resources are most critical for your transformation efforts?

Building Culture

1. How would you characterize your current school culture?
2. What evidence of joy and continuous improvement exists in your learning environment?
3. How do you actively shape culture rather than letting it evolve by default?

Overcoming the Four Frictions

1. Which of the four frictions (Inertia, Effort, Emotion, Reactance) most impacts your change efforts?
2. How do you currently address resistance to change?
3. What strategies could you employ to reduce each type of friction?

Next Steps

Based on these discussions:

- What are your top 3 priorities for transformation?
- What small experiments could you try?
- How will you measure success beyond traditional metrics?

Support Structures

What support structures do you need to:

- Help teachers adapt to new roles as mentors and coaches
- Support students in taking greater ownership of their learning
- Engage parents and community in this transformation
- Maintain focus on both timeless developmental needs and modern skills

Balancing Priorities

How will you balance:

- The need for rapid change with thoughtful implementation
- Innovation with maintaining stability
- Individual teacher autonomy with systemic change
- Short-term pressures with long-term transformation

Closing Reflection

What is your compelling vision for:

- The graduate you want to develop
- The learning experience you want to create
- The school culture you want to build
- The impact you want to have on your community

Note: These questions are designed to be explored over multiple sessions. Consider focusing on one section per meeting to allow for deep discussion and meaningful action planning.

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