Building AI Organizational Readiness for Digital Transformation

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DEDICATION

My grandfather arrived in the US as a teenager, entirely on his own, to pick fruit in California through the *bracero* program. He came from Mexico with no formal education; in fact, it was my grandmother who taught him how to read. Similarly, my parents grew up in rural communities with limited access to educational opportunities.

From them, I learned about the transformative power of education. Their sacrifices and unwavering investment in my development made it possible for me to reach Harvard University.

I dedicate this capstone to my mother, father, Mama Mella, and Papa Lleyo.

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ABSTRACT

Amid tremendous political, economic, social, and technological headwinds, system-level leaders in K-12 public education face significant pressure to integrate emerging technologies into existing systems while balancing ethical and responsible use. AI integration alone is insufficient; rather, a digital transformation is required, predicated on AI organizational readiness (i.e., the collective aptitude of the system to effectively integrate intelligent technologies across workstreams). This paper leverages a case study from a large school district in California, through which Digital Promise supported an executive cabinet to develop a district-wide vision for AI literacy. While the project was successful, achieving 100% executive satisfaction and 80% internal staff approval, the implementation process revealed lessons around the importance of system coherence and organizational ambidexterity. Ultimately, this capstone introduces the Digital Leadership Convergence Model, which hypothesizes that adaptive leaders effectively catalyze digital transformation by balancing human-centered change management with the technical aspects of technological integration.

INTRODUCTION

School districts serving kindergarten through 12th grades (K-12) across the US are facing turbulent crosswinds. In March 2025, an executive order was signed by the White House to radically decrease the size of the US Department of Education (ED) (Economic Policy Institute, 2025). In the face of these sweeping changes, previously reliable funding for educational programs has become uncertain – especially in rural and low-income communities (Wething & Cohn, 2025). This fiscal uncertainty comes on the heels of a financial cliff created by the end of pandemic-era emergency funding (Wething & Cohn, 2025). Paradoxically, amid these financial losses, a significant amount of funding is becoming available for the integration of artificial intelligence (AI) into education (Chow, 2025), bolstered by the White House's AI Action Plan (2025) and ED's AI-related priorities (2025). In other words, despite a decrease in overall capacity, school districts are facing mounting pressure to adopt effective AI strategies, policies, and practices to cope with the rate of change. Districts are not only being asked to do more with less, they are expected to plough through a digital transformation (Center on Reinventing Public Education, 2026). However, as this paper will explore, digital transformation can only be achieved by achieving systemwide coherence (Center on Reinventing Public Education, 2026), predicated upon a school district's AI organizational readiness (Jöhnk et al., 2021; Tehrani et al., 2024).

The demand for school-based AI support for pupils is growing. A global survey conducted by the Digital Education Council found that 86% of post-secondary students are regularly relying on AI to support their studies (2024, p. 6). Despite widespread usage among students, a global study conducted by Ernst and Young found that approximately half of students

"struggle with critically evaluating and identifying AI's shortfalls, such as whether AI systems can invent facts" (as cited in OECD, 2025, p. 7). As the Center on Reinventing Public Education (CRPE) at Arizona State University explains, "students are already integrating AI into how they write, create, and explore future pathways, often outside of school and with little adult guidance" (2026, p. 4). The issue is exacerbated due to a lack of adoption by educators themselves. At the time that the report was published in 2025, a survey conducted by Gallup in partnership with the Walton Family Foundation found that four out of ten teachers had not yet used generative AI in their work (Gallup, p. 3). As such, it is no surprise that only 14% of students indicate that they have learned to use AI tools from their teachers (Merriman & Sanz Sáiz, 2024, p. 27). In other words, there is a growing chasm between students and their teachers in respect to AI usage, creating a precarious situation where students lack the necessary guidance to leverage emerging technologies responsibly.

It is within this context that Digital Promise operates. With an established reputation in educational technology research and development (R&D), the organization is uniquely positioned to address a critical need for capacity building in K-12 public education as school districts grapple with the integration of AI into their systems and practices (Chow, 2025). However, it is important to note that Digital Promise regards education R&D as its "bread and butter" (Digital Promise, 2026, p. 6). Given its history, the challenge for Digital Promise lies in making a strategic shift to professional services by converting its subject matter expertise into fee-for-service offerings that can meet the rising demand. As school districts and nonprofits alike cope with the realities of the federal and financial landscape, this paper will explore how Digital Promise can promote its own financial sustainability amid economic headwinds, especially as the organization ramps up its AI-related offerings.

Before exploring how Digital Promise can navigate the economic and political turbulence that currently confront the sector, it is important to contextualize the organization's origins and its recent development. Digital Promise is a nonprofit organization "working to expand opportunity for every learner" by ending the digital divide in US public schools (Digital Promise, n.d.-a, Our History). The organization was initially established by an act of the US Congress in 2008, and was signed into law as a government agency by President George W. Bush. Nearly three years later, it was then launched by President Barack Obama. The organization's mission "is to shape the future of learning and advance equitable education systems by bringing together solutions across research, practice, and technology" (Digital Promise, n.d.-b, About, What We Do). The organization further states that their vision "is that every person engages in powerful learning experiences that lead to a life of well-being, fulfillment, and economic mobility." In 2015, Digital Promise separated from the US government, and was established as an official legal entity with 501(c)(3) status. Through various private partnerships, the organization quickly diversified its funding, such that it is no longer reliant on federal funding. In fact, in 2012, government funding accounted for a fifth of Digital Promise's financial backing. Nearly a decade later, that number had fallen to 3% (Digital Promise, n.d.-d, Financials, Revenue by Source). Given this context, Digital Promise is on sturdy footing in contrast to other educational organizations that have been dependent on federal dollars, especially in light of the sweeping financial implications taking place in Washington, DC. As the organization continues to diversify its funding streams, Digital Promise is considering ways to bolster its professional services, converting its wealth of expertise into fee-for-service offerings.

In July 2025, I commenced a residency experience with Digital Promise through the Doctorate for Education Leadership (EdLD) program at the Harvard Graduate School of

Education (HGSE). During my first 30 days at Digital Promise, I conducted a series of empathy interviews with staff members to understand the history of the organization and the issues confronting the districts served by its programs, and how these dynamics play into existing funding models. Because of Digital Promise's origins as a federally-funded agency, the organization never had a centralized fundraising department that is otherwise typical of many other nonprofits. Instead, the nonprofit entity sought out most of its funding opportunities through grants and corporate sponsorships. In one empathy interview, a staff member likened the team's fundraising practices to that of hunters and gatherers, explaining that departments would seek out funds to sustain their own work. As a result, Digital Promise grew organically. Like roots seeking out water, the organizational chart branched into a myriad of directions. To this end, when asked to describe the organizational culture, one staff member colorfully described Digital Promise as a 'confederacy of fiercely independent teams that are loosely bound together by an ideal.' It is perhaps because of this culture and branching that Digital Promise underwent a restructuring process, with a new organizational chart that went into effect on July 1, 2025 (the same day that I started my doctoral residency). Facing a challenging nonprofit funding environment, the organization further realigned its staffing model in two stages during my residency experience (once in November 2025 and then again February 2026) to ensure long-term sustainability. Expanded fee-for-service offerings are a direct response to the need to create sustainable revenue-streams amid economic headwinds. In short, Digital Promise must "pivot" or "persevere" during these challenging times (Ries, 2011). Otherwise, like any organization operating at the intersection of education and technology, Digital Promise could risk becoming obsolete.

While Digital Promise takes steps to safeguard its financial stability, the demand for Digital Promise's subject matter expertise and AI capacity building is on the rise. According to a McKinsey study, AI is projected to contribute upwards of $4.4 trillion annually to the global economy (Chui et al., 2023). Within the next decade, the marketplace for AI educational tools is projected to exceed $112.3 billion in revenue, up from a mere $5.2 billion in 2024 (Kulesa et al., 2025, p. 3). Consequently, the market is being flooded with new AI tools (Center on Reinventing Public Education, 2026; Grand View Research, 2025), and usage among high school students is "surging" according to the College Board (Howell & Romee, 2025). In 2025, the College Board found that despite the fact that "nearly all students are using gen AI tools, 1 in 5 high schools allow use but have no formal policy" (Howell & Romee, 2025). In short, there is a tremendous need for services that support district leaders to put in place the systems and structures to support responsible adoption of emerging technologies in the public education sector (Burns et al., 2026). As the Center on Reinventing Public Education posits, "Meeting the moment will require decisive action from funders, policymakers, system leaders, and technology developers to move beyond fragmented experimentation toward coherent, human-centered action" (2026, p. 15).

At a time when demand is on the rise for AI capacity building, Digital Promise is replete with talent, resources, and tools to support such endeavors. In 2024, Digital Promise released its *AI Literacy Framework*, and it has since become a widely referenced resource in the field of education. The framework posits that, "safe and effective use of AI requires informed users and therefore calls on school leaders and policymakers to support AI literacy for all learners, educators, and community members to use emerging tech responsibly" (Mills et al., 2024, p. 4). Digital Promise's AI literacy framework has become integral to the organization's research-based approach to professional services. Digital Promise's AI literacy framework is housed within the

organization's Powerful Learning Division, a team that was established in July during the reorganization and served as the host for my doctoral residency experience. By merging multiple departments, the Powerful Learning Division became the largest unit within the organization, accounting for approximately a third of the organization. The name 'Powerful Learning' alludes to a new concept coined by Digital Promise. The organization defines "powerful learning" as educational experiences that "empower learners with the skills to prepare them for the future" by fostering "agency, purpose, curiosity, and connection" (Digital Promise, 2025c, p. 16). The adoption of this term marks a shift for the division. Previously focused on digital access, the team is now examining what it means to deliver educational experiences that are transformative and meaningful to students.

In the recent reconfiguration of the organization that took effect in July 2025, the Powerful Learning Division was tasked with the following impact goal: "By 2031, 30 million are engaging in sustained and meaningful experiences of powerful learning that prepare them for the future" (Digital Promise, n.d.-c). Under this broader goal, the Powerful Learning Division established 16 key results, of which two are of prime importance for the project showcased in this paper: (1) Engage 2-3 education systems (e.g., districts or states) in co-designing and testing early components of systems-level frameworks that foster Powerful Learning; and (2) Generate $1M in committed funds through professional services that enables long-term growth and innovation of Powerful Learning offerings. These key results fall under two objectives, the first focusing on "systemic change by embedding the necessary policies, culture, and infrastructure for Powerful Learning to thrive at scale" and the second with the intent to "establish partnerships and scale professional services to advance Powerful Learning" (Digital Promise, 2025b). It is within this context that the newly configured Powerful Learning Division launched its first

fee-for-service project (henceforth referred to as “the Project”) in August 2025 in partnership with a large school district in California. Reaching 11,000 staff members and 70,000 learners, the Project focused on supporting the district’s executive team to develop a district-wide vision for AI literacy.

Culminating in October 2025, the Project achieved remarkable results, with 100% of executive leaders expressing that they were satisfied or extremely satisfied with the program, and 91% indicating that they would recommend the service to others. Through this paper, the Project will be leveraged as a case study to examine the ways in which Digital Promise can incubate innovative offerings by fostering organizational ambidexterity, especially as the organization strives to build sustainable revenue streams amid economic and political shifts in the education ecosystem. To do so, the “Review of Knowledge for Action” will unpack the meaning of terms such as ‘digital transformation,’ while pulling from change management experts and theorists to explain how leaders can manage complex change in otherwise ambiguous settings. However, to start, the “Review of Knowledge for Action” begins by defining ‘AI literacy,’ while also building the case of ‘AI organizational readiness’ – a concept that is grounded in organizational psychology and promotes the idea of building systemwide coherence.

REVIEW OF KNOWLEDGE FOR ACTION

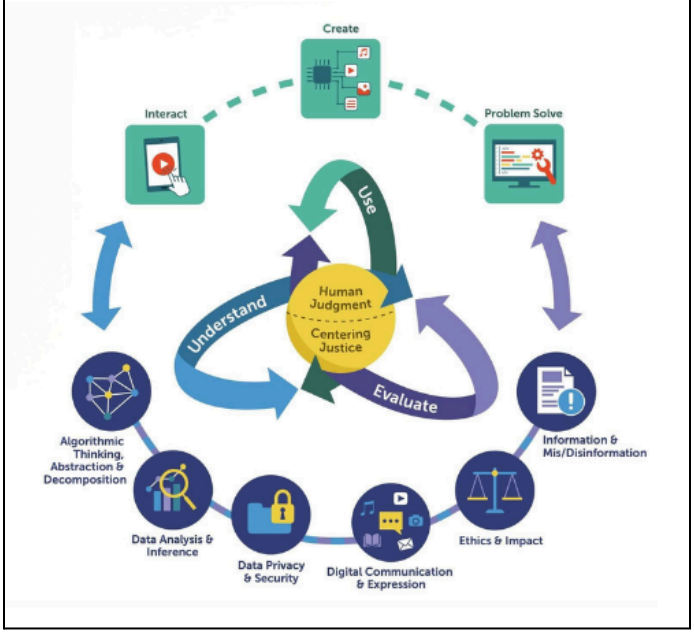
AI Organizational Readiness

Due to the rapid rate of change and the AI usage gap that exists between teachers and their students (Gallup, 2025; Howell & Romee, 2025; Kulesa et al., 2025; Merriman & Sanz Sáiz, 2024), significant capacity building is needed for educators (Center on Reinventing Public Education, 2026; Kulesa et al., 2025; OECD, 2025). In order to foster AI literacy at the classroom level, leaders overseeing school districts must develop a nuanced understanding of these emerging technologies so that they can determine whether AI can be safely integrated into existing systems and practices (Kulesa et al., 2025; Merriman & Sanz Sáiz, 2024; OECD, 2025). As the Center for Reinventing Public Education posits, leaders must "move beyond fragmented tool adoption toward more coherent and integrated school designs" (2026, p. 2). However, achieving system-level coherence for digital transformation is difficult to attain and requires a concerted effort (Ross et al., 2019). Moreover, capacity building for system-level leaders is often pushed to the side due to "competing demands and funding constraints" (Kulesa et al., 2025, p. 4). The issue is further exacerbated by a "lack of a shared understanding of what AI literacy is and how to teach it" (OECD, 2025, p. 6). As such, before exploring the ways in which leaders can foster AI integration into public education, it is important to first define key terms such as 'AI literacy,' how it differs from 'AI organizational readiness,' and then unpack the ways in which these concepts can promote a digital transformation in K-12 public education.

In 2025, the Organization for Economic Cooperation and Development (OECD) released a draft AI literacy framework, through which they define AI literacy as: "the technical

knowledge, durable skills, and future-ready attitudes required to thrive in a world influenced by AI" (OECD, 2025, p. 6). The framework developed by OECD goes on to assert that AI literacy extends beyond rudimentary understanding toward the ability to "engage, create with, manage, and design AI, while critically evaluating its benefits, risks, and ethical implications" (OECD, 2025, p. 6). The definition employed by Digital Promise parallels the one used by OECD. In fact, Digital Promise's AI literacy framework is prominently featured in OECD's draft document. According to the framework developed by Digital Promise, "AI literacy includes the knowledge and skills that enable people to critically understand, evaluate, and use AI systems and tools to safely and effectively participate in an increasingly digital world" (Mills et al., 2024, p. 4). The framework then goes on to outline a set of competencies needed for teachers to apply these technologies effectively under three broad categories: (1) Use; (2) Understand; and (3) Evaluate (see Figure 1). The term "use" refers to a teacher's ability to interact, create, and problem-solve effectively with these emerging technologies (Mills et al., 2024, p. 6). Meanwhile, the categories of "understand" and "evaluate" involve interlinking skills such as the processing of information, weighing ethics and impact, digital communication, ensuring data privacy and security, analyzing data, and exhibiting basic computational thinking skills (e.g., algorithmic thinking, abstraction, and decomposition) (Mills et al., 2024, p. 6). Ultimately, Digital Promise's AI literacy framework aims "to

Figure 1: AI Literacy Framework (Mills et al., 2025, p. 6)



ensure the safe, efficacious and ethical use of AI" (Mills et al., 2024, p. 14). As the authors of the framework explain, "Digital Promise believes that safe and effective use of Al requires informed users and therefore calls on school leaders and policymakers to support Al literacy for all learners, educators, and community members to use emerging tech responsibly" (Mills et al., 2024, p. 4). Supporting this need for responsible use, a 2025 study from the Massachusetts Institute of Technology (MIT) used electroencephalography (EEG) to identify a decline in neural connectivity among users who over-relied on generative AI, a phenomenon the researchers characterize as "cognitive debt" (Kosmyna, p. 1). As such, the frameworks developed by OECD and Digital Promise both advocate that AI literacy must include the ability to examine emerging technologies through a critical lens.

While the term 'AI literacy' is most widely used in the education sector, 'AI readiness' is another alternative that has also gained attention from prominent thinkers and practitioners. Well before tools like ChatGPT became commonplace, the term 'AI readiness' was already in use by Rose Luckin, a world-renowned AI expert who teaches at the University College London's Institute of Education. As Luckin and her colleagues explain, "The concept of AI Readiness is a way to describe the transition that those working in education and their students need to make from not understanding what AI is and what AI can do, to being able to understand, in non-technical terms, what AI is capable of achieving" (2022, p. 1). The same publication goes on to argue that "Al Readiness training is not the same as merely learning about Al. Rather, Al Readiness recognises the diversity of the professions, workplaces and sectors for whom Al has a potential impact" (Luckin et al., 2022, p. 1). It is for that reason that Luckin advocates for "a participatory training process and aims to empower people to be more able to leverage Al to meet their needs" (Luckin et al., 2022, p. 1). Within a similar vein, the term 'AI readiness' has

also been adopted by organizations such as Bellwether Education Partners and aiEDU. Through their framework, Bellwether and aiEDU treat AI literacy as a "baseline understanding of the technology," whereas AI readiness refers to "the skills, tools, critical-thinking mindsets to navigate and shape a world increasingly influenced by AI" (Kulesa et al., 2025, p. 11). That is to say, Bellwether Education Partners and aiEDU regard 'AI readiness' as the ability to apply emerging technologies to higher-order thinking (Bloom, 1956). In short, there is no universally shared definition of AI literacy or AI readiness.

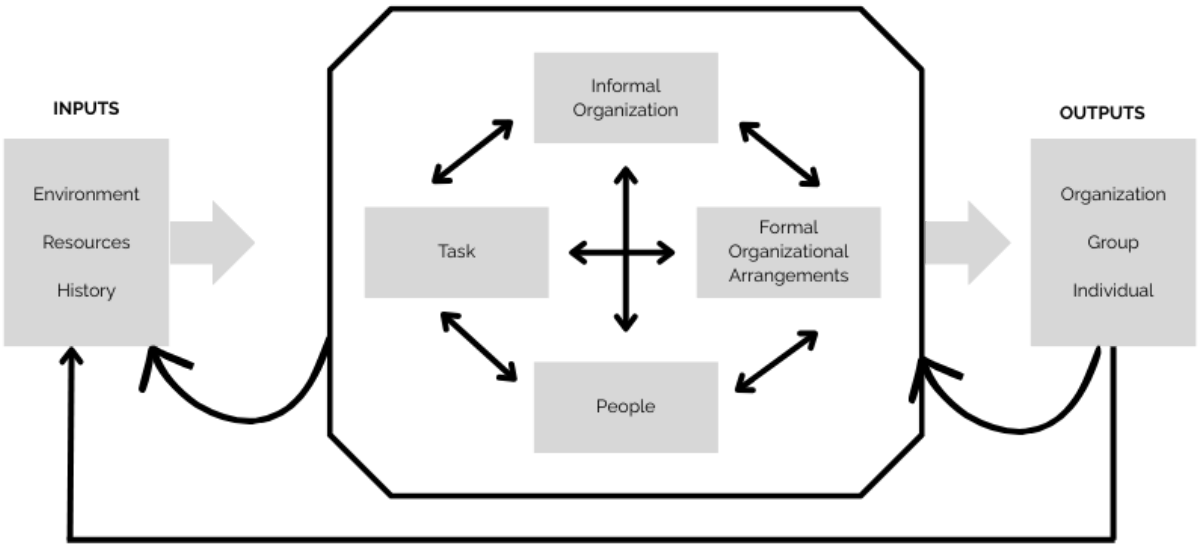
What is perhaps most striking about the term 'AI readiness' is the extent to which this term is being applied to the field of organizational psychology. Two recent international studies help to shed light on the topic. One study conducted in South Asia interviewed 52 managers working at large multinational corporations in the midst of systemwide AI integration (Tehrani et al., 2024). The other study, conducted in Germany, entailed semi-structured interviews with 25 AI experts (Jöhnk et al., 2021). Both studies intentionally endorsed the term 'AI organizational readiness,' and both also grounded the use of the term in Bryan Weiner's theory for organizational readiness. Through the lens of organizational psychology, Weiner's theory posits that organizational readiness is, "a multi-level, multi-faceted construct. As an organization-level construct, readiness for change refers to organizational members' shared resolve to implement a change (change commitment) and shared belief in their collective capability to do so (change efficacy)" (Weiner, 2009, p. 1). Weiner goes on to expand that, "Social cognitive theory suggests that when organizational readiness for change is high, organizational members are more likely to initiate change (e.g., institute new policies, procedures, or practices), exert greater effort in support of change, and exhibit greater persistence in the face of obstacles or setbacks during implementation" (Weiner, 2009, p. 5). It is with Weiner's theory in mind that the authors of the

2024 study in South Asia define 'AI organizational readiness' as "the state of an organization in terms of willingness and ability of its stakeholders, and suitability of its environment, processes, data and resources for adopting and operating AI" (Tehrani et al., 2024, p. 4). Similarly, the study from Germany found that successful systemwide AI adoption is dependent on the organization's ability to "create the necessary conditions, and introduce managerial practices" (Jöhnk et al., 2021, p. 6).

Through their interviews with 25 AI experts, Jan Jöhnk, Malte Weißert, and Katrin Wyrtki identified five dimensions that underpin AI organizational readiness: (1) Strategic alignment; (2) Resources; (3) Knowledge; (4) Culture; and (5) Data (Jöhnk et al., 2021, p. 6). These dimensions parallel what has been captured through other frameworks, such as the "building blocks" identified by Jeanne Ross and her colleagues at the MIT (2019). Considered an eminent scholar on the topic of digital transformation, Ross approaches digital transformation through the lens of organizational design and capacity building. In *Designed for Digital*, which has become regarded as one of the most influential books on the topic of digital transformation, Ross and her colleagues outline the building blocks needed in order to achieve digital transformation, which include: (1) An "operational backbone" (i.e., the "core" work being done); (2) "Insights" about the end-user; (3) An "accountability framework" to support teams with decision-making; as well as (4) Both internal and external digital platforms to support the intended transformation (i.e., infrastructure) (Ross et al., 2019, pp. 119-120). While parallels can be drawn between Ross' building blocks and the model presented by Jöhnk and his colleagues, it cannot be ignored that both frameworks share commonalities with a coherence framework popularized by Harvard Business School professors David Nadler and Michael Tushman in 1980, otherwise known as the "Nadler-Tushman Coherence Framework." The Nadler-Tushman

Framework posits that leaders must strategically align people, task, informal organization, and formal organizational arrangement in order to achieve desired outputs (see Figure 2). According to the model introduced by Ross, digital transformation is no different, insofar that all elements within an organization must be aligned to the desired change in order for implementation to be successful (Ross et al., 2019).

Figure 2: Nadler-Tushman Coherence Framework



Adapted from Nadler-Tushman (1980, p. 47)

What then is digital transformation? In his 2019 seminal piece, expert Gregory Vial defines digital transformation as "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies" (p. 118). Meanwhile, the European Union (which regards digital transformation as a top priority), uses the following definition: "the integration of digital technologies by companies and the impact of the technologies on society" (European Parliament, 2021, What is digital transformation?). The term 'digital transformation' has significantly changed over the years, morphing as the technology itself has developed and

reshaped society. In its early years, ‘digital transformation’ simply implied the digitization of processes, transitioning “from analog to digital” (Pellicelli, 2023, Chapter 2, Section 1.2.1). With the emergence of AI, the term is again acquiring a renewed meaning (Paige, 2024). While some circles are advocating for novel terms such as “intelligence transformation” (Etwaru, 2023), others argue that the term ‘digital transformation’ is already broad enough to absorb future technological breakthroughs – just as the term has done over time. After all, the term ‘digital’ is grounded in early computational theory (Turing, 1936; Shannon, 1948) and has continued to flex as technologies have evolved. It is for this reason that the term ‘digital transformation’ will be used in this paper.

As technical as the term may seem, digital transformation is deeply human work (Ross et al., 2019). As George Westerman, another digital transformation expert from MIT, explains: “In an age of digital innovation, leaders in every industry should strive to transform every part of the [organization], from [user] experience… to operational management. But we cannot forget that it is people who make [organizations] work” (2016, p. 3). It is for that very reason why Ross posits that organizations can only fully “unlock the benefits of artificial intelligence” when leaders intentionally “build an empowered, AI-savvy workforce” – which requires an “upgrade in people’s skills” (Ross, 2018, p. 10). Meaning, digital transformation depends on adaptive leadership, and the collective knowledge, skills, and mindsets of the people within a given system. As such, in this paper, digital transformation is defined as the convergence of human-centered change management orchestrated strategically to unlock the fullest potential of technological integration across a system. Change management as a concept will be explored in more detail in the next section.

Due to the adaptive human dimensions involved in digital transformation, experts recommend an iterative approach to change, one that brings people along in the process (Kulesa et al., 2025; Luckin, 2022). Luckin advocates that true AI readiness leads to the ability for educators to collaborate effectively with technology leaders and researchers, in order to explore "how such tools might be developed ethically from an initial idea, through an evaluated prototype, to a saleable and useful product" (Luckin et al., 2022, p. 2). Similarly, Bellwether Education Partners suggest a "pilot, implement, scale, and learn" approach to AI in public education, arguing that more must be done to "transform one-off successes into scalable, sustainable change" so that school systems "move from reactive experimentation with AI toward proactive, coherent AI strategies that serve all students" (Kulesa et al., 2025, p. 6). To that end, Ross also posits that digital transformation "requires experimentation," through which leaders develop a "roadmap" to tackle prioritized building blocks (Ross et al., 2018, p. 126).

According to *Designed for Digital*, the most successful organizations "focus initially on developing one or two building blocks. Leaders invest resources to lead the change that will embed a new digital capability" (Ross et al., 2018, p. 128). As Ross further explains, "A roadmap can help a company avoid two risks of a digital transformation: (1) dividing resources across so many building blocks that the company doesn't make real progress on any of them; or (2) becoming too focused on one or two for too long and failing to develop other building blocks that are also essential" (Ross et al., 2018, p. 129). However, this roadmap must first be grounded in a vision (Ross et al., 2018). As the International Society for Technology in Education (ISTE) outlines through its standards for system-level leaders, it is essential for districts to "engage others in establishing a vision, strategic plan and ongoing evaluation cycle for transforming learning with technology (ISTE, 2024, p. 7). Only with a 'shared vision' can leaders proceed to

implementation. As leaders implement, they must then ‘evaluate progress’ and ‘communicate effectively’ with stakeholders to bring them along in the process’ to ‘make course corrections,’ ‘share lessons learned,’ and ‘embed best practices’ into a new way of being (ISTE, 2024, p. 7).

Through this section, we have established that ‘ AI literacy’ is the most widely accepted term to describe an individual learner’s mastery over intelligent technologies, whereas AI organizational readiness encompasses the collective aptitude of a system to integrate such technologies at scale. To use a metaphor, AI literacy is similar to the fitness regiment used by an individual to remain healthy. However, AI organizational readiness is more akin to a team practicing together in order to remain athletically competitive. To extend the analogy, digital transformation is therefore the outcome of the team’s vigorous collective efforts, working in unison to achieve extraordinary feats on the field. As such, through this paper, there is a recognition that digital transformation can only be achieved when education leaders foster system-level coherence through their respective technological strategies. To that end, leaders require capacity building that helps them to set a bold vision for systemwide change, while building out a roadmap that helps them break down their vision into manageable, iterative cycles of innovation. In the next section, we will examine the key elements of change management, and the steps needed to lead strategically, especially in contexts aiming to achieve digital transformation despite a rapidly evolving field.

Change Management

While no single author can be credited with the concept of ‘change management,’ Kurt Lewin’s Three-Step Model for Change can be regarded as foundational to later thinkers (Hussain

et al., 2018). Developed throughout the 1940s, Lewin's model posits that change can only take place within entrenched group dynamics when the status quo is pushed into disequilibrium (Lewin, 1947), a stage which Lewin demarcates as a period of "unfreezing" (Hussain et al., 2018, p. 124). The second stage is then characterized by "movement," through which leaders are able to implement the necessary changes in order to transition "an organization from the known (current state) state to the unknown (desired future state) state" (Hussain et al, 2018, p. 123). During the last stage, Lewin argues that leaders must then "freeze" the desired changes in order to restore equilibrium within the system (Hussain et al, 2018, p. 123; Lewin, 1951, p. 147). John Kotter, one of the most prominent contemporary thinkers on the topic of change management leadership, has continued to build upon Lewin's original work. In his book *Leading Change*, Kotter outlines the steps that leaders should take to "defrost a hardened status quo" to achieve transformation (Kotter, 2012, p. 16). These steps include: "establishing a sense of urgency, creating the guiding coalition, developing a vision and strategy, communicating the change vision, empowering a broad base of people to take action, generating short-term wins, consolidating gains… and institutionalizing new approaches in the culture" (Kotter, 2012, p. 15). Within the scope of the Project, it is important to note that the content of the session primarily focused on the vision-setting step in Kotter's framework so that district leaders could in turn develop a strategy.

In their book *Leading Strategically: Achieving Ambitious Goals in Education*, Harvard professor Elizabeth City and education leadership expert Rachel Curtis offer a new framework to conceptualize change management in the education sector (see Figure 3). The model is built around "five elements" that include "(1) discern, (2) cultivate relationships, (3) understand context and history, (4) harness power, and (5) think big, act small, learn fast" (City & Curtis,

2025, p. 5). Discernment, as described by the authors, is the process of 'gathering data by counting, seeing, hearing, and feeling what is going on…' (p. 5). This in turn allows leaders to build a foundation of trust upon which relationships can be built by "... acknowledging colleagues' humanity, inviting them into work, and honoring their contributions" (p. 6). Also connected to discernment is the need to understand the context and history of an organization, so that a leader can see how "the current context and culture and how they intersect and interact…" (pp. 6-7). Only then can a leader harness power, by 'paying attention to who makes what decisions, how power flows, and the politics, biases, and inequities reflected in those things' (p. 7). However, by harnessing power, a leader must move through change deftly by iterating and quickly learning from both wins and failures. To do so, leaders must "hold the big picture in mind while constantly thinking about the parts of the whole and the relationships and interactions among them" (p. 8). These five elements were instrumental in the design of the project that is explored through this capstone paper.

Figure 3: Leading Strategically Framework

Adapted from City & Curtis (2025, p. 6)

In change management processes, the practice of deep listening is a catalytic ingredient that cannot be overlooked, as it can have a profound effect on a leader's ability to contextualize, discern, build relationships, navigate power dynamics, and iterate effectively. As Elena Aguilar writes in her highly influential book *The Art of Coaching, "*In order to transform our education

system, we need to pay attention to the people who make up this system and all of their needs. This requires everyone to develop tremendous patience, compassion, humility, attentiveness, and a willingness to listen deeply" (2013, p. 7). Expanding on this concept, City and Curtis borrow from C. Otto Scharmer's work, explaining that there are "four ways of listening: 'downloading–listening from habit; factual–listen from outside; empathetic–listen from within; [and] generative–listen from the field'" (City & Curtis, 2025, p. 59). It is because of listening and discernment that leaders can "make sense of several things: what's going on around us, data and evidence, how we are feeling, what we anticipate or predict may be important in the future, and how the thing in front of us relates to a bigger goal or vision" (City & Curtis, 2025, p. 15). Moreover, especially for individuals in a doctoral residency program, City and Curtis posit that, "Talking with people is a crucial way to understand context and history. This is one of the reasons why relationship building is so important, particularly as you enter a new organization" (City & Curtis, 2025, p. 81). The timebound nature of the EdLD residency necessitates program participants to enter the host institution by being keenly aware of past "successes and strengths" of the organization that can be leveraged, especially since these "are often underutilized resources when it comes to understanding history and context" (City & Curtis, 2025, p. 82).

Just as important as fostering relationships, it is also essential for newcomers in an organization to be power literate – meaning they must be able to read the power dynamics around them. Whether 'positional' or 'personal' (City & Curtis, 2025, p. 99) all individuals within an organization possess power. As City and Curtis explain, power "is conferred on us based on our position (social, economic, or professional), expertise, or affiliations" (City & Curtis, 2025, p. 95). As such, "Strategic leaders don't just notice power. They manage it" (City & Curtis, 2025, p. 104). In order to manage power, an individual must first recognize their "own

relationship to power," and observe the "interplay" between our own conceptions of power and how those ricochet across "interactions with others and with systems" (City & Curtis, 2025, p. 93). Once an individual recognizes their own power, and how it connects to the system around them, leaders must also pay attention to the fluid nature of power – it is constantly shifting. By understanding "where power lies, how it flows," leaders can wield influence, by connecting their own power to the power of others (City & Curtis, 2025, p. 96).

However, power in and of itself is insufficient to accomplish change. A leader with tremendous positional power could mandate change through a top-down approach, but such an approach may not wield the collective buy-in needed to achieve system-wide transformation. Conversely, co-creating solutions in partnership with others can unlock change in "complex environments where there aren't clear solutions to problems" (City & Curtis, 2025, p. 47). Additionally, as ISTE lays out in its standards, leaders must be able to set a bold vision for digital transformation. However, again a bold vision alone may be insufficient – as it may feel overwhelming to teams, especially under the weight of rapid technological advancements. As City and Curtis explain, "Thinking big helps leaders hold the big picture and stay anchored in purpose… Acting small helps us to actually make things happen, to not get overwhelmed by the complexity of the big thing, and to use our resources with intention" (City & Curtis, 2025, p. 124). By 'thinking big' and 'acting small,' leaders can bridge the divide between vision and practice through "faster learning cycles" (City & Curtis, 2025, p. 132). After all, "Learning is key to improvement. Learning fast helps us to be more responsive and make adjustments that move us more quickly toward the North Star" (City & Curtis, 2025, p. 125).

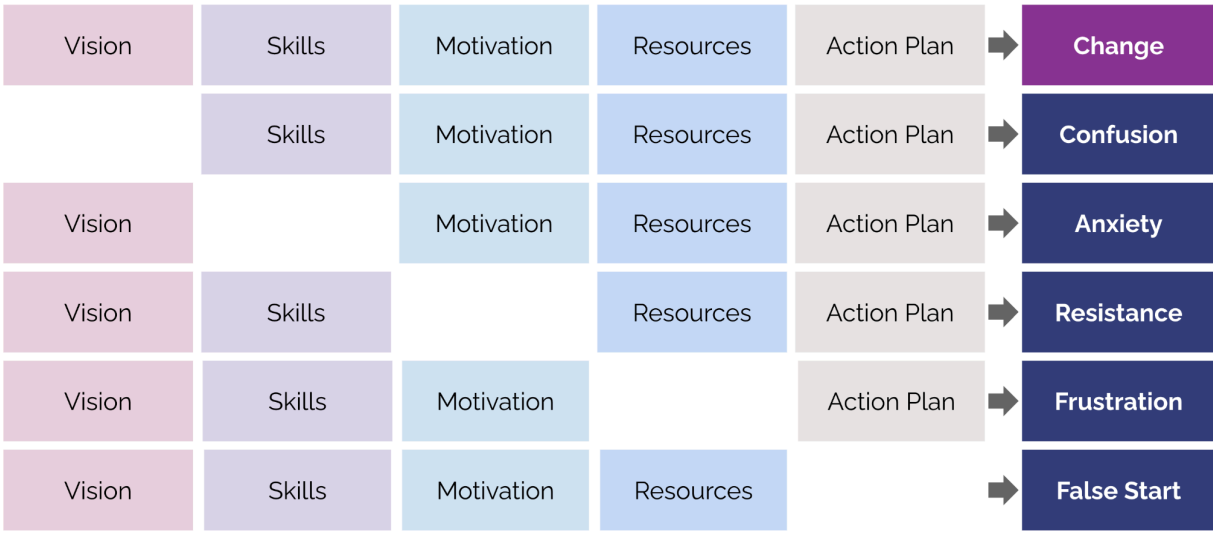
While the Leading Strategically Framework from City and Curtis informed the theory of action and logic model for the Project (see "Project Description"), the Managing Complex

Change Model (often referred to as the Lippitt-Knoster Model) was selected to analyze the outcomes through an internal staff survey (see "Outcomes"). The decision to use the Leading Strategically Framework to guide entry planning was grounded in the tool's ability to serve as a strategic planning tool, especially since this model aligns closely with my own relationship-oriented and co-creative leadership philosophy. However, while compelling, the dimensions of the Leading Strategically Framework (i.e., discern, harness power, etc.) can be difficult to measure, whereas the components of the Lippitt-Knoster Model lend themselves well to assessment (while continuing to align a human-centered approach).

The Lippitt-Knoster Model was initially conceptualized by The Enterprise Group, through the work of Delorese Ambrose and Mary Lippitt (1987). The model then became popularized in the field of education by Timothy Knoster through a presentation delivered in 1991 at the TASH Conference. Later, in 2000, Knoster applied the model to 'inclusive education' through a piece titled, "A framework for thinking about systems change." The framework developed by Ambrose, Lippitt, and later Knoster provides a mental model through which leaders can evaluate the extent to which an initiative has core ingredients to achieve success. According to the Lippitt-Knoster Model, missing even one core ingredient could lead to significant issues. For example, a project without a vision may result in confusion. A team without the necessary skills will experience anxiety, whereas a lack of motivation will cause resistance. Meanwhile, if a project lacks sufficient resources, a team may feel frustrated with the process. Alas, without a clear plan, leaders may run into a 'false start' (see Figure 4). When a project is built upon a sturdy foundation in each of the five pillars (i.e., vision, skills, motivation, resources, and action plan), only then can change be sustained (Knoster et al., 2000, p. 97). It is for these reasons that the Lippitt-Knoster Model was leveraged in order to design the

post-implementation survey provided to staff members who were engaged in the Project. In doing so, team perceptions of the Project's implementation could be used to signal the extent to which effective change management practices were employed.

Figure 4: Lippitt-Knoster Model



Adapted from Ambrose (1987), Lippitt (1987), & Knoster et al. (2000, p. 97)

Both the Leading Strategically Framework and the Lippitt-Knoster Model will be revisited in later sections, insofar as both informed the Project's theory of action as well as the logic model. However, before doing so, it is important to understand organizational ambidexterity, and the role this concept plays in fostering a culture of innovation. Especially as it relates to initiatives that aim to launch new programs, products, and services, knowing how to simultaneously look to the future while continuing to maximize existing strengths is a crucial ability that innovative teams must balance.

Organizational Ambidexterity

While effective leaders who strive to achieve systemic change will think big and act small to innovate, they must also build ambidextrous organizations – that is to say, organizations that look both inwardly towards existing assets and outwardly towards untapped potential (Duncan, 1976; March, 1991; O'Reilly & Tushman, 2004). Robert Duncan, who is credited as the first organizational theorist to use the term "organizational ambidexterity," introduced the idea in a chapter titled "The Ambidextrous Organization: Designing Dual Structures for Innovation" (1976). Taking a structural approach, Duncan's approach advocates for organizations to establish "separate units that pursue either exploitation or exploration" (Raisch & Birkinshaw, 2008, pp. 389-390). However, as experts Sebastian Raisch and Julian Birkinshaw explain, while "Duncan was the first to use the term organizational ambidexterity, it is [James] March's landmark article that has frequently been cited as the catalyst for the current interest in the concept" (Raisch & Birkinshaw, 2008, p. 376). James March, a professor at Stanford University and one of the most influential organizational theorists of the modern era, expanded upon the idea of organizations balancing exploration with exploitation (Raisch & Birkinshaw, 2008, p. 376). While March uses the former to describe "search, variation, risk taking, experimentation, play, flexibility, discovery, innovation," the latter is used to capture "such things as refinement, choice, production, efficiency, selection, implementation, execution" (March, 1991, p. 71). To that end, March argues that organizations that neglect exploitation in favor of exploration "find themselves trapped in suboptimal stable equilibria," whereas the reverse leads to "too many undeveloped new ideas and too little distinctive competence" (March,

1991, p. 71). With this in mind, March posits that "adaptive systems" (as he calls them) must maintain "an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity" (March, 1991, p. 71). In other words, organizations must be ambidextrous.

While Duncan and March are both credited as some of the early thinkers related to organizational ambidexterity, the concept was popularized by Michael Tushman from the Harvard Business School and Charles O'Reilly III from the Stanford Graduate School of Business (Tushman & O'Reilly, 1996). Through their work, Tushman and O'Reilly synthesize the ideas proposed by their predecessors, re-interpreting March's concept of balancing exploitation and exploration through the lens of Duncan's notion of organizational ambidexterity. In an article published in 2004, O'Reilly and Tushman use the analogy of a Roman deity that "had two sets of eyes – one pair focusing on what lay behind, the other on what lay ahead" (O'Reilly & Tushman, 2004, p. 74). By looking to the past, they argue that good leaders can continue to leverage past successes by making incremental improvements on existing offerings, while looking to the future for new, bold ideas that can catalyze radical change (O'Reilly & Tushman, 2004). As O'Reilly and Tushman explain, the model of an ambidextrous organization provides "a practical and proven model for forward-looking executives seeking to pioneer radical or disruptive innovations while pursuing incremental gains" (O'Reilly & Tushman, 2004, p. 75). Through their work, O'Reilly and Tushman found that ambidextrous organizations are far more successful in comparison to their counterparts. In fact, in one study, O'Reilly and Tushman found that less than a quarter of other team structures produced successful results, whereas "90% of the ambidextrous organizations achieved their goals" (O'Reilly & Tushman, 2004, p. 76). From their perspective, O'Reilly and Tushman posit that organizations "failed because of their inability to

play two games at once: To be both effective defenders of what quickly became old technologies and effective attackers with new technologies" (Tushman & O'Reilly, 1996, p. 10).

According to O'Reilly and Tushman, the reason why so many companies become obsolete is because attempts to "adapt to discontinuities through incremental adjustment are unlikely to succeed" (Tushman & O'Reilly, 1996, p. 12). Meaning, recalcitrant companies avoid risk by simply making minor adjustments to their core product. From their experience, O'Reilly and Tushman lament that "only a small minority of farsighted firms initiate discontinuous change before a performance decline" (Tushman & O'Reilly, 1996, p. 23), resulting in companies that "go from leading edge to historical oddity in barely the blink of an eye" (The Ambidextrous Organization, 1997, p. 42). Without "radical advances" through "discontinuous innovations," companies themselves will become obsolete; The goal is 'render old products or ways of working obsolete' through "radical advances" before the organization becomes obsolete in and of itself (O'Reilly & Tushman, 2004, p. 76). To do so, leaders must be ready to "cannibalize their own products" and core business (The Ambidextrous Organization, 1997, p. 46; Tushman & O'Reilly, 1996, p. 24). This type of cannibalization is not easy to accomplish, especially since teams upholding existing flagship programs and products may perceive new products as threats to their own stability. In the words of O'Reilly and Tushman, "the power, resources, and traditions of organizations are usually anchored in the more traditional units" (The Ambidextrous Organization, 1997, p. 43). As such, these teams often "try to ignore, trample, or otherwise kill the entrepreneurial units" (The Ambidextrous Organization, 1997, p. 43). According to O'Reilly and Tushman, the more established an organization is, with 'institutionalized norms, values, and stories,' the more challenging it is to overcome the "cultural inertia" due to "organizational complacency and arrogance" (Tushman & O'Reilly, 1996, p. 17). Given this, leaders "must not

only protect and legitimize the entrepreneurial units, but also keep them physically, culturally, and structurally separate from the rest of the organization" (The Ambidextrous Organization, 1997, p. 43).

To do so, O'Reilly and Tushman argue that both core and innovation units must be "tightly integrated at the senior executive level" (O'Reilly & Tushman, 2004, p. 75). At the same time, while tightly integrated as a core strategy at the senior and executive-leadership levels, ambidextrous organizations are also "loose," providing space for "openness, autonomy, initiative, and risk taking" (Tushman & O'Reilly, 1996, p. 26). In other words, such organizations are "simultaneously tight and loose" (Tushman & O'Reilly, 1996, p. 26) in that leaders "promote both local autonomy" (Tushman & O'Reilly, 1996, p. 27) while ensuring strong alignment and accountability to a shared vision. As O'Reilly and Tushman elaborate, "This combination of autonomy and access to core business assets, all under the sponsorship of a senior leader and team with a shared ambition for growth, is what defines the ambidextrous organization approach" (Binns et al., 2022, p. 108). Building off of Duncan's earlier concept of structural ambidexterity, Tushman and O'Reilly argue that it is essential to create an innovation unit that possesses "autonomy from the core business" so that "it is free from the core business system, while also sustaining access to its assets to support its scaling path" (Binns et al., 2022, p. 120). Or, to put it differently, "The new ventures need to be able to secure access to the assets needed to complete the scaling path without getting crushed by the short-term pressures of the core business" (Binns et al., 2022, p. 108). Through this structure, organizations are able to "support core and explore units equally well" (Binns et al., 2022, p. 120) while "managing for short-term efficiency by emphasizing stability and control, as well as for long-term innovation by taking risks and learning by doing" (The Ambidextrous Organization, 1997, p. 43).

However, it is important to note that not all management scholars advocate for a structural approach to implementing ambidexterity. Extending the concept, Cristina Gibson and Julian Birkinshaw contend that ambidexterity can be cultivated without rigid structural delineation between teams. Instead, they propose "contextual ambidexterity," which they define as: "an interplay of system capacities—for alignment and adaptability—that simultaneously permeate an entire business unit" (Gibson & Birkinshaw, 2004, p. 211). Rather than building "dual structures" that create separation within a team, contextual ambidexterity disburses the function across the system "by building a set of processes or systems that enable and encourage individuals to make their own judgments about how to divide their time between conflicting demands for alignment and adaptability" (Gibson & Birkinshaw, 2004, p. 210).

Whether taking a structural or contextual approach to balancing exploitation with exploration, organizations must "reconcile internal tensions and conflicting demands in their task environments" (Raisch & Birkinshaw, 2008, p. 375). After all, both activities "fundamentally different organizational structures, strategies, and contexts" (Raisch & Birkinshaw, 2008, p. 376). Through Tushman and O'Reilly's structural approach, they would argue that success hinges on "a common set of values, a shared vision, and an overarching governance process" (Raisch & Birkinshaw, 2008, p. 389). Similarly, Gibson and Birkinshaw posit that contextual ambidexterity can only be fostered "when a supportive organization context is created," by enabling "individuals [to] engage in both exploitation-oriented actions (geared toward alignment) and exploration-oriented actions (geared toward adaptability)" (2004, p. 213).

Ultimately, leaders who intend to promote ambidexterity on their teams must consider how to strategically foster a culture of innovation that simultaneously looks inwardly and outwardly to exploit internal assets while exploring novel offerings, linking these dual activities

with a shared vision and goals. As such, in the next section I will expand on the aims of the Powerful Learning Division, and how the Project's theory of action supports the organization's long-term goals. Additionally, in the next section, the convergence of three key concepts will begin to emerge: AI organizational readiness, change management, and organizational ambidexterity. As this paper will continue to expound, the convergence of these three concepts lay the foundation for digital transformation through the creation of systemwide coherence.

Theory of Action

The theory of action that I established for the Project is directly informed by the concepts outlined in my "Review of Knowledge for Action." However, in order to understand why I selected these theoretical frameworks, it is important to first take into consideration my professional background. Prior to starting the EdLD program at Harvard University, I served as the Interim and Deputy CEO of Teach For Armenia, one of the largest educational institutions in its context, reaching 10% of all public schools. During my first year as an executive leader, I led an organizational restructuring and a staff culture turnaround effort, which catapulted Teach For Armenia to the #1 spot in a global survey conducted by Boston Consulting Group (BCG). In the same year, I wrote a grant proposal that secured over $24 million to support the organization's expansion, which subsequently allowed us to double the size of our operations within a period of one year with 100 staff members. Perhaps most importantly, my time as the Interim CEO overlapped with a war that broke out in the region. With a Master's degree from Columbia University that focused on providing education in conflict zones, I quickly mobilized an emergency response for the students and their teachers who were evacuated from the affected

territory. At the height of the war, the emergency effort supported 1 out of every 13 students displaced due to the conflict. Despite the tumult caused by the crisis, staff morale remained high. Teach For Armenia continued to rank at the top in BCG's survey. Additionally, by the time I left, Teach For Armenia was rated globally as a "Great Place to Work" (Great Place to Work, 2024).

Throughout it all, the greatest lesson that I derived from my four years as an executive was the power of taking a human-centered approach to leadership. Six months before I arrived in Armenia, Teach For Armenia's performance on the BCG survey had plummeted to the second lowest spot in the Teach For All network, with nearly all indicators in the red. Given this, upon joining the team, I prioritized conducting empathy interviews with each and every staff member. During each interview, I explained the concept of 'deep listening,' and emphasized that the purpose of the interviews would not be to resolve issues – rather, the intent was to just listen and understand the pain points of each and every staff member. After completing all empathy interviews within my first 30 days, I then led a 60-day design process, through which I worked with a cross-functional working group to engage 280 stakeholders (including students and their families) in the creation of the organization's new theory of change. Because the theory of change was co-created with such a broad audience, the resulting framework became a powerful unifying force for the team. It is for that reason, despite a highly turbulent period of time, staff morale remained high. In a way, my time as an executive leader was a crucible experience, forging me into a leader who can lead with heart amid calamity.

It is with this personal context in mind that I selected the Leading Strategically Framework from City and Curtis and the Lippitt-Knoster Model to inform the leadership decisions that I made while implementing the Project. Given the organizational restructuring that took place as I began my residency at Digital Promise, I wanted to be sensitive to interpersonal

dynamics. My actions would require discernment and agility, being responsive to the needs of the team while leveraging the skills that I had fine-tuned as an executive to deftly navigate obstacles. Moreover, through the lens of system-level change, it was important for me to position the Project as an opportunity to derive learning around AI organizational readiness and organizational ambidexterity, concepts that could have material implications for the organization as it strives to reach its ambitious goal of reaching 30 million learners by 2031. Therefore, the strategic decisions and leadership moves that I chose to prioritize to implement the Project were encapsulated in the following theory of action:

If I strategically lead the Powerful Learning Team's first fee-for-service project by:

1) Seeking to understand the context and history;
2) Practicing deep listening in order to discern team dynamics;
3) Cultivating a positive working environment that fosters relationship building;
4) Harnessing the power of my own skills; and
5) Learning iteratively while evaluating impact;

Then I will establish a blueprint for executive-level AI readiness programming that can be scaled,

So that Digital Promise can become an ambidextrous organization with sustainable revenue streams, fueling its growth towards reaching 30 million learners.

By synthesizing these leadership moves – ranging from deep listening to iterative learning – I aimed to cultivate AI organizational readiness through a practical case study that

models organizational ambidexterity for the Powerful Learning Division. This integration of theory and practice serves as the foundation for the project details that follow. In the next section, I will provide a comprehensive description of the Project, its implementation timeline, my specific leadership decisions, and the resulting outcomes. To ground this transition, Table 1 summarizes the core concepts from the "Review of Knowledge for Action" that will be analyzed throughout the remainder of this paper.

Table 1: Core Concepts and Definitions

Term	**Definition**
AI literacy	An individual learner's mastery over intelligent technologies, including the knowledge and skills to critically apply AI tools safely and effectively.
AI organizational readiness	The collective aptitude of a system to effectively integrate emerging technologies across workstreams.
System Coherence	The strategic alignment of people, task, informal organization, and formal arrangement in order to achieve desired outputs.
Digital transformation	The convergence of human-centered change management orchestrated strategically to unlock the fullest potential of technological integration across a system.
Change management	A strategic process used to move an organization from its existing state to a desired state by addressing complex, human-centered challenges.
Organizational ambidexterity	The ability of an organization to simultaneously leverage existing assets (i.e., exploitation) while looking outwardly to untapped potential (i.e., exploration).
Structural ambidexterity	The creation of a semi-autonomous innovation unit that is devoted to exploration and shielded from the pressures exerted by an organization's core business.
Contextual ambidexterity	The diffusion of organizational ambidexterity across teams, enabling all departments to balance the exploitation of existing assets with the exploration of new opportunities.

PROJECT DESCRIPTION

In this section I will begin by providing a general overview of the Project, a step-by-step outline of the implementation timeline, followed by an explanation of the leadership actions that I took based on my theory of action. However, before doing so, it is important to name three key dynamics that were at play while the Project was being implemented. First, the Project was the first fee-for-service program to be delivered by the newly constituted Powerful Learning Division. In an empathy interview, a colleague characterized the organizational restructuring process as emotionally charged and highly political. Second, in light of the restructuring, previously independent teams now found themselves reorganized under a new centralizing body. As such, at the time that the Project was launched, norms around cross-functional collaboration had not yet been established or embedded within the division's *modus operandi*. Third, the Project was implemented in a highly truncated timeline (i.e., 36 full production days). As explained to me by a colleague with a background in product development, it is not uncommon for large educational service providers to devote six months to developing new products. Given this, the runway for the Project posed considerable challenges, especially in light of the aforementioned sensitivities. With this context in mind, I will now provide a general overview of the Project.

Background

In July 2025, a large school district in California (henceforth referred to as "the District") contacted Digital Promise through the organization's website, requesting information about

AI-related professional development services. The District is among the 50 largest school districts in the US, reaching 70,000 students with 11,000 employees. The request for services stemmed from a need to build coherence around a district-wide strategy for AI literacy. Prior to contacting Digital Promise, the District had engaged a competitor, but ultimately chose Digital Promise due to the organization's longstanding relationships with school districts through its various programs and the prominence of its AI literacy framework. The original pitch for the Project was developed by a colleague who proposed a multi-phased partnership that would include an AI Leadership Accelerator (i.e., an ongoing series of virtual professional learning experiences) as well as an AI Leadership Summit (i.e., a gathering of 150 district leaders, principals, as well as other school-based staff). To kick-off the Project, the first phase included an in-person full-day vision-setting workshop for the District's executive leaders (henceforth "Visioning Session"), as well as one-hour train-the-trainer onboarding experience for school-based staff members who would serve as 'AI Champions' for their respective teams (henceforth "AI Champions Onboarding"). The train-the-trainer program also included an online community platform that would help to facilitate peer-to-peer collaboration across schools. For the purposes of this paper, I will focus my analysis on the Visioning Session.

On August 27, 2025, the District agreed to the activities proposed for Phase 1, which included Visioning Session and AI Champions Onboarding. In initial conversations with the District, a delivery date in January 2026 was originally proposed. However, upon the creation of the contract, the District asked for the delivery date to be moved up to October 2025, creating an extremely truncated design period. Despite the tight turnaround, the team decided to proceed with the partnership given that the Project would serve as the Powerful Learning Division's first

fee-for-service contract, providing the team with a high profile partnership in a state like California where there is significant demand for such services.

Implementation

On the day that the District agreed to the Project, I was informed by my supervisor that the individual who initially developed the proposal would be going on temporary leave. Consequently, I was asked to step-in to support client management. The following day, my supervisor and I met with the Design Team to discuss the specifications of the Project. In order to be responsive to the needs of the client as well as the team, I quickly orchestrated a meeting between the District and the Design Team in order to co-create the expected outcomes of the session. Within a week of the Project's approval, I mobilized the necessary teammates and created the necessary foundation to foster cross-functional collaboration: I organized a kick-off meeting involving the 30 staff members engaged in the Project, put into motion the project planning process, and created a dedicated Slack channel to promote seamless internal communication. By September 10, in recognition of my ability to promote a positive working environment despite the hurried nature of the Project, the Design Team nominated me to continue facilitating the design process. From that point onward, I played the lead role in implementing the Project. The steps that I took as the leader of the Project throughout the implementation process are outlined in Figure 5.

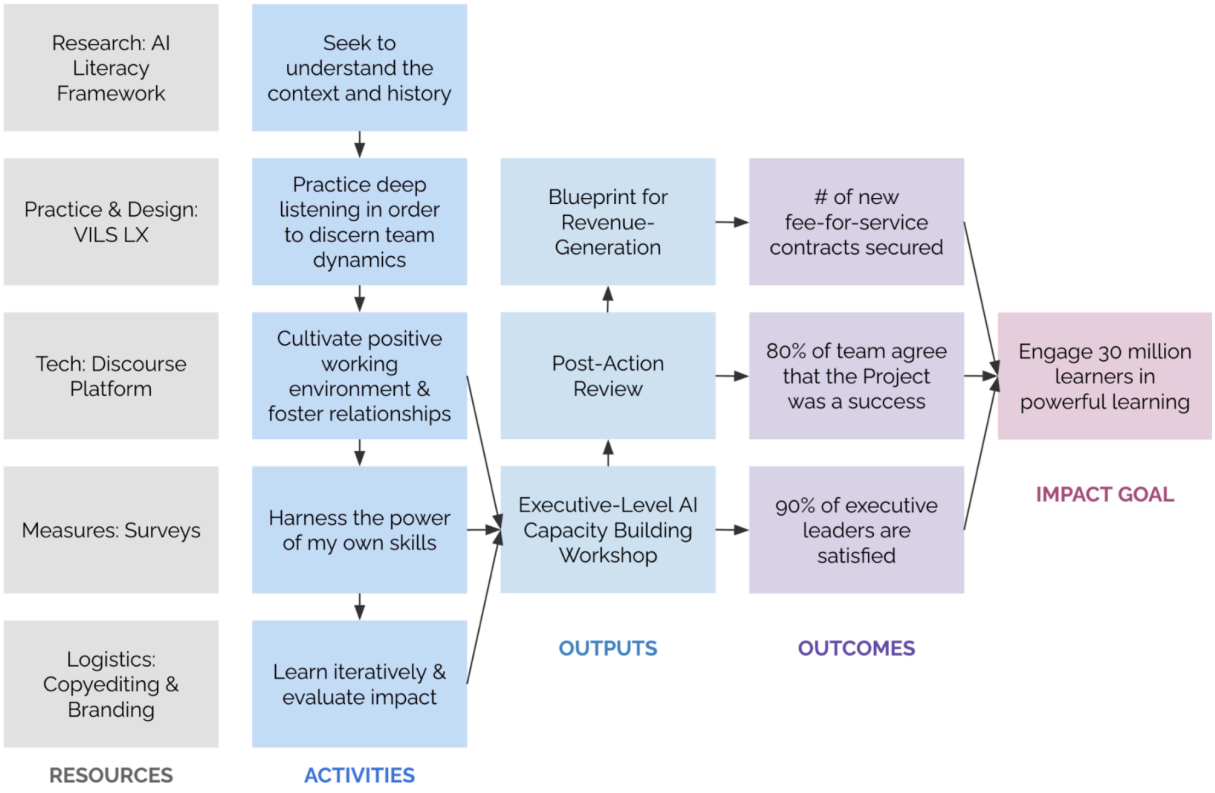
After being appointed as the Project's leader, I promptly organized a two-week design sprint, scheduling brief meetings every other day so the team could discuss progress, obstacles, and iterate on ideas. Although the team had two months to deliver the Project, the design period

was interrupted by the Annual Staff Retreat which occurred in October, during which period the entire staff was asked to suspend day-to-day work in order to fully engage in a weeklong series of activities. As such, accounting for the retreat, the Project's team only had 36 full days in which to develop two products: (1) The 3.5 hour-long virtual AI Champions Onboarding delivered on October 16; and (2) The full-day in-person Visioning Session delivered on October 29. This accelerated timeline was made possible due to the fact that the team drew upon a significant repository of internal assets, including its AI literacy framework, Learning Experiences (LX) designed for past projects, Discourse (a learning management system), pre-existing surveys, as well as general branding resources (which are represented under the "Resources" column of the logic model that I established for the Project (see Figure 6).

Figure 5:

Steps Taken by the Project Leader

Figure 6: Project Logic Model



Moreover, the steps that I took throughout the Project were informed by the Leading Strategically Framework as well as the Lippitt-Knoster Model, which then informed the logic model which I individually developed for the purpose of this paper. The logic model thus maps out the aforementioned resources, the activities outlined in my theory of action, as well as the anticipated outputs, outcomes, and impact. Through the remainder of this section, I will elaborate on the actions that I took as a leader in order to execute the Project effectively, which were executed in the following order: (1) Understand the context and history; (2) Discern; (3) Harness power; (4) Cultivate relationships; and (5) Learn and evaluate.

Understand Context and History: Prior to the start of my residency, I developed a comprehensive entry plan that thoroughly gathered publicly available information about Digital

Promise. Leaning on the work of Francis Aguilar (1967), I analyzed the organization across political, economic, social, technological, environmental, and legal dimensions. Additionally, I also interpreted potential structural, relational, political, and symbolic dynamics at play within the organization (Bolman & Deal, 2021). In doing so, I was able to enter into the residency experience with a firm grasp on the organization's context and history. Upon entering Digital Promise, during my first 30 days, I then embarked upon a review of the organization's key publications, sifting through more than 300-pages of research-based content. In doing so, I was able to synthesize patterns across programs which in turn informed the decisions I took when launching the Project.

Discern: During the first 30 days, I also conducted empathy interviews with 17 staff members. By employing principles of deep listening (Aguilar, 2013), I was able to become attuned to team dynamics, such as the team's history of being highly decentralized, fractured, and loosely aligned (i.e., 'confederacy of fiercely independent teams' and 'hunters and gatherers' in search for their own funding opportunities). Through these empathy interviews, I was able to ascertain a divergence in thinking around the intent to build fee-for-service offerings, and the reluctance of the team to monetize existing programs. By taking the time to listen to teammates representing various functions from across the organization, I entered the Project with the ability to discern opportunities and potential risks.

Harness Power: At the onset of the Project, the scope of my involvement was meant to be minimal; I was asked to support with client management while a teammate went on leave. However, as I assumed the role of client management, I also started facilitating the internal

meetings to communicate the client's needs with the design team. Within the first two weeks of the Project, the Design Team specifically asked for me to continue facilitating the process, expressing appreciation for a positive and collaborative culture I had fostered. At first, I was hesitant to assume greater responsibility. After all, I was not the individual who initially secured the contract, and did not want my actions to be interpreted as political maneuvering. Additionally, I was also conscious that I lacked both formal authority as a resident, as well as informal authority as a newcomer. However, when the Design Team explicitly asked me to continue leading the process, I became conscious of the credibility that I had quickly formed through my careful planning and attention to relationship building during calls. From that point onward, I made the conscious decision to harness my power by drawing on my background as an executive leader. My past experience leading an organization amid a pandemic and a war while achieving high rates of staff satisfaction therefore prepared me to lead the Project, despite the organizational restructuring and uneasy team dynamics.

Cultivate Relationships: As such, I chose to lead the Project with curiosity, humility, and positivity. I wanted to foster a collaborative environment where all voices could be heard and valued. In doing so, I believe that I built the credibility I needed with the team to lead, despite the fact that I was not initially appointed as the project lead or manager. In fact, one personal anecdote illustrates the 'power' that I held as a leader. At the All Staff Retreat hosted in October (as the Project was close to culmination), one of the senior leaders on the Powerful Learning Division pulled me aside for a chat. He remarked that he was impressed by my ability to quickly establish a positive working environment, effectively 'activating a power button' for authentic team collaboration. To borrow from City and Curtis, this is the source of my 'power' – the ability

to cultivate a positive, collaborative environment despite stressful and uncertain conditions. No doubt, I amassed this skill while working abroad in my previous role. Through conflict I emerged a more compassionate leader, one who can foster collaboration despite the most challenging of conditions. By leveraging this personal power and carefully tending to the dynamics of the team, I was able to cultivate relationships that translated into the successful implementation of the Project.

Learn & Evaluate: Throughout the design process, regular 'standups' were scheduled so that the team could iterate together, make adjustments to the content being developed, and pivot when needed. To measure the effectiveness of the Project, I also developed a survey for the staff who participated, using the dimensions of the Lippitt-Knoster Model to evaluate team dynamics. While the Project's outcomes were overwhelmingly positive, significant areas for improvement were identified, in particular in relation to a clear action plan. Given that the Project was conceptualized and implemented within 36 working days, more can be done for future projects so that teammates have adequate time to plan, design, and iterate. In the "Outcomes" section of this paper, I will expand upon the ways in which the Project met its anticipated goals (according to the logic model), and the areas of growth that surfaced through the data.

The Project's logic model, which closely follows the steps articulated in my theory of action, serves as a guiding framework for this paper. In this section of the paper, I briefly describe the "Resources" that were leveraged through the Project, and I detailed the actions that I took as a leader (constituting the "Activities" outlined in the logic model). The next section will

complete the model by detailing the Project's "Outputs" and "Outcomes" in relation to the organization's Impact Goal.

OUTCOMES

As outlined in the logic model, the outputs of the Project were to create the Visioning Session for the District, conduct a post-action review, and derive learnings from the implementation process in order to create a blueprint for revenue-generation. Each output in the logic model was evaluated through the following corresponding metrics: (1) A post-training survey provided to the executives who attended the Visioning Session; (2) A post-implementation survey provided to staff members at Digital Promise who had been engaged in the development of program; and (3) The number of new fee-for-service contracts secured based on the learning acquired through the Project. Regarding the Visioning Session itself, the purpose was for the "District and school leaders will leave with a tangible shared vision, communication plan, and co-developed success metrics to guide AI-powered transformation across FUSD" (Lowe et al., 2025a, Slide 7). The extent to which this purpose was achieved was measured through 17 statements in the post-training survey designed by the Data Team (see Appendix 1). To measure staff perceptions, I also created a survey leveraging the dimensions of the Lippitt-Knoster Model in order to measure staff perceptions regarding the effectiveness of the Project (see Appendix 2). It should be noted that an Institutional Review Board (IRB) process was not needed for the Project, given that these outcomes pertain to the internal evaluation of a Digital Promise product, and therefore cannot be considered generalizable knowledge for research purposes.

The Visioning Session, which concluded on October 29, received universally positive feedback from the 12 executive leaders who completed the post-training survey. All respondents (100%) were satisfied or extremely satisfied with the session, and 91% indicated they would

recommend the program to others. Overall, executives demonstrated solid levels of confidence, with 83% expressing assurance in their ability to "articulate AI concepts and advocate for their strategic value among fellow leaders" and "advocate for meaningful AI integration in our district's classrooms" (see Chart 1). These statements demonstrate early signals that the District is successfully establishing AI organizational readiness, which (as described earlier) is the collective aptitude of a system to effectively integrate emerging technologies across workstreams.

The Visioning Session was intended to be an introductory experience, with the post-training survey designed to serve as a diagnostic assessment to establish an initial foundation among the executive leaders. Another survey was scheduled for early May, six months later, to measure growth over time (which falls after the conclusion of my doctoral residency). Given this introductory focus, it was assumed that many responses would be at the "emerging" or "developing" stages through the initial post-training survey. Supporting this, 100% of respondents rated the district's vision for AI literacy as at minimum "emerging" or "developing," but none found it "exemplary." This result is understandable, as the vision established in the seven-hour workshop was intentionally an initial draft. As the District continues to build its AI organizational readiness, it will be critical for this vision to be further refined.

The results also highlighted several areas of collective strength and high confidence. Specifically, 100% of respondents indicated that district leaders actively engage in conversations around ethical AI use (see Chart 2), teachers have access to professional development related to AI (see Chart 2), and the District possesses the technical infrastructure to support AI tools (see Chart 3). Notably, the question about technical infrastructure scored the highest, with nearly a

third of respondents marking “exemplary” as the response (see Chart 3). Given the critical importance of building system-wide coherence around technological infrastructure for the purpose of supporting digital transformation, this strength will surely buoy the District’s AI literacy efforts.

Conversely, the areas that scored the least confidence focused on community engagement. Nearly half of respondents indicated that no communication had started regarding the District’s AI strategy (see Chart 4). This is expected, as an objective of the session was to develop the initial communication plan. Additionally, nearly a third of respondents felt that the District had not yet started engaging families in conversations about AI use. In discussions with the District, it was discussed that community engagement, along with the other skills embedded in the survey, would be further developed in subsequent professional development opportunities.

Chart 1: Overall Executive Confidence (N = 12)

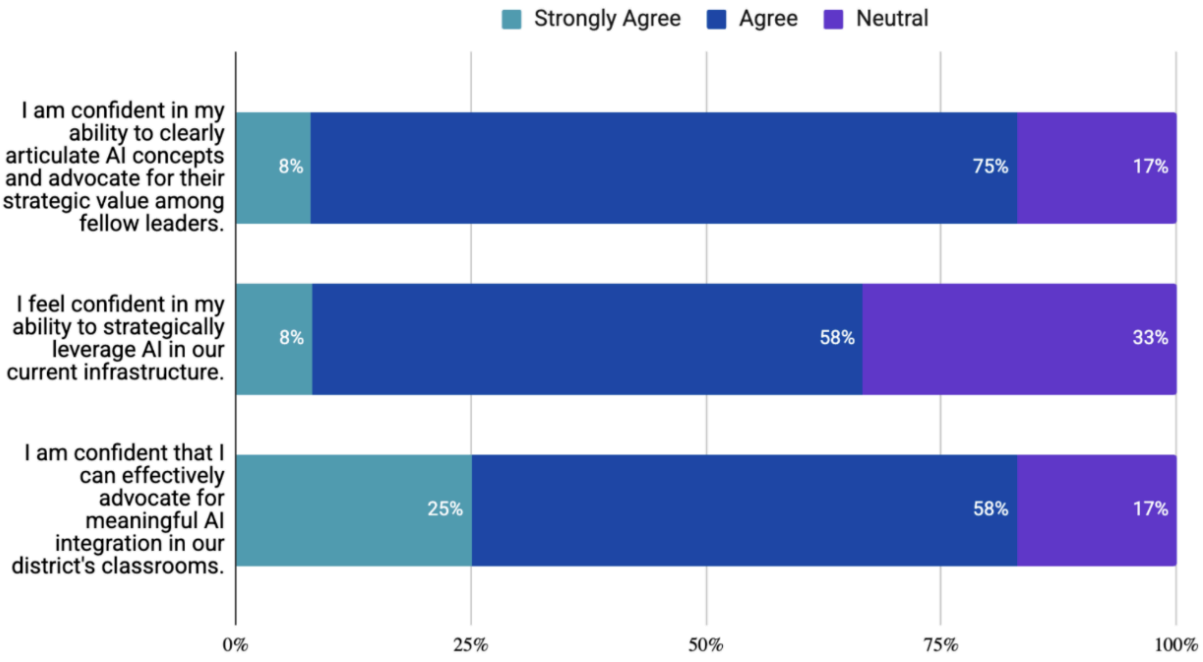


Chart 2: Vision, Leadership, & Learning (N = 11)

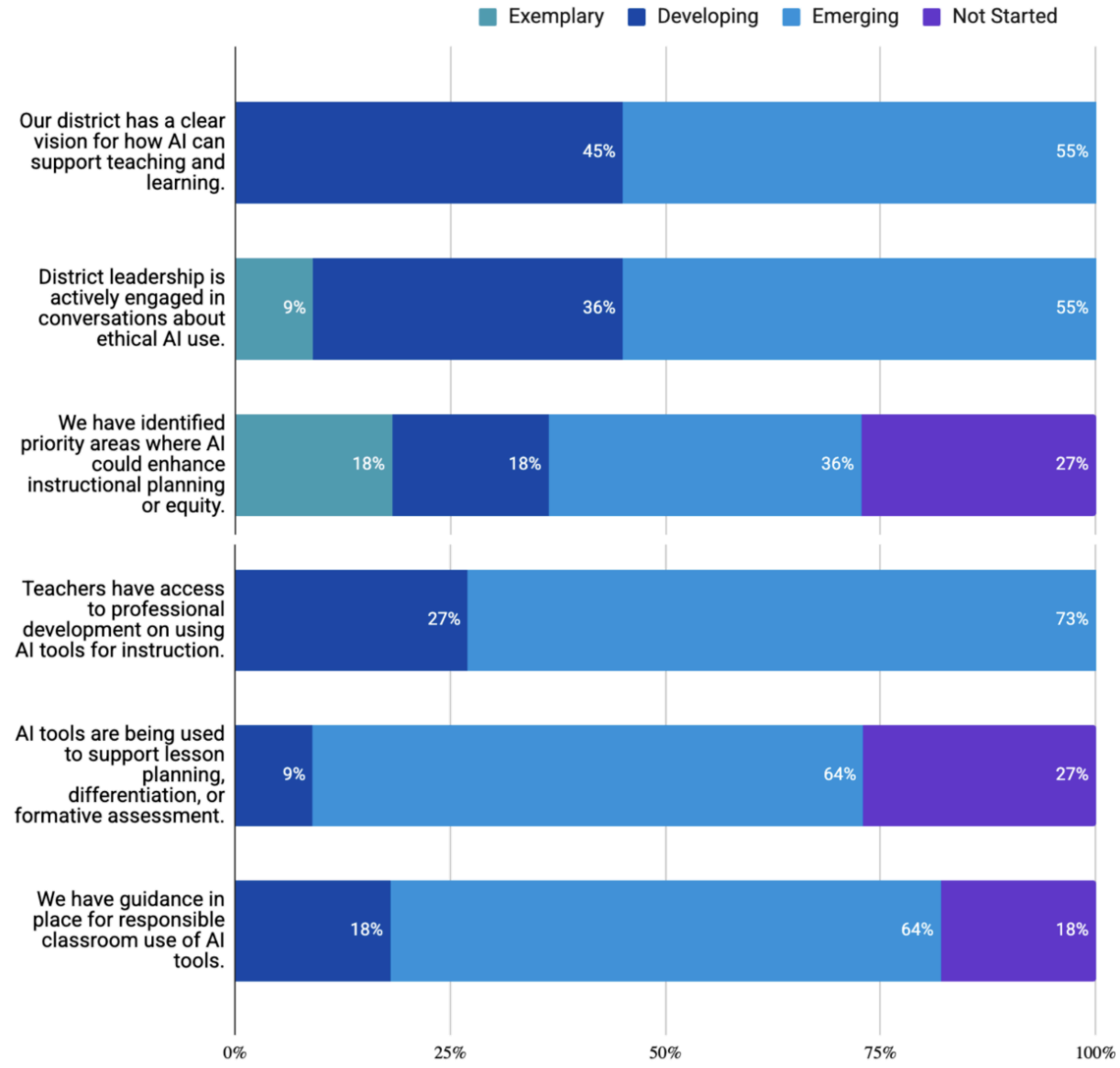


Chart 3: Infrastructure & Data (N = 11)

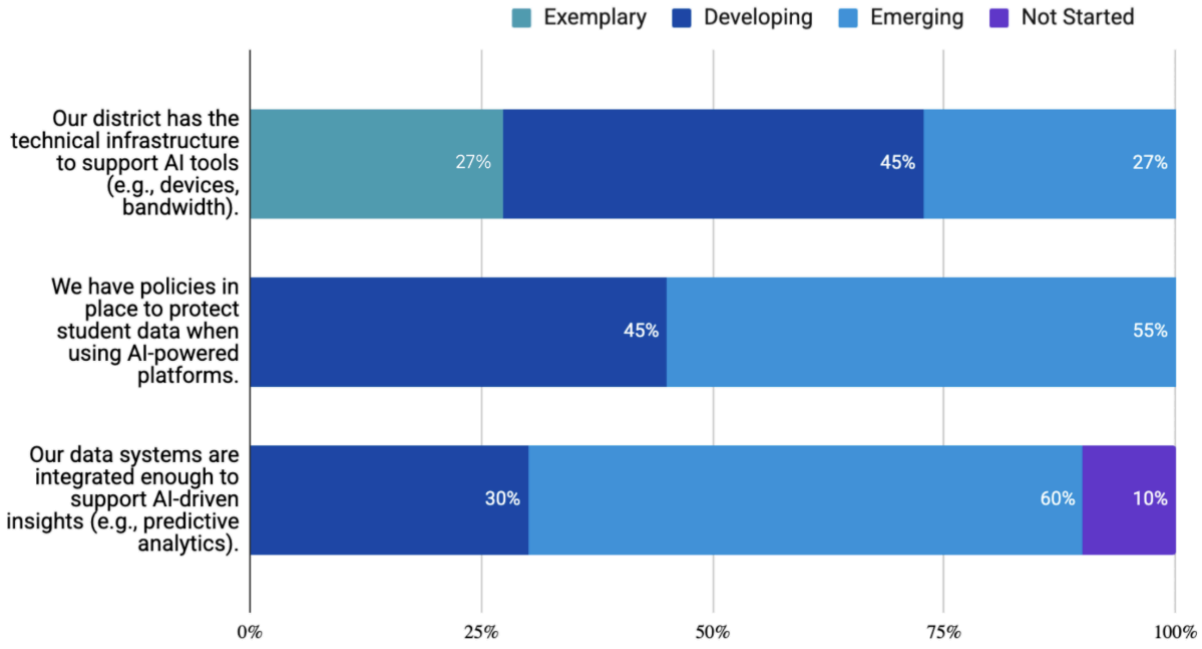
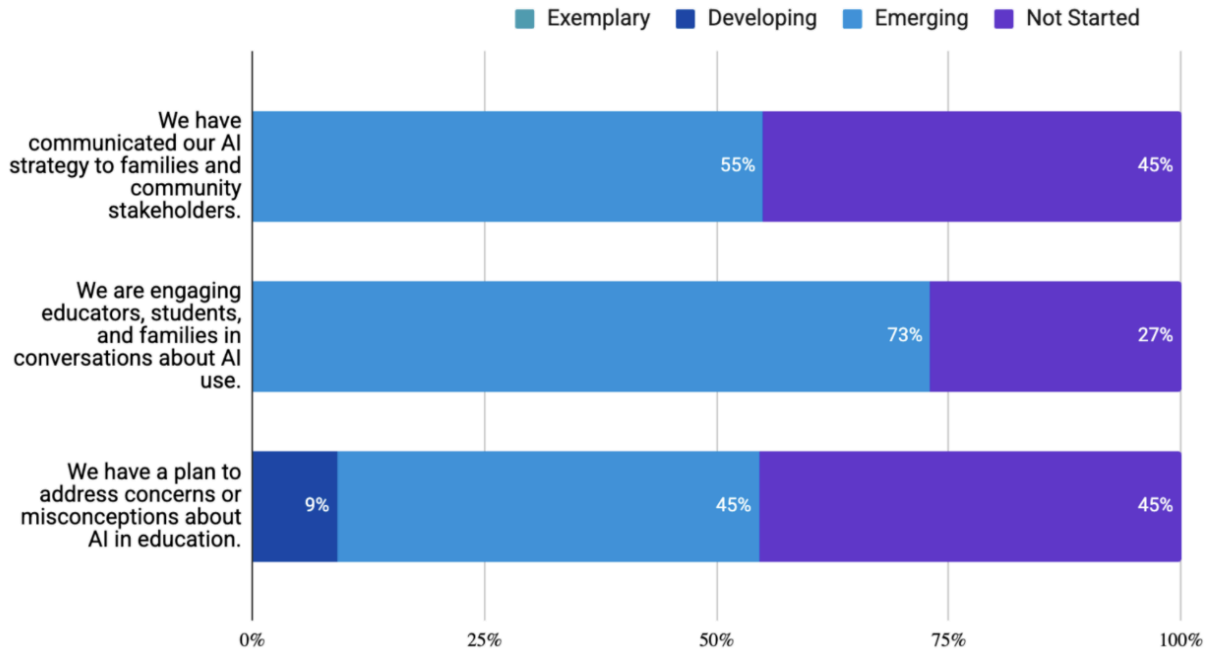


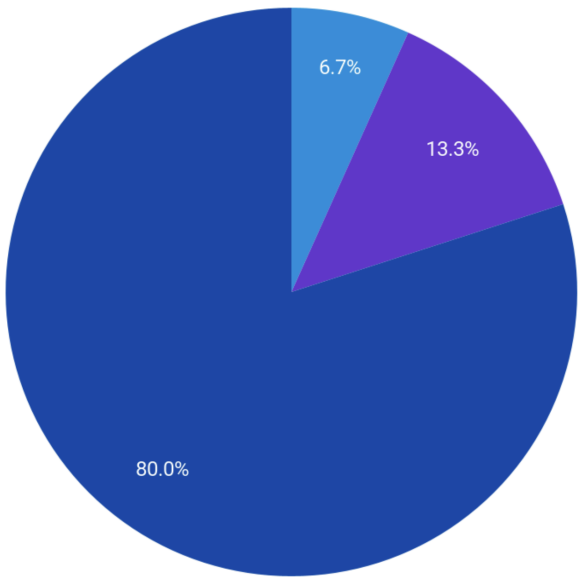
Chart 4: Communication & Engagement (N = 11)



In addition to the post-training survey provided to the executive leaders who participated in the Visioning Session, an internal survey was also administered to the staff who were engaged in the Project. As indicated previously, the design of the survey was informed by the Lippitt-Knoster Model, which is broken into five essential components: (1) Vision; (2) Skills; (3) Motivation; (4) Resources; and (5) Action Plan. According to the model, when one or more of these five critical components are missing, failure is likely to occur. As such, to measure the effectiveness of the Project through the vantage point of the staff members who were engaged, the internal survey measured the extent to which teammates felt as though: (1) The vision was clear; (2) They had the requisite skills; (3) They felt a sense of ownership over the Project; (4) They had the necessary resources; and (5) The timeline and deadlines were clear.

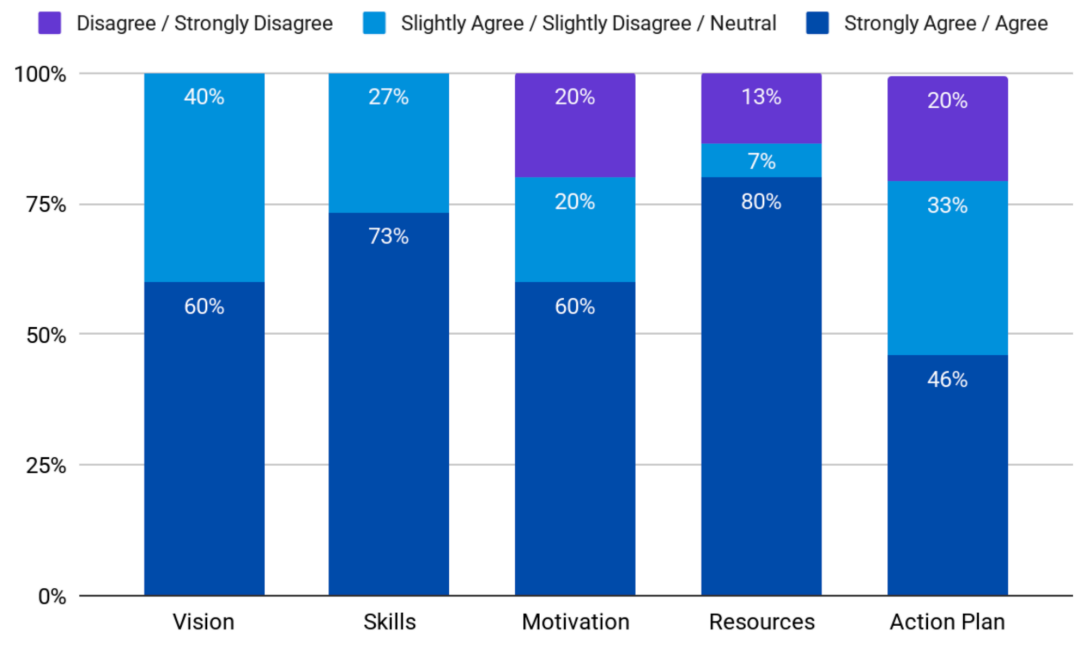
Based on the internal survey, which received responses from 15 staff members, 80% of the team either agreed or strongly agreed that the Project was a success (see Chart 5). As such, from the perspective of overall participant satisfaction (i.e., 100%) and the team's perception of overall success (i.e., 80%), the intended outcomes of the Project as outlined in the logic model were attained. However, there were significant areas for growth from the team's perspective. While 80% of the team felt as though they had the necessary resources to complete their tasks (see Chart 6), this was the only statement to achieve this level of satisfaction. Regarding the vision and the skills required to complete the

Chart 5: Team's Perception of Success (N = 15)



Project, none of the staff members answered negatively. However, respectively, only 60% and 75% answered that they agreed or strongly agreed. Regarding motivation, a fifth indicated that they did not feel a sense of ownership over the Project. This statistic is not surprising, given that staff members provided feedback through the process that the Project moved too quickly, and that important steps were missed during the pre-launch. In particular, the Research Team voiced that the original pitch to the District did not adequately integrate evidence-based practices into the proposal. The indicator related to the action plan was the lowest rated question, with less than half of the team answering "agree" or "strongly agree." Again, this is not surprising, given that the Project was launched in an expedited manner with very little time to plan. As mentioned earlier, most other leaders in the field set aside six months for product development. In this case, the Project was developed and delivered in less than a third of the time. Due to an accelerated timeline, the process felt rushed, with teammates expressing that insufficient space was dedicated to meaningful cross-department collaboration.

Chart 6: Lippitt-Knoster Model Dimensions (N = 15)



DISCUSSION

Change management, organizational ambidexterity, and AI organizational readiness – while distinct concepts as detailed in the "Review of Knowledge for Action" – all share a central quality: the need for adaptive leadership. While AI integration into public education involves significant technical challenges, digital transformation is a deeply human endeavor, one that is "grounded in the complexity of values, beliefs, and loyalties rather than technical complexity and stir up intense emotions rather than dispassionate analysis" (Heifetz et al., 2009, Chapter 5, para. 6). Conceived by Ronald Heifetz at Harvard Kennedy School, adaptive leadership can be understood as the human dimensions of change management. According to this framework, "Leadership begins… with the diagnostic work of separating a problem's technical elements from its adaptive elements" (Heifetz et al., 2009, Chapter 5, para. 5) in order to "mobilize people throughout the organization to do adaptive work" (Heifetz & Laurie, 1997, p. 124). Meaning, adaptive leaders do not rely on technical solutions to problems, rather they attend to "three very tough, human tasks: figuring out what to conserve from past practices, figuring out what to discard from past practices, and inventing new ways that build from the best of the past" (Heifetz et al., 2009, Chapter 5, para. 1). Here, we can see parallels to the concept of organizational ambidexterity. Adaptive leadership requires organizations to look beyond the status quo in order to constantly evolve and innovate, as such "adaptive challenges are difficult because their solutions require people to change their ways" (Heifetz et al., 2009, Chapter 5, para. 1). However, as Heifetz writes, "Without such change, any company today would falter" (Heifetz & Laurie, 1997, p. 124). As such, "Mobilizing an organization to adapt its behaviors in order to thrive in new business environments is critical" (Heifetz & Laurie, 1997, p. 124).

Through the Project, the team was provided with a unique challenge: use existing materials from other programs to develop a highly customized solution for a large school district within 36 business days. This Project came at a time when the team was balancing multiple priorities. Additionally, the Project required a recently restructured team to operate cross-functionally in a way that had not been done previously. To use concepts from adaptive leadership, the context necessitated the "collective intelligence" of the team, and required me as a leader to reach "across boundaries" and leverage teammates as valuable "resources" for solutions (Heifetz & Laurie, 1997, p. 124). After all, as Heifetz advocates, in such situations, "the locus of responsibility for problem solving when a company faces an adaptive challenge must shift to its people" (Heifetz & Laurie, 1997, p. 124).

As such, for the "Discussion" portion of this capstone, I will be interpreting my actions and outcomes through the lens of adaptive leadership. First, the data collected through the Project will be analyzed to ascertain the extent to which change management processes were effectively employed. Next, the cross-functional nature of the Project will serve as a lens through which organizational ambidexterity can be discussed. Lastly, the concept of AI organizational readiness will be employed to forecast the ways in which Digital Promise can champion the idea of digital transformation through its fee-for-service offerings. Together, these three themes will help to determine the extent to which the theory of action for the Project was realized.

Analysis: Change Management

According to the outcomes outlined in the logic model, the Project was a success – achieving 100% satisfaction among the executives who participated in the Visioning Session

while attaining 80% approval from the staff who were engaged in the Project (i.e., that is to say the staff members perceived the Project to be an overall success). Despite this success, the data reveals key areas for improvement, especially as it relates to adaptive leadership and being responsive to team dynamics. As explained previously, the Visioning Session with the District served as the first fee-for-service offering delivered by the newly constituted Powerful Learning Division. Moreover, while the Project leveraged Digital Promise's vast collection of resources developed by the organization, the content of the session required significant customization within a short period of time (i.e., 36 production days). Through this lens, it is understandable why the 'Action Plan' component of the Project scored the lowest on the Lippitt-Knoster Model. While a comprehensive project plan was developed within the first week along with an Asana board (both of which outlined the roles and responsibilities of each staff member), at times the decision-making process was cumbersome. Especially in light of the new team structure, and nascent nature of cross-functional collaboration on the team which was described in the "Project Description" section, it was unclear which senior leaders were needed in the approval process. Due to the rapid pace of the Project and packed schedules, not all senior leaders were available for critical discussions, which led to delays in decision-making. The lack of cohesion among senior leaders caused friction, particularly among members of the Design Team, with one individual describing the situation as a 'traffic jam' that hindered the team's ability to execute quickly.

Meanwhile, the rushed nature of the Project also led to a situation where members of the Research Team did not feel as though they had sufficient time to review materials and adequately provide feedback, resulting in a lack of motivation. In fact, one individual admitted that they stopped attending meetings as a form of protest – which the Lippitt-Knoster Model would

interpret as resistance. Additionally, at the onset of the Project, the Research Team was vociferous in expressing their opposition to the term 'AI readiness,' a concept that was prominently featured in the original pitch materials presented to the District. As a consequence, the Research Team voiced that the initial concept of the Project appeared flawed. It was repeatedly expressed in meetings that the Project was not 'research-based.' This in turn led to a two-week period during which the Research Team was brought into the process in order to rectify disagreements, which consequently vexed the Design Team as they perceived the intervention as a form of control (a sentiment which surfaced through the qualitative comments in the internal survey). With this context in mind, it is apparent why nearly a fifth of the team indicated that they lacked a sense of ownership through the internal survey. Despite these misgivings, the majority of the staff involved (i.e., 60%) felt motivated, which perhaps explains why the Project was still able to overcome these obstacles and achieve its intended outcomes. As such, though the Project was a technical success (i.e., the team delivered a high quality product), the team dynamics signaled the need for more agile and adaptive leadership responses.

Due to the organizational restructuring, it could be argued that relationships were not sufficiently in place at the onset of the Project, and the systems and structures to support cross-functional collaboration were also in flux. In light of the vacuum caused by the lack of processes, teams jostled for decision-making authority, which in turn placed undue strain on relationships. To revisit language from the adaptive leadership framework, the strife that occurred during the implementation of the Project could be viewed as the clash of 'values, beliefs, and loyalties' which stirred up intense emotions' (Heifetz et al., 2009, Chapter 5, para. 6). Moreover, the rushed pace of the Project – while highly iterative – led to a dynamic through which the team felt as though a clear action plan was absent. Meaning, while the team excelled at

'thinking big, acting small, and learning fast' (City & Curtis, 2025, p. 132), the tight turnaround weighed heavily on the team's morale, causing undue stress.

Analysis: Organizational Ambidexterity

Despite the strained dynamics, the Project could be described as an overall success (insofar as key outcomes were achieved as outlined in the logic model). Given this, the Project can serve as a case study in adaptive leadership, especially as Digital Promise and the Powerful Learning Team consider how to foster organizational ambidexterity in order to pivot in times of need. As it was explained through the "Review of Knowledge for Action," organizations that are most successful at innovating demonstrate ambidexterity – that is to say, they simultaneously look inward at their most successful offerings, while looking outward for revolutionary ideas that will break the mold. These revolutionary ideas may be so iconoclastic, that they may cannibalize the organization's existing programs and products. Leaders within ambidextrous organizations recognize that ideas that cannibalize existing work can be perceived as a threat by teams managing the more traditional programs (The Ambidextrous Organization, 1997; Tushman & O'Reilly, 1996). As explained through the lens of adaptive leadership, the loss of existing programs could cause emotional reactions from teammates, inciting fear and distrust. Therefore, leaders ought to shield their innovation units by building the necessary team structures to separate exploratory functions away from its core operations (i.e., structural ambidexterity) or to distribute the strategy across all departments (i.e., contextual ambidexterity) (Gibson & Birkinshaw, 2004; Tushman & O'Reilly, 1996). In either respect, what is essential is that all

senior leaders share a common vision for what success will resemble when the organization is ambidextrous.

Given the current structure and dynamics of the Powerful Learning Division, strategic adaptive leadership shifts are required to improve its ambidexterity. At the time of its conceptualization and implementation, the Project was being led by the Advancement Team. Newly minted through the organizational restructuring that took effect in July 2025, the Advancement Team's purpose was to leverage the Powerful Learning Team's existing programs in order to establish novel fee-for-service offerings. The senior leader in charge of the Advancement Team reported directly to the Vice President. Despite being linked to the executive leader's vision, divergent perceptions were apparent among the senior leaders who reported to the Vice President. A lack of coherence among senior leaders was particularly observable during the empathy interviews that I conducted during my first 30 days within the organization, and again during the implementation of the Project. Through the empathy interviews, I had one-on-one conversations with four of the senior leaders. With each leader, I asked them to define 'Advancement.' The responses provided by the senior leaders were highly focused on individual workstreams, and lacked a singular, cohesive vision. This in turn manifested during the implementation of the Project, when competing interests came into play. Despite an incredibly accelerated timeline, three of the senior leaders requested to be a part of the approval process in addition to the Vice President. The lack of coherence among senior leaders caused dissatisfaction among the team (a sentiment surfaced through the internal survey), leading teammates to perceive the situation as a decision-making 'bottleneck.' In order for the Powerful Learning Team to be truly ambidextrous, all members of the senior leadership team must feel a

sense of collective ownership over the strategy, so that they can adapt to new challenges as they arise while tending to the concerns and needs of the team.

Analysis: AI Literacy vs. AI Organizational Readiness

Perhaps the greatest lesson around adaptive leadership in relation to the Project centers on the concepts of 'AI literacy' and 'AI organizational readiness.' As mentioned earlier, a particular area of contention was the use of the term 'AI readiness,' and the perception that research-based practices were not being employed by the Advancement or Design Teams. When the Project was first pitched to the District, the term 'AI readiness' was used, referring to the capacity building of district leaders and school-based staff to promote AI literacy among students. However, the Research Team had significant concerns with this terminology, expressing that it was not backed by research. Because of this feedback, the Advancement Team promptly replaced the term 'AI readiness' with 'AI literacy.' As the team proceeded, the Research Team continued to have concerns about whether the Design Team was adequately leveraging research-based practices in the development of the sessions. To this end, a subject matter expert from the Research Team was delegated part of the design work, and the Head of Research was added as an approver through the content review process. In the moment, adjusting the terminology being used and adding another layer of review temporarily alleviated disagreement on the team, allowing the Project to continue at its hastened pace. However, the deeper conceptual disagreements were not addressed. This paper will attempt to reconcile the integrity of the term 'AI literacy' with the need to evolve the concept to meet the needs of system-level leaders.

The Visioning Session was ultimately built upon Digital Promise's AI literacy framework, with the goal of helping leaders to develop a unified vision for district-wide AI literacy and a communication plan. The overall purpose of the session was to have leaders move beyond the mere application of AI tools, towards responsible use while ensuring accessibility for students with varying needs. As the workbook for the Visioning Session explains, "Our expanded AI Literacy Framework depicts the relationship between AI Literacy Practices, Core Values, Modes of Engagement, and Types of Use that support the knowledge and skills to enable people to critically understand, use, and evaluate AI systems and tools" (Lowe et al., 2025b, p. 4). With the belief that "AI literacy is critical to safely and effectively participate in an increasingly digital world," the session emphasized the importance of balancing "AI Literacy Practices," "Core Values," "Modes of Engagement," as well as "Types of Use" (see Table 2).

Table 2: AI Literacy Framework Components (Digital Promise, 2025c, p. 4)

Framework Component	Description	Examples
AI Literacy Practices	Actionable practices of understanding and evaluating that learners can demonstrate	Data Privacy & Security, Information & Mis/Disinformation
Core Values	Underlying principles that support learners to safely and effectively use AI tools	Human Judgment, Centering Justice
Modes of Engagement	Interconnected ways users can engage with AI-enabled tools to demonstrate AI literacy	Understand, Evaluate, Use
Types of Use	Distinct purposes for which users engage with AI-enabled tools	Interact, Create, Problem Solve

With this framework in mind, the activities included through the seven-hour long Visioning Session included interactive exercises through which leaders questioned underlying assumptions about AI, while stress-testing the District's existing policies through simulations. The workshop required leaders to cross-reference the emergent vision against the District's core values as well as the pillars of Digital Promise's Powerful Learning Framework (i.e., Agency, Purpose, Curiosity, and Connection). Through the process of co-creation, the leaders moved towards a collective vision rather than role-based interpretations. The workshop culminated with leaders ideating metrics to measure the emergent vision, while mapping out a five-phase communication plan that would cover a 90-day rollout period.

Digital Promise's AI literacy framework places a heavy emphasis on the ability to not only use AI tools, but the ability to look under the hood, understand how the technology functions, and evaluate its appropriateness and effectiveness. Under the umbrella of 'understand' and 'evaluate,' the framework key concepts that would ensure education leaders and learners are able to think critically when employing AI, particularly as it relates to data privacy, digital communication, identifying disinformation, and weighing ethical implications. However, the 'understand, use, and evaluate' construct upon which the framework is built is missing a critical component needed as it relates to AI organizational readiness. Executive-level leaders in education are not only responsible for evaluating policies and practices, they must also build future-facing systems and structures that will ensure that these quickly evolving technologies are employed safely and effectively. The level of critical awareness and depth of skill needed to build the necessary environmental conditions for system-wide AI literacy would require a level of mastery that few district leaders have been able to attain given other competing priorities. This is where Digital Promise can leverage lessons from the Project in order to scale professional

development opportunities for executive leaders. System-level leaders must be able build upon their own AI literacy (i.e., understanding, application, and evaluation) and funnel such knowledge and skills into the creation of professional development for teachers, the development of systems and the implementation of safety protocols. In short, leaders must work collectively within a system in order to foster AI organizational readiness. As detailed in the "Review of Knowledge for Action," the term 'AI literacy' can be employed to refer to an individual learner's mastery over intelligent technologies whereas 'AI organizational readiness' refers to the collective capacity of a system to effectively integrate emerging technologies across workstreams.

Within the context of the Project, the Visioning Session marked the initial phase of developing AI organizational readiness within the District. By working together to establish a district-wide vision for AI literacy and establishing an initial communication roadmap, the participants took the first step towards digital transformation (Ross et al., 2018). For the Powerful Learning Division at Digital Promise, the initial friction caused by the term 'AI readiness' can lead the team to evolve its frameworks, allowing the organization to honor the work that has been done in regards to AI literacy while expanding its repertoire to include AI organizational readiness. In doing so, the team can reconcile an adaptive challenge centering on terminology in order to attend to the needs of district leaders.

Analysis: Theory of Action

When crafting the theory of action for the Project, the conceptual underpinnings of change management were used to inform my actions. By taking these actions, my intent was to

create a ‘blueprint’ for future fee-for-service work, with the ultimate aim of helping Digital Promise to achieve scale through sustainable revenue streams. For easy reference, the original theory of action can be found below:

If I strategically lead the Powerful Learning Team's first fee-for-service project by:

1. Seeking to understand the context and history;
2. Practicing deep listening in order to discern team dynamics;
3. Cultivating a positive working environment that fosters relationship building;
4. Harnessing the power of my own skills; and
5. Learning iteratively while evaluating impact;

Then I will establish a blueprint for executive-level AI readiness programming that can be scaled,

So that Digital Promise can become an ambidextrous organization with sustainable revenue streams, fueling its growth towards reaching 30 million learners.

In order to assess the extent to which each component of my theory of action was realized, I will reflect on the extent to which each component manifested throughout the process, first by reviewing the actions that I prioritized as a leader. Next, I will then discuss the extent to which I successfully established a ‘blueprint,’ followed by analysis of the term ‘AI organizational readiness.’ Lastly, I will briefly touch on the concept of organizational ambidexterity within the context of the Powerful Learning Division, which will be further discussed in the “Implications for Site” section.

Leadership: The nature of developing and implementing a new fee-for-service model amid organizational restructuring necessitated a focus on human-centered change management. As such, I leveraged the Leading Strategically Framework from City and Curtis (2025) and the Lippitt-Knoster Model (Ambrose & Lippitt, 1987; Knoster, 1991) to inform the steps that I took as a leader. Prior to the start of my residency, I analyzed publicly available information about the organization. Additionally, one month prior to the start of my residency, I began regular check-ins with my supervisor so that I could begin to familiarize myself with the dynamics at play within the organization. Then, during my first 30 days, I reviewed over 300 pages of content published by the organization. These actions in turn helped me to establish a sturdy knowledge base regarding the organization's **context and history**. Concurrently, I also conducted semi-structured empathy interviews with 17 staff members upon my entry in order to **discern** the interpersonal dynamics on the team. In doing so, I was able to launch the Project while paying careful attention to building a **positive working environment**, which was affirmed when the Design Team specifically requested for me to lead the process. Despite the challenging dynamics posed by the organizational restructuring, and the nascent nature of cross-collaboration on the team, I led the Project by **harnessing my power** – that is to say, I drew on my past experience working as a wartime executive to navigate tensions with temperament. Regarding **iteration and evaluation**, the process that I led created space for the team to come together regularly during a truncated design process in order to develop a highly customized product. Despite the fact that the team only had 36 production days for an otherwise unplanned project, the team achieved the goals set out in the logic Model my achieving 100% satisfaction from the executives who

participated, and 80% overall agreement from the implementation team that the Project was a success.

Blueprint: When the logic model for the Project was created, three primary outcomes were established: (1) 90% satisfaction from the session participants; (2) 80% approval rate from the staff members who were involved; and (3) The number of additional fee-for-service projects modeled after the Project. The last outcome in particular was used as a proxy to determine whether the Project could be regarded as a 'blueprint' for future fee-for-service offerings. While the contents of the Project have not been fully replicated as a set program, components have been repurposed towards other activities. Two months after the conclusion of the Project, portions of the AI Champions Onboarding and Visioning Session were leveraged for another school district in California serving more than 40,000 students. The contents of the Project were also pitched to a state-level agency for a state-wide AI literacy project. The Project's Visioning Session model was also adapted for a workshop featured at the California Association for Leading Innovation in Education's 2026 Spring CUE, attracting 3,000+ attendees. This session resulted in the development of a preliminary diagnostic tool to gauge AI organizational readiness, with five additional districts contacting Digital Promise for its AI capacity building services after engaging with the diagnostic. Additionally, Digital Promise has been invited to present at LEE's 2026 Courageous Leadership Conference, through which the content from the Vision Session will be repurposed to meet the needs of 200+ state-level elected leaders and policymakers. To further document the learnings from the Project, a pricing book has been created so that the program can be marketed to other school districts. Despite these instances in which the content is being repurposed, it is difficult to determine whether the Project itself could be called a 'blueprint.'

Upon reflecting on my original theory of action, I have come to realize that the term was ill-defined. What constitutes a 'blueprint'? What are successful features of a 'blueprint' that is adopted for later use? Can the Visioning Session still be considered a successful model if the contents are adapted (rather than delivered as is)? Especially in light of the accelerated pace at which AI is evolving, there is no doubt that the content that was developed in October for one school district would likely need to be significantly updated for another school district six months later. Given this, the term 'blueprint' is a misnomer. Rather, the Project instead should have been regarded as a 'case study,' through which the Powerful Learning Division could derive learning for future projects. I will further elaborate on these insights in the "Implications for Site" section.

AI Organizational Readiness: At the onset of the Project, the term 'AI readiness' was used – both in the original proposal provided to the District as well as the theory of action developed for this paper. The intention was to distinguish between general 'AI literacy' from the type of 'readiness' needed to catalyze systemwide change. While Luckin (2022) as well as organizations such as Bellwether Education Partners (Kulesa et al., 2025) advocate for the term 'AI readiness,' I found scarce examples of this term being used in the US K-12 education sector. However, by expanding my scan beyond the education sector, I came across Weiner's theory of organizational readiness, which has been applied by researchers to describe the strategic integration of AI across in corporate contexts (Jöhnk et al., 2021; Tehrani et al., 2024). To that end, while it has been established in this paper that the term 'AI literacy' can be used to describe mastery at the individual learner level, 'AI organizational readiness' speaks to the need for broader systemwide coherence. If I were to rewrite the theory of action, I would instead employ

the term ‘AI organizational readiness’ in lieu of ‘AI readiness.’ Moreover, through the analysis conducted in this paper, I have come to the conclusion that the concept of ‘AI organizational readiness’ is too narrow of a focus. While district-wide AI literacy served as the central focus of the Project, the objectives of the session (i.e., establishing a vision and communication plan) can be regarded as essential stepping stones in establishing AI organizational readiness within a school district. Moreover, I would now also argue that AI organizational readiness alone is insufficient. In a world shaped by the rapid pace of technology, districts must reimagine the purpose of school-based learning and put into place a bolder vision for public education, one that will no doubt require a digital transformation. As such, AI organizational readiness is merely a vehicle in which a system can achieve this transformation. Depending on where a school district is in its journey, AI organizational readiness remains a critical stepping stone nonetheless. As such, I now regard digital transformation as the ultimate aim, and AI organizational readiness as merely the means. Through the “Implications for Sector” section, I will further expand upon the need for digital transformation in the sector and how AI organizational readiness plays a role in achieving such an aim.

Organizational Ambidexterity: As it relates to organizational ambidexterity within Digital Promise, it is essential for the Powerful Learning Division to leverage content developed through initiatives such as the Project in order to build sustainable revenue-streams that meet market demands. However, a lack of coherence across the Powerful Learning Division regarding fee-for-service work may impede the team’s efforts to be ambidextrous and build sustainable revenue-streams. The empathy interviews that I conducted during my first 30 days revealed hesitance from teammates to monetize its services, as well as a lack of shared understanding.

One team member's comment, 'It doesn't feel right that we are charging low-income schools for our services,' highlighted a significant misconception that the fee-for-service strategy was intended to extract funding from partner schools. Despite the urgent need for sustainable revenue-streams amid multiple reorganizations, concerns around fee-for-service work have continued to surface in meetings. Shortly after a restructuring process that took effect in November, one staff member questioned why the organization was pursuing new projects at all given the team's limited capacity. Similarly, two additional teammates questioned why a fee-for-service model ought to be a key strategy, instead indicating that the Powerful Learning Division should instead maximize research-oriented request for proposals (RFP). The response from the Head of Strategic Partnerships centered on the idea of exploring diversified avenues for growth based on field demand. Misconceptions around the fee-for-service model, along with varying levels of buy-in, signal that the Powerful Learning Division may need to develop a shared vision for organizational ambidexterity, and how this will inform the projects that the team decides to pursue in an effort to reach its broader impact goals. In the next section, I will go into greater detail about the ways in which the Powerful Learning Division can foster organizational ambidexterity.

IMPLICATIONS

Implications for Site

At the end of March 2026, Oracle announced that it would layoff up to 30,000 employees in an effort to automate workflows by leveraging AI (Bursztynsky & Novet, 2026). Oracle is just one of many companies that is experiencing reductions in force. As the corporate sector reels with such dramatic changes, the nonprofit sector likewise faces grim realities, with Forbes describing the climate as a "crisis" (Rae, 2026). Digital Promise has also been impacted by these economic headwinds. Over the course of my residency experience, Digital Promise underwent significant restructuring as well as a reduction in force in order to "right-size the team given the realities of a constrained funding environment across the sector," as described by the Head of Strategic Partnerships. Now more than ever, the Powerful Learning Team must lean on adaptive leadership, change management, and organizational ambidexterity in order to make critical pivots. Given the heightened urgency to exploit existing assets while pivoting to new opportunities, in this section I will provide recommendations that revolve around the need to: (1) Evolve the organization's AI literacy framework to include AI organizational readiness; (2) Orient services around digital transformation; and (3) Ensure internal coherence in regards to revenue generation.

AI Organizational Readiness: As the Powerful Learning Division considers expanding its offerings related to AI literacy, it will be essential to evolve its AI literacy framework to include the development of AI organizational readiness for executive-level leaders working in

education. The concept of ‘AI literacy’ in and of itself may not sufficiently meet the need of district leaders in their effort to achieve digital transformation. Moreover, with the rapid pace of technology, it can be expected that the current framework may need to be reworked in order to avoid becoming obsolete. The Powerful Learning Team ought to consider evolving the existing framework to keep up with the pace of change, while building into the framework the nuanced difference between AI literacy for learners and AI organizational readiness for system-level leaders

Digital Transformation: The second recommendation centers around the terms ‘powerful learning’ and ‘digital transformation.’ While ‘powerful learning’ offers a compelling internal frame, externally it lacks the shared meaning required for effective positioning. During the kick-off meeting with the District, the term ‘powerful learning’ was used in the original title proposed for the Visioning Session. The executive leaders who attended the meeting had a nearly visceral reaction to the term, and asked to refrain using the phrase. The leaders from the District explained that the use of the term ‘powerful learning’ infers that what is currently happening in classrooms is ‘weak.’ At a moment when timing and alignment matter within the broader education ecosystem, Digital Promise must use terminology that district leaders already associate with pressing priorities. Helping districts build system-level coherence to achieve digital transformation could be a new north star for the Powerful Learning Division, one which can lead to significant revenue-streams due to high demand and need. In fact, the Powerful Learning Division’s Digital Equity Framework, published the same year as its AI literacy framework, already champions “leadership for digital transformation” through “coherent systems” (Jackson et al., 2024, p. 10). Powerful learning as a concept is embedded within this coherence

framework, and plays a critical role in achieving digital transformation in public schools. As the Powerful Learning Division continues to evolve its offerings, the team could repurpose its internal assets and coherence framework to usher school districts through the process of digital transformation. Meanwhile, the team can continue to invest time and resources into the exploration of powerful learning, as it did with the *Powerful Learning with Emerging Technologies* report that was published in 2025 (Mills et al.). In doing so, the team can pivot to fee-for-service offerings that simultaneously 'exploit' existing assets to 'explore' new programs that promote system-level coherence and digital transformation (Duncan, 1976). In doing so, the team will function ambidextrously.

Internal Coherence: However, as described in the previous section, it is clear that there is significant disagreement on the team about how to achieve sustainable revenue-streams in order to avoid additional reductions in staff. As such, in order to practice organizational ambidexterity, the Powerful Learning Division's senior leaders must determine how best to balance the 'exploitation' of existing assets and 'exploration' of new ideas (March, 1991). I initially viewed the Advancement Team, which was tasked with developing novel fee-for-service offerings, as embodying structural ambidexterity by operating essentially as an innovation unit. This interpretation was challenged by subsequent organizational changes, including the dissolution of the Advancement Team, thereby obscuring the mandate to innovate. An announcement in April 2026 that the Powerful Learning Division would adopt a matrixed management approach to program development then signaled a shift toward contextual ambidexterity. To ensure success, the Powerful Learning Division must explicitly articulate how it intends to foster organizational ambidexterity within the new team structure.

If the team chooses to take a structural approach, then a separate 'innovation unit' must be established, one that is intrinsically linked to the vision and strategy established by the executive leader (Duncan, 1976; O'Reilly & Tushman, 1996). This unit must be elevated and safeguarded to develop innovative ideas, ones that have the potential to cannibalize existing programs and products (The Ambidextrous Organization, 1997; Tushman & O'Reilly, 1996). Given the tension that already exists around a fee-for-service model, the innovation unit must be shielded from team dynamics that may otherwise smother the creation of new products. Alternatively, ambidexterity can be distributed across the team through a 'contextual' approach, through which the entire division functions ambidextrously (Gibson & Birkinshaw, 2004). However, a contextual approach requires a collective ownership over what ambidexterity ought to resemble, otherwise competing interests across teams may interfere with a coherent strategy. Disagreements over fee-for-service offerings may impede the ability for the team to inculcate contextual ambidexterity, due to a lack of cohesion and collective buy-in over the strategy.

Regardless of whether the Powerful Learning Division pursues structural or contextual organizational ambidexterity, achieving internal alignment hinges on a shared understanding of 'coherence.' A leader of the Powerful Learning Division recently noted that despite frequent use of the term, the team lacks a shared definition, often confusing it with mere 'cohesion' or 'agreement' instead of strategic, system-level alignment. To achieve this internal alignment, the team should establish a common definition. Options include leveraging the organization's existing Digital Equity Framework to align on the term 'coherence' or adopting established models from the sector, such as Harvard University's Public Education Leadership Program (PELP) Coherence Framework (2003), or the Nadler-Tushman Coherence Framework (1980).

Promoting internal coherence will thus better equip the Powerful Learning Division to successfully guide school districts through similar change processes.

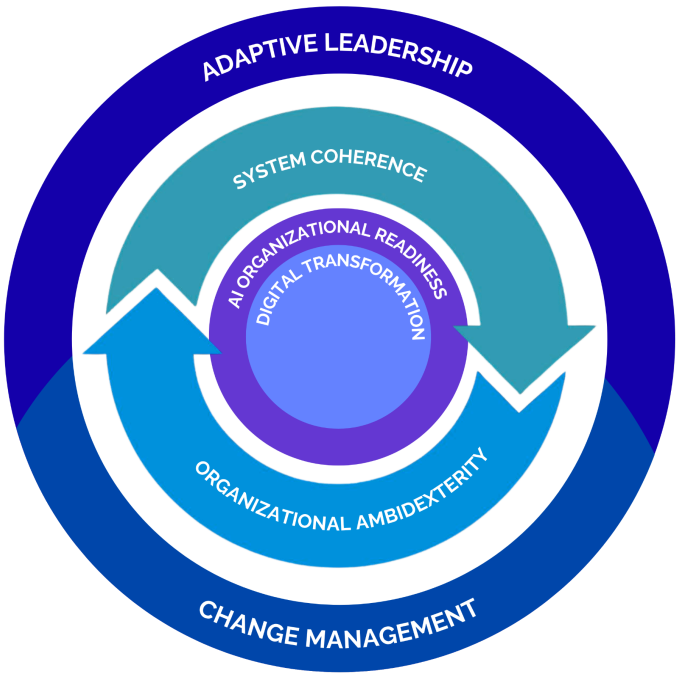
Implications for Sector

Through this paper, it has been argued that AI literacy is imperative at the individual learner level. When AI literacy exists across a collective of individuals, it can be inferred that said system has developed AI organizational readiness – that is to say, the aptitude to integrate intelligent technologies across the system. Due to the now pervasive nature of intelligent technologies, AI organizational readiness is essential in driving digital transformation across an organization. However, in order to achieve such transformation, a system must establish coherence in its strategy and operations. Given that transformation is ever evolving with the rate of technological change, it is imperative for organizations to remain nimble by fostering ambidexterity recognizing that the needs of each organization will vary depending on their starting point. All of these processes depend on a system's leaders to be adept at change management. Ultimately, through adaptive leadership, a system can unlock its potential to change through coherence and ambidexterity. When these interlocking components converge, they create the momentum necessary to unlock digital transformation, which is represented through the Digital Leadership Convergence Model (see Figure 7).

The Digital Leadership Convergence Model is a visual representation of the synthesis presented in this paper and presents the following hypothesis: Adaptive leaders effectively catalyze change management by first establishing system coherence in order to foster a culture of organizational ambidexterity, which in turn enables a system to realize digital transformation

through AI organizational readiness. In order to understand the convergence of these concepts, let us consider what constitutes each component (starting with the outer layer working towards the center):

Figure 7: Digital Leadership Convergence Model



Adaptive Leadership for Change Management: While the integration of AI into public education entails highly technical solutions, digital transformation is deeply human work. Any type of systemwide change requires thoughtful considerations around the human dimensions of the work. Humans are notorious for resisting change, and any change process often evokes strong emotions, stemming from psychological states of grief and loss (Kübler-Ross, 2005). As such, change management necessitates leaders to be adaptive to team dynamics, and deftly attend to the often unseen dynamics at play. Pulling from design thinking (Hasso Plattner Institute of Design at Stanford, 2010), leveraging the frameworks incorporated into this paper, my own international experience in change management, and the outcomes of the Project, the Digital Leadership Convergence Model therefore proposes the following steps to effectuate change: (1) Contextualize the problem; (2) Practice deep listening; (3) Co-create solutions; (4) Iterate collectively in order to create a continuous learning loop. As we learned from City and Curtis

(2025), contextualizing the problem entails information gathering in order to understand the history and context, while deep listening serves a critical phase in which a leader can better discern the team dynamics. This in turn begins to establish a foundation of trust, through which a leader can work with the team to identify and test solutions together. Through iterative cycles of implementation and testing, teams can create ongoing cycles of learning that promote collaboration and agility.

Organizational Ambidexterity: The ability for a team to simultaneously look to the future while leveraging learning from past successes is what makes an organization ambidextrous. However, organizational ambidexterity is grounded in the premise that teams must be willing to pivot to meet the needs of the moment, defenestrating once beloved programs or products for new, untested ideas. Just as change can be difficult for teams to embrace, a culture of ambidexterity requires collective ownership over the duality of exploitation and exploration. Whether a team opts to distribute a mandate to innovate (i.e., contextual ambidexterity) or establish a separate innovation unit (i.e., structural ambidexterity), the Digital Leadership Convergence Model posits that innovation can only happen when: (1) A shared vision for innovation is collectively owned across departments; (2) Innovation is woven into a coherent strategy that unifies operations across a system; and (3) A culture of innovation creates an environment in which the vision and strategy can thrive.

System Coherence: Drawing on the work of Ross (2019) as well as Nadler and Tushman (1980), systemwide coherence can be understood as the alignment of: (1) Core operations; (2) Organizational structures; (3) Processes; and (4) Infrastructural resources. Core operations

represent the work prioritized by the team, whether it be established programs, products, and services that can be exploited, or new exploratory workstreams. To that end, the organizational structures that are put into motion determine the type of ambidexterity the team will employ (i.e., equally distributed across departments or segmented into a separate function). That is to say, the way that the team is arranged directs the way in which the organizational ambidexterity is implemented, which in turn accelerates the system's ability to be simultaneously exploitative and exploratory. The work is then guided by guardrails established through processes that encourage accountability, supported by the infrastructure that makes the work possible (e.g., hardware, software, technological platforms, etc.). Ultimately, by creating this synergistic cycle of innovation, teams can therefore accelerate momentum towards the ultimate goal of achieving digital transformation.

Digital Transformation: As detailed in the "Review of Knowledge for Action," the term 'digital transformation' can be interpreted as the convergence of human-centered change management orchestrated strategically to unlock the fullest potential of technological integration across a system (hence the name "Digital Leadership Convergence Model"). While new terms have emerged within the field, such as 'intelligence transformation' (Etwaru, 2023), at present 'digital transformation' as a term remains broad enough to encompass current technological advancements. However, given the rapid pace of technological change, etymological adjustments may be needed and can be explored in the future. Regardless, in its current form, the Digital Leadership Convergence Model defines digital transformation as the outcome of human-centered change (i.e., outer circles of the model) working in concert with technological integration (i.e.,

inner core), weaving together “information, computing, communication, and connectivity technologies” (Vial, 2019, p. 118) to unlock the potential of a system.

AI Organizational Readiness: Prior to the emergence of ChatGPT, the threshold for digital transformation was lower insofar as digital transformation was primarily relegated to the integration of technological systems into human-led processes. With the acceleration of AI, the goal post has moved. Access to technology in public schools is now wholly inadequate. Instead, digital transformation must now take into account the way that intelligent societies are reshaping society. As such, digital transformation, as it exists now, is dependent on a system’s ability to establish AI organizational readiness (i.e., a system’s collective aptitude to integrate intelligent technologies across its various activities). This readiness is dependent on a system’s collective aptitude to integrate intelligent technologies across its various activities based on: (1) Will (i.e., “change commitment”); and (2) Capacity (i.e., “change efficacy”) (Weiner, 2009, p. 1). When teammates across an organization demonstrate baseline AI literacy as well as collective buy-in to apply emerging technologies, said system can be said to demonstrate both the will and capacity to catalyze digital transformation.

In summary, the Digital Leadership Convergence Model is the confluence of human-centered adaptive leadership practices that promote systemwide coherence and ambidexterity (i.e., the outer circles) in order to support digital transformation through AI organizational readiness (i.e., the inner core). While conceived specifically for the public education sector, it is important to emphasize that the concepts the underpin the Digital Leadership Convergence Model (i.e., adaptive leadership, system coherence, organizational

ambidexterity, digital transformation, and organizational readiness) are grounded in theories related to organizational behavior, and can therefore have broad applicability to various sectors. It is my hope that this model can help school districts, nonprofit organizations, and corporations alike to achieve digital transformation as AI continues to accelerate change.

Implications for Self

As I conclude my doctoral degree at Harvard University, the Digital Leadership Convergence Model represents a synthesis of my professional learning over the past 20 years. The outer rings, focused on leading human-centered change, codify the conceptual understanding that I have developed through the EdLD program in relation to my past and current leadership experience. Prior to my time at HGSE, as mentioned previously, I served as the Interim and Deputy CEO of one of the largest educational institutions in its context, doubling the size of the organization's footprint, reaching 10% of all public schools in the country, and overseeing a team of 100+ staff members. During my tenure, I led a highly successful change management process, successfully restructuring the organization amid the pandemic and a regional war while maintaining record-breaking staff satisfaction as measured by BCG. Additionally, as an executive, I was responsible for the launch of a school transformation initiative, a public policy lab, an innovation incubator, as well as the creation of a new Master's program in Teacher Leadership. These experiences, along with the theoretical frameworks which I have cited throughout this paper, undergird the outer rings of the Digital Leadership Convergence Model.

Meanwhile, the inner core of the Digital Leadership Convergence Model is heavily informed by my doctoral studies and prior programming experience. Nearly a decade ago, I

attained a certificate in full-stack web development from the University of Denver. While at Harvard University, I deepened my coding abilities by enrolling in computer science coursework, through which I launched the web application VERIVOX, a platform designed to amplify the voices of the EdLD community. This technical work was conducted alongside my service on the Massachusetts Department of Elementary and Secondary Education's AI Task Force, co-authoring an AI implementation guide for Prince George's County Public Schools, training an AI teacher training coach for the Public Schools of Brookline, and building an AI-powered data wrangler. This last project, which received university funding and was tested under the supervision of Dr. Ying Xu, demonstrated that AI tools could be nearly as effective as human researchers at analyzing trends in qualitative data while reducing time spent on the task by 96% (Clark, 2025). These efforts in educational technology were further bolstered by my previous track record of securing $2.5 million to implement a one-to-one device program during the pandemic, which included developing a fully virtual teacher training program and an online student leadership experience. Ultimately, the Digital Leadership Convergence Model serves as a personal milestone, seamlessly reflecting the integration of my technological skills with my leadership background.

My immediate professional focus will be on applying and testing the Digital Leadership Convergence Model to help school districts and organizations achieve digital transformation through coherent and ambidextrous systems. While the Project and the subsequent development of the Digital Leadership Convergence Model provided a template for my continued professional development, the model itself is currently dense and requires substantial unpacking. To transform it into an actionable tool for myself and district leaders, I must comprehensively test its hypotheses in diverse contexts through a robust data collection process. This systematic process

will allow me to finetune the embedded concepts and provide practitioners with clear, actionable steps for achieving AI organizational readiness and digital transformation.

Moreover, as a practitioner who straddles the nexus of technology and education, I am committed to continuing to drive AI-related projects in education. Upon graduating from Harvard University, I will be engaged in various AI-related projects, including the development of an AI-native school, building an AI-enabled teacher training portal, and launching an AI-powered parent-facing application to help families interpret student performance data. To effectively lead these initiatives, it remains incumbent upon me to deepen my technical understanding of intelligent technologies. Having gained experience developing web applications leveraging LLM APIs (such as ChatGPT) and practicing with Retrieval-Augmented Generation (RAG) to customize content generated by AI, my immediate next step is to learn the mechanics of building neural networks to gain a better grasp of these core technologies. This continued focus on technical skill development is necessary to effectively build new applications and stay relevant in this rapidly evolving field.

On a personal level, this Project showcased in this paper confirmed the necessity of human-centered adaptive leadership when facing complex change. Specifically, the Leading Strategically framework prompted me to critically reflect on the power that I wield as a leader. My prior background as a wartime executive leader was a crucible experience, teaching me how to navigate profound ambiguity and tumult by always centering relationships and human-centered change management. The successful implementation of the Project, despite organizational restructuring, team dynamics, and a highly truncated timeline, confirmed that the ability to foster trust and collaborate remain my most prized leadership assets. As I look to the future as an entrepreneur and system-level leader, maintaining this relational focus will remain

front and center in my practice. This commitment is the foundation of the Digital Leadership Convergence Model, which deliberately centers adaptive leadership and a human-centered approach to change management. In an era that will likely be marked by the ubiquity of intelligent machines, my aim is to ensure that the human experience remains at the core of educational transformation. This human-centered approach is the power that I wield as I enter into an education ecosystem that craves support in building ethical AI systems.

CONCLUSION

Our world is in the throes of change. Emerging technologies are reshaping entire sectors. Just as the industrial revolution led to an explosion of economic growth, the rise of AI may cause a similar acceleration of human development. However, while these advancements have tremendous promise, they also have the potential to eclipse progress. Unless society prioritizes a future-facing education for all students, rifts in our social fabric may only continue to tear. To address both the beneficial and adverse consequences of this sudden technological seismic shift, education leaders must grapple with their own mastery of these ever evolving technologies – a duty that is challenged by the very nature of an already complex system that is in the midst of significant upheaval in and of itself. As political pressures reshape the US education system, state and local leaders are grappling with the pace of change (in terms of the material structural changes of the system itself, on top of financial constraints and technological demands). Like skyscrapers built upon shifting dunes, our education systems are stretching to the heavens aspiring for progress while the foundations upon which were built churn. Now more than ever, system-level leaders working in public education require support to build coherence for digital transformation. Programs like the Project showcased through this paper are a step in the right direction, but more is needed. Education leaders require robust capacity building to strategically integrate educational technology across the entire system, encompassing formal and informal organizational structures, staff support, operational processes, infrastructural resources, and community engagement.

Through this paper, three key themes were examined: (1) AI organizational readiness as a precursor to digital transformation; (2) adaptive leadership for change management; and (3)

fostering a culture of innovation through organizational ambidexterity. While these three concepts were the underpinnings of the Project at the center of this paper, the lessons extracted from the case study extend the sector as a whole. To that end, three essential questions can help to make meaning of these takeaways:

- *How can we support system-level leaders with digital transformation in an AI era?*
- *In a rapidly changing world, how can organizational ambidexterity foster innovation?*
- *What does it look like to lead strategically to manage complex change?*

How can we support system-level leaders with digital transformation in an AI era?

As outlined in the Digital Leadership Convergence Model, digital transformation relies on an intricate web of interlinking parts in order to adequately integrate educational technology into all aspects of public education. Education leaders working in school systems must arrange their system in such a way that individuals are positioned to innovate, supported by a culture where teachers can safely apply new skills (so that they can foster AI literacy among their pupils). After all, digital transformation is not merely a technical challenge. While integrating emerging technologies into public education requires technological expertise, the change management process itself is deeply human. District leaders must be adept at driving human-centered change. The support must address both the technical aspects of technological integration, as well as develop the capacity of the people within a system. Returning to Luckin, the level of AI organizational readiness required to achieve system-wide digital congruence in education necessitates a “participatory training process,” one that will “empower people to be more able to leverage Al to meet their needs” (Luckin et al., 2022, p. 1). In building the capacity

of their teams, a district can establish the collective aptitude necessary to foster systemwide AI organizational readiness.

For this learning to occur, the necessary infrastructure is required (which must be built upon processes that will protect learners from possible harm). To borrow from Tushman, this level of "congruence" requires leaders to envision the culture of innovation they wish to see in the system, and "build architectures around that" (The Ambidextrous Organization, 1997, p. 46). As Tushman expresses, is this type of "alignment, or congruence, between strategy and four organizational building blocks – critical tasks and work flows, formal organizational arrangements, people, and culture – drives today's success" (The Ambidextrous Organization, 1997, p. 47). The Visioning Session highlighted through this paper is an example of the professional development system-level leaders need in order to establish a shared vision of success and a communication plan to realize the aims of the transformation process. To that end, the Digital Leadership Convergence Model could serve as a tool to identify the areas where a system needs to focus, based on where they are in the process of developing AI organizational readiness.

In a rapidly changing world, how can organizational ambidexterity foster innovation?

As the education sector faces political, economic, and technological pressures, leaders can leverage organizational ambidexterity to navigate change. Returning to concepts championed by Tushman and O'Reilly, "organizations are subject to ecological pressures," marked by "periods of incremental adaptation punctuated by discontinuities" (Tushman & O'Reilly, 1996, p. 12). These discontinuities, such as the introduction of generative AI, require leaders to shield

innovation from complacency. As Tushman and O'Reilly argue, "To remain successful over long periods, managers and organizations must be ambidextrous — able to implement both incremental and revolutionary change" (1996, p. 8). They further expound that the "failure to achieve breakthrough innovations while also making steady improvements" can lead to stagnation (O'Reilly & Tushman, 2004, p. 74). For this reason, Tushman and O'Reilly posit that "Managing innovation streams is as much rooted in organizational architectures and the management of discontinuous organizational change as it is in technological prowess" (The Ambidextrous Organization, 1997, p. 45).

Organizations like Digital Promise can benefit greatly by establishing innovation units that are intrinsically linked to the strategy championed by its executive leaders. However, given the threats posed by competing interests, this vision must be shared among all senior leaders while creating a culture of innovation. While radical ideas have the potential to upend traditional workstreams, revolutionary offerings can lead to leapfrog moments, ensuring the overall health and longevity of the organization. This is especially important given the current flux of rapidly changing dynamics at play within the ecosystem. Even school systems can derive meaning from the notion of creating organizational ambidexterity by creating space for novel concepts. Again, through the application of education R&D, novel approaches to teaching can be incubated through careful collaboration with researchers and technologies in a way that protects students from harm. However, just as with any sector, education leaders must be wary of resistance and the gravitational force exerted by the status quo.

What does it look like to lead strategically to manage complex change?

The confluence of political, economic, societal, and technological forces that confront contemporary US public education require system-level leadership that goes beyond technical solutions towards adaptive change. Digital transformation cannot be achieved through technical solutions alone. Coherence across the system requires a human-centered approach, one that cultivates trust. To do so, leaders must 'recognize the full humanity of everyone involved, make time for relationship building, anchor decisions in shared purpose and values, be vulnerable about limitations, give grace as well as credit when necessary, and find delight in the co-creative process' (City & Curtis, 2025, p. 49). Only then can system-level leaders cultivate the 'political will' necessary to achieve 'change management' (City & Curtis, 2025, p. 33). In short, leaders must reconcile both the "intellectual and emotional aspects of the change process" (Knoster et al., 2000, p. 98). As such, managing complex change requires leaders to build a bold vision, while ensuring that teammates have the skills, motivation, resources, and action plan required to bring that vision to life (Ambrose, 1987; Knoster et al., 2000).

Final Thought

Heraclitus once taught that, "One cannot step twice into the same river" (Nayak, 2014, 3.3.1 Everything Flows). While this ancient philosopher preceded Socrates, the lesson remains the same today. Everything is always changing, and nothing remains the same. As generative AI

quickly reshapes society, education leaders must embrace accelerated change. What they know about AI today could become obsolete by tomorrow.

The fact of the matter is that the use of AI in education stretches back to the 1950s (Mills et al., 2024, p. 11), when Jaime Carbonell developed "an adaptive geography instruction system called SCHOLAR" (Luckin et al., 2022, p. 2). Whereas earlier AI models replied heavily on answer and response triggers, generative AI "synthesizes new content by using statistical models and predicting outputs, such as the next word or pixel" (Mills et al., 2024, p. 12). While powerful, generative AI built on traditional computers could arguably be considered rudimentary.

On the horizon, technologists predict that breakthroughs in quantum computing will revolutionize the ways in which we leverage AI. Quantum computing is still in its early stages of development. However, large technological companies are already testing what these machines can do. While traditional computers are bound by binary code (i.e., in which a single bit can either be "0" or "1"), quantum computers expand the number of calculations possible by leveraging "qubits," a concept extracted from "quantum-evident characteristics of matter and light" (Kirubakaran et al., p. 89). In order to manipulate "subatomic particles such as electrons and protons" (Giles, 2019), sub-zero temperature conditions are needed. Alternatively, electromagnetic fields can be used to target a single atom "on a silicon chip in ultra-high-vacuum chambers" (Giles, 2019, What is a qubit?). In either regard, the reconfiguration of the atom supercharges the computer's ability to process exponentially more data.

All of this is to say that if an education leader is feeling overwhelmed and unable to keep up with the current pace of change as it relates to existing generative AI, quantum computing is only going to exacerbate the problem. "As the old adage goes," write Knoster, Villa, and Thousand, "it is important not to mistake the edge of a rut for a horizon. Change is a dynamic

process that requires constant vigilance and flexibility toward a common good" (2000, p. 120). With quantum computing (and other possible breakthroughs) on the horizon, there is no doubt that the substance of digital transformation will continue to expand with the speed of technological advances. In that sense, digital transformation is fluid – a constantly moving goal post. Once a system has achieved a certain level of transformation, no doubt it will be time for another iteration of change. Alas, the Heraclitean river continues to flow. For the students of today, the rapids are particularly tumultuous with wave upon wave of innovation. It is thus imperative that we reimagine the system in which they are learning to lead, so that they can cross the technological Rubicon that stands before them.

BIBLIOGRAPHY

Aguilar, E. (2013). *The art of coaching: Effective strategies for school transformation.* Jossey-Bass.

Aguilar, F. J. (1967). *Scanning the business environment*. New York, NY: Macmillan.

Akbarighatar, P., Pappas, I., & Vassilakopoulou, P. (2023). A sociotechnical perspective for responsible AI maturity models: Findings from a mixed-method literature review. *International Journal of Information Management Data Insights*, 3(3), 100193. https://doi.org/10.1016/j.jjimei.2023.100193

Ali, W., & Khan, A. Z. (2025). Factors influencing readiness for artificial intelligence: a systematic literature review. *Data Science and Management*, 8, 224–236. https://doi.org/10.1016/j.dsm.2024.09.005

Ambrose, D. (1987). *Managing Complex Change.* Pittsburgh, PA: Enterprise Group, Ltd.

Alter, S. (2013). Work system theory: Overview of core concepts, extensions, and challenges for the future. *Journal of the Association for Information Systems*, 14(2), 72–121. https://doi.org/10.17705/1jais.00323

Binns, A., O'Reilly, C. A., III, & Tushman, M. L. (2022). *Ambidextrous Organization. In Corporate Explorer: How Corporations Beat Startups at the Innovation Game* (pp. 105–144). John Wiley & Sons, Incorporated.

Bloom, B. S. (Ed.). (1956). Taxonomy of educational objectives: The classification of educational goals. *Handbook I: Cognitive domain.* Longmans, Green.

Bolman, L. G. & Deal, T. (2021). *Reframing organizations : artistry, choice, and*

leadership (6th edition.). Jossey-Bass, a Wiley imprint. https://onlinelibrary-wiley-com.ezp-prod1.hul.harvard.edu/doi/book/10.1002/9781119281856

Burns, M., Winthrop, R., Luther, N., Venetis, E., & Karim, R. (2026). *A new direction for students in an AI world: Prosper, prepare, protect*. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2026/01/A-New-Direction-for-Students-in-an-AI-World-FULL-REPORT.pdf

Bursztynsky, J., & Novet, J. (2026, March 31). *Oracle layoffs begin as company ramps up AI spending*. CNBC. https://www.cnbc.com/2026/03/31/oracle-layoffs-ai-spending.html

Center on Reinventing Public Education. (2026, January). *Think forward: Building a coherent approach to AI in education* [White Paper]. CRPE, ASI, Arizona State University.

Chow, A. R. (2025, July 9). The AI industry is funding a massive AI training initiative for teachers. *TIME*. https://time.com/7301335/ai-education-microsoft-openai-anthropic/

Chow, A. R. (2025, July 9). The AI industry is funding a massive AI training initiative for teachers. *TIME*. https://time.com/7301335/ai-education-microsoft-openai-anthropic/

Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L., & Zemmel, R. (2023, June 14). *The economic potential of generative AI: The next productivity frontier.* McKinsey & Company. https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier mckinsey.com+2bibliography.ipums.org+2

City, E. & Curtis, R. (2025). *Leading Strategically: Achieving Ambitious Goals in Education.* Harvard Education Press: Cambridge, Massachusetts.

Clark, R. (2024, May 15). *Who will control the robots?* Medium.

https://medium.com/@ruiz_38224/who-will-control-the-robots-48ce9cc4fa49

Clark, R. (2025, September 28). *Can AI help to elevate the voices of students?* Verivox. https://www.verivox.pro/articles/0972a139-5115-4e6c-8ae9-6d4ac2866b82

Digital Education Council. (2024, August 2). *Digital Education Council global AI student survey 2024*. https://www.digitaleducationcouncil.com/post/digital-education-council-global-ai-student-survey-2024

Digital Promise (2025a, July 10). *Powerful Learning: Leadership Meeting.* (Presentation).

Digital Promise. (2025b, August 5). *ST outcomes data strategy review* [Unpublished internal

Digital Promise. (2026). *DP rebrand findings and recommendations* [PowerPoint slides]. Internal organizational document. Retrieved February 28, 2026.

Digital Promise. (n.d.-a). *Our History.* https://digitalpromise.org/about/our-history/

Digital Promise. (n.d.-b). *About*. https://digitalpromise.org/about/

Digital Promise. (n.d.-c). *Our Strategic Framework and Impact Goals.* https://digitalpromise.org/our-strategic-framework-and-impact-goals/

Digital Promise. (n.d.-d). *2023 Annual Report.* https://digitalpromise.org/2023-annual-report/

Digital Promise. (n.d.). *CT Pathways Toolkit.* Retrieved November 27, 2025, from https://digitalpromise.org/initiative/computational-thinking/ct-pathways-toolkit/

Duncan, R. B. (1976). The ambidextrous organization: Designing dual structures for innovation. In R. H. Kilmann, L. R. Pondy, & D. Slevin (Eds.), *The management of organization* (Vol. 1, pp. 167–188). North-Holland.

Economic Policy Institute. (2025, March 21). *Executive Order on closing the Department of*

Education. https://www.epi.org/policywatch/executive-order-on-closing-parts-of-the-department-of-education/

Etwaru, R. (2023, November 21). *Evolving from digital transformation to intelligence transformation*. *Forbes*. https://www.forbes.com/councils/forbestechcouncil/2023/11/21/evolving-from-digital-transformation-to-intelligence-transformation/

European Parliament. (2021, April 22). *Shaping the digital transformation: EU strategy explained.* https://www.europarl.europa.eu/topics/en/article/20210414STO02010/shaping-the-digital-transformation-eu-strategy-explained

Frangos, P. (2022). An Integrative Literature Review on Leadership and Organizational Readiness for AI. *International Conference on AI Research*, 4(1), 145–152. https://doi.org/10.34190/icair.4.1.834

Gallup, & Walton Family Foundation. (2025). *Teaching for tomorrow: Unlocking six weeks a year with AI.* Gallup.

Giles, M. (2019, January 29). *Explainer: What is a quantum computer? MIT Technology Review*. https://www.technologyreview.com/2019/01/29/66141/what-is-quantum-computing/

Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal, 47*(2), 209–226. https://doi.org/10.5465/20159573

Grand View Research. (2024). AI in K-12 education market size, share & trends analysis report

by component (solutions, services), by deployment, by application, by region, and segment forecasts, 2024 – 2033. *Grand View Research.* https://www.grandviewresearch.com/industry-analysis/ai-k-12-education-market-report

Great Place to Work. (2024). *Teach For Armenia*. Retrieved March 9, 2026, from https://www.greatplacetowork.it/scheda_azienda/teach-for-armenia/

Hasso Plattner Institute of Design at Stanford. (2010). *An introduction to design thinking: Process guide*. Stanford University. https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf

Heifetz, R. A. (1994). *Leadership without easy answers*. Harvard University Press.

Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Harvard Business Press.

Heifetz, R. A., & Laurie, D. L. (1997). The work of leadership. *Harvard Business Review, 75*(1), 124–134.

Heifetz, R. A., & Linsky, M. (2002). *Leadership on the line: Staying alive through the dangers of leading*. Harvard Business School Press.

Hernholm, S. (2025, June 22). Why AI literacy is essential for success in an AI-driven economy. *Forbes*. https://www.forbes.com/sites/sarahhernholm/2025/06/22/why-ai-literacy-is-essential-for-success-in-an-ai-driven-economy/

High, P. (2020, January 27). MIT's Jeanne Ross on why companies are only getting five percent of revenues from digital. *Forbes*. https://www.forbes.com/sites/peterhigh/2020/01/27/mits-jeanne-ross-on-why-companies-are-only-getting-five-percent-of-revenues-from-digital/

Howell, J., & Romee, S. (2025, October 10). *High school student use of AI is surging: Are schools ready?* All Access. https://allaccess.collegeboard.org/high-school-student-use-ai-surging-are-schools-ready

Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge, 3*(3), 123–127. https://doi.org/10.1016/j.jik.2016.07.002

International Society for Technology in Education (ISTE). (2024). *ISTE Standards for Education Leaders*. https://iste.org/standards/education-leaders

Jackson, J., Starr, J., & Weaver, D. (2024). *A framework for digital equity*. Digital Promise. https://doi.org/10.51388/20.500.12265/223

Jöhnk, J., Weißert, M., & Wyrtki, K. (2021). Ready or not, AI comes—An interview study of organizational AI readiness factors. *Business & Information Systems Engineering*, 63(1), 5–20. https://doi.org/10.1007/s12599-020-00676-7

Kirubakaran, S. S., Senthil Kumar, R., Anusha Bamini, A. M., & Chitra, R. (2023). *From evolution to revolution: The contemporary development of quantum computing.* In P. Raj, A. Kumar, A. K. Dubey, S. Bhatia, & O. M. S. (Eds.), *Quantum computing and artificial intelligence: Training machine and deep learning algorithms on quantum computers* (pp. 85–106). Walter de Gruyter. https://doi.org/10.1515/9783110791402-005

Kosmyna, N., Hauptmann, E., Yuan, Y. T., Situ, J., Liao, X.-H., Beresnitzky, A. V., Braunstein, I., & Maes, P. (2025). *Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task* (Version 2). arXiv. https://doi.org/10.48550/arXiv.2506.08872

Kotter, J. P. (2012). *Leading change* (Rev. ed.). Harvard Business Review Press.

Knoster, T. (1991, November). *The Knoster model for managing complex change* [Conference presentation]. TASH Conference, Washington, D.C. Kansas State University.

Knoster, T. P., Villa, R. A., & Thousand, J. S. (2000). A framework for thinking about systems change. In R. A. Villa & J. S. Thousand (Eds.), *Restructuring for caring and effective education: Piecing the puzzle together* (pp. 93–128). Paul H. Brookes Publishing Co.

Kübler-Ross, E. (2005). *On death and dying: What the dying have to teach doctors, nurses, clergy, and their own families* (40th anniversary ed.). Scribner. (Original work published 1969)

Kulesa, A. C., Mission, M., Wells, M. K., & Kotran, A. (2025, May 13). *Building AI Readiness: Actionable K-12 insights and investment pathways.* Bellwether Education Partners. https://bellwether.org/publications/building-ai-readiness/?activeTab=1

Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science; social equilibria and social change. *Human Relations, 1*(1), 5–41. https://doi.org/10.1177/001872674700100103

Lewin, K. (1951). *Field theory in social science: Selected theoretical papers* (D. Cartwright, Ed.). Harper & Row. https://heinonline.org/HOL/P?h=hein.cow/anamacp0276&i=153

Lippitt, M. (1987). *The Managing Complex Change Model.* Enterprise Management, Ltd.

Lowe, A., Oboh, J., & Stewart, L. (2025a). *Vision-setting for district-wide AI literacy* [Slide deck]. Internal presentation prepared for client.

Lowe, A., Oboh, J. & Stewart, L. (2025b). *Vision-Setting for District-Wide AI Literacy Workbook & Communication Plan.*

Luckin, R., Cukurova, M., Kent, C., & du Boulay, B. (2022). Empowering educators to be

AI-ready. *Computers & Education: Artificial Intelligence*, 3, Article 100076. https://doi.org/10.1016/j.caeai.2022.100076

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science, 2*(1), 71–87. https://doi.org/10.1287/orsc.2.1.71

McClimon, T. J. (2025, October 2). Most nonprofits are in survival mode — waiting for donors to act. *Forbes*. https://www.forbes.com/sites/timothyjmcclimon/2025/10/02/most-nonprofits-are-in-survival-mode-waiting-for-donors-to-act/

Merriman, M., & Sanz Sáiz, B. (2024). *How can we upskill Gen Z as fast as we train AI?* Ernst & Young. https://www.ey.com/en_us/about-us/corporate-responsibility/how-can-we-upskill-gen-z-as-fast-as-we-train-ai%20

Mills, K., Ruiz, P., Lee, K., Coenraad, M., Fusco, J., Roschelle, J., & Weisgrau, J. (2024). *AI literacy: A framework to understand, evaluate, and use emerging technology.* Digital Promise. https://doi.org/10.51388/20.500.12265/218

Mills, K., Noakes, S., Pattenhouse, M., Shell, A., & Vollavanh, A. (2025, November). *Powerful learning with emerging technology*. Digital Promise. https://digitalpromise.org/wp-content/uploads/2024/04/Powerful-Learning-with-Emerging-Technology.pdf

Nadler, D. A., & Tushman, M. L. (1980). A model for diagnosing organizational behavior. *Organizational Dynamics*, 9(2), 35–51. https://doi.org/10.1016/0090-2616(80)90039-X

Nayak, A. (2014). Heraclitus (540–480 BC). In J. Helin *et al.* (Eds.), *The Oxford handbook of*

process philosophy and organization studies. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199669356.013.0003

Nortje, M. A., & Grobbelaar, S. S. (2020). A Framework for the Implementation of Artificial Intelligence in Business Enterprises: A Readiness Model. *2020 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)*, 1–10.

OECD (2025). *Empowering learners for the age of AI: An AI literacy framework for primary and secondary education (Review draft)*. OECD. Paris. https://ailiteracyframework.org.

O'Reilly, C. & Tushman, M. (2004). The Ambidextrous Organization. *Harvard Business Review*, 82(4), 74-81.

O'Reilly, C. A., III, & Tushman, M. L. (2004). The Ambidextrous Organization. *Harvard Business Review*, 82(4), 74–81.

Paige, M. (2024, May 20). *The history of digital transformation: From mainframes to generative AI*. HatchWorks AI. https://hatchworks.com/blog/product-design/history-digital-transformation/

Pellicelli, M. (2023). *The digital transformation of supply chain management*. Elsevier.

Pinski, M., Hofmann, T., & Benlian, A. (2024). AI Literacy for the top management: An upper echelons perspective on corporate AI orientation and implementation ability. *Electronic Markets,* 34(24). https://doi.org/10.1007/s12525-024-00707-1

Public Education Leadership Project. (2003). *Coherence Framework.* Harvard University. https://pelp.fas.harvard.edu/coherence-framework

Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management, 34*(3), 375–409. https://doi.org/10.1177/0149206308316058

Eric Ries. (2011). *The Lean Startup : How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Currency.

Rae, A. (2026, March 19). *Nonprofit workers are in crisis. Funders and policymakers have the tools to fix it*. Forbes. https://www.forbes.com/sites/aparnarae/2026/03/19/nonprofit-workers-are-in-crisis-funders-and-policymakers-have-the-tools-to-fix-it/

Ross, J. W. (2018). *The fundamental flaw in AI implementation*. *MIT Sloan Management Review, 59*(2), 10–11.

Ross, J. W., Beath, C. M., & Mocker, M. (2019). *Designed for digital: How to architect your business for sustained success*. The MIT Press.

Shannon, C. E. (1948). A mathematical theory of communication. *The Bell System Technical Journal, 27*(3), 379–423.

Shepardson, D. & Varghese, H. M. (2025, November 14). *Verizon to cut about 15,000 jobs as new CEO restructures, source says*. Reuters. https://www.reuters.com/business/verizon-cut-about-15000-jobs-wsj-reports-2025-11-13/

Snelling, J. (2016, July 1). *New student standards are comprehensive approach to developing lifelong learners.* ISTE. https://iste.org/blog/new-student-standards-are-comprehensive-approach-to-developing-lifelong-learners

The Ambidextrous Organization [Interview]. (July 1997). *Journal of Business Strategy*, 18(4), 42–45. https://search.proquest.com/scholarly-journals/ambidextrous-organization/docview/1295095976/se-2

The White House. (2025, July). *America's AI Action Plan.* https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf

Tehrani, A. N., Ray, S., Roy, S. K., Gruner, R. L., & Appio, F. P. (2024). Decoding AI readiness: An in-depth analysis of key dimensions in multinational corporations. Technovation, 131, Article 102948. https://doi.org/10.1016/j.technovation.2023.102948

Tomasko, L., Martin, H., Fallon, K., Kim, M., Faulk, L., & Boris, E. T. (2025, October). *How government funding disruptions affected nonprofits in early 2025: Nationally representative findings from the Nonprofit Trends and Impacts Study* (Research Report). Urban Institute. https://www.urban.org/sites/default/files/2025-10/How_Government_Funding_Disruptions_Affected_Nonprofits_in_Early_2025.pdf

Turing, A. M. (1936). On computable numbers, with an application to the Entscheidungsproblem. *Proceedings of the London Mathematical Society, 42*(1), 230–265. https://doi.org/10.1112/plms/s2-42.1.230

Tushman, M. L., & O'Reilly, C. A., III. (1996). Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change. *California Management Review,* 38(4), 8–30.

U.S. Department of Education. (2025, September 25). *Proposed Priority and Definitions-Secretary's Supplemental Priority and Definitions on Career Pathways and Workforce Readiness (Document No. 2025-18639)*. Federal Register. https://www.federalregister.gov/documents/2025/09/25/2025-18639/proposed-priority-and-definitions-secretarys-supplemental-priority-and-definitions-on-career

Vial, G. (2019). *Understanding digital transformation: A review and a research agenda.* Journal

of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, 4, 67. https://doi.org/10.1186/1748-5908-4-67

Westerman, G. (2016). *Why digital transformation needs a heart*. *MIT Sloan Management Review, 58*(1).

Wething, H. & Cohn, E. (2025, April 17). *Trump is putting crucial school funding at risk by dismantling the Department of Education.* Economic Policy Institute. https://www.epi.org/blog/trump-is-putting-crucial-school-funding-at-risk-by-dismantling-the-department-of-education/

APPENDICES

Appendix 1: Post-Training Survey Questions for Executive Participants

General Questions:

- How satisfied were you with your overall AI training experience?
- Would you recommend this learning experience to a colleague?
- I feel confident in my ability to strategically leverage AI in our current infrastructure.
- I am confident that I can effectively advocate for meaningful AI integration in our district's classrooms.

Strategic Vision and Leadership

- Our district has a clear vision for how AI can support teaching and learning.
- District leadership is actively engaged in conversations about ethical AI use.
- We have identified priority areas where AI could enhance instructional planning.
- District leadership is actively engaged in conversations about ethical AI use.

Instructional Integration

- Teachers have access to professional development on using AI tools for instruction.
- AI tools are being used to support lesson planning, differentiation, or formative assessment.
- We have guidance in place for responsible classroom use of AI tools.

Infrastructure and Data Systems

- Our district has the technical infrastructure to support AI tools (e.g., devices, bandwidth).
- We have policies in place to protect student data when using AI-powered platforms.
- Our data systems are integrated enough to support AI-driven insights (e.g., predictive analytics).

Communication and Engagement

- We have communicated our AI strategy to families and community stakeholders.
- We are engaging educators, students, and families in conversations about AI use.
- We have a plan to address concerns or misconceptions about AI in education.

Appendix 2: Post-Implementation Survey Questions for Digital Promise Staff

Please answer the following statements by indicating the extent to which you agree or disagree (1 = Strongly Disagree | 2 = Disagree | 3 = Slightly Disagree | 4 = Neutral | 5 = Slightly Agree | 6 = Agree | 7 = Strongly Agree)

Statements:

- By the end of the Project, I had a clear understanding of the vision.
- Throughout the Project, I had the necessary skills to execute my tasks.
- Throughout the Project, I felt a sense of ownership over my role in Phase 1 of the project.
- Throughout the Project, I had the necessary resources to complete my tasks.
- Once the project plan was shared, I had a clear idea of the timeline and my deadlines.
- Overall, I felt as though the Project was successful.

Appendix 3: Internal Survey Results by Question

Chart 7: Team Survey Question #1

By the end of Phase 1 of the Fresno project, I had a clear understanding of the vision.

15 responses

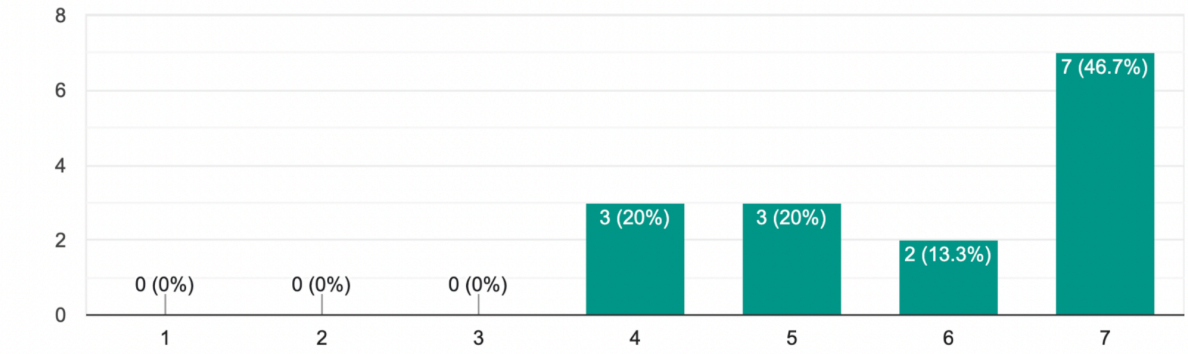


Chart 8: Team Survey Question #2

Throughout Phase 1 of the Fresno project, I had the necessary skills to execute my tasks.

15 responses

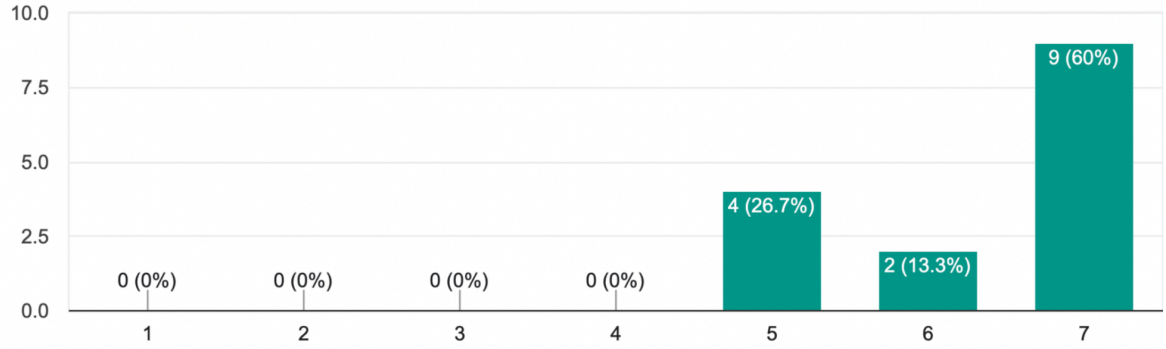


Chart 9: Team Survey Question #3

Throughout Phase 1 of the Fresno project, I felt a sense of ownership over my role in Phase 1 of the Fresno project.

15 responses

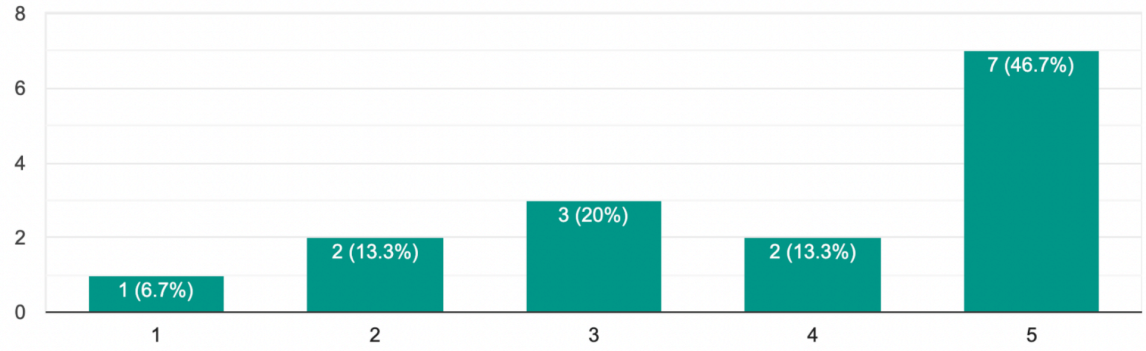


Chart 10: Team Survey Question #4

Throughout Phase 1 of the Fresno project, I had the necessary resources to complete my tasks.

15 responses

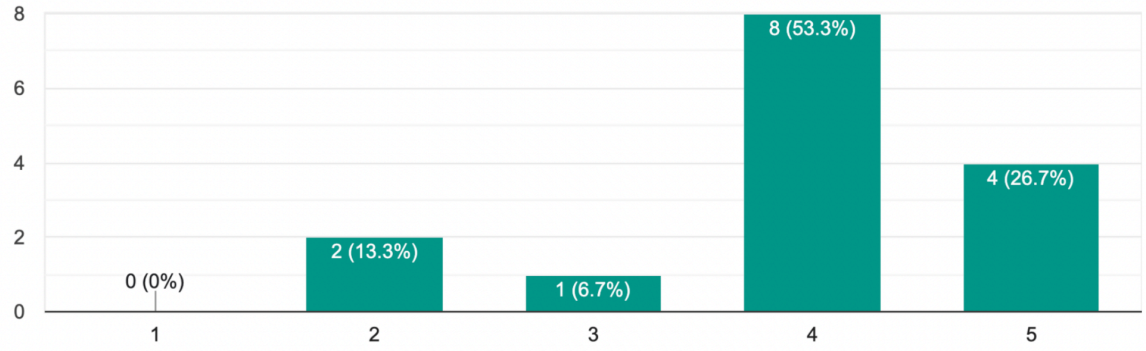


Chart 11: Team Survey Question #5

Once the project plan for Phase 1 of the Fresno project was shared, I had a clear idea of the timeline and my deadlines.

15 responses

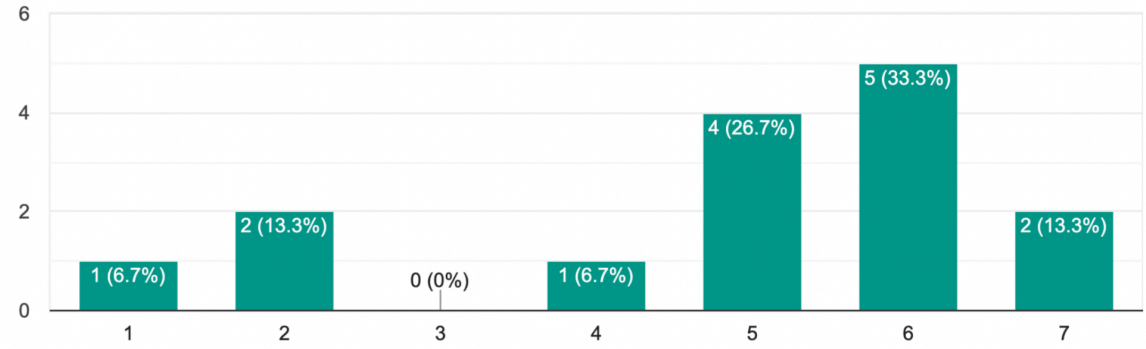


Chart 12: Team Survey Question #6

Overall, I felt as though the Phase 1 of the Fresno project was successful.

15 responses