Organizing Public Education Systems for the Future

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Organizing Public Education Systems for the Future

Doctor of Education Leadership (Ed.L.D.)
Capstone

Submitted by
Babak Mostaghimi

To the Harvard Graduate School of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education Leadership

April 2018
“As you start to walk out on the way, the way appears.”
–Rumi
For Ashley.

Were I to write
at the last minute
for a thousand years,
I could never capture my thanks
and love for you.
Acknowledgements

To my advisor, Elizabeth City, for always pushing me to be my best self, for being a listening ear, and for providing much needed advice

To my professor, David Cohen, for enabling me to see the system for what it is and what it can be and for helping to ignite a passion for district leadership within me

To Mr. J. Alvin Wilbanks, for enabling me to be a part of the team, for pulling back the curtain and letting me witness and be a part of the good work, and for mentoring me

To Berney Kirkland, for all of the hospitality, support, and kindness

To Jonathan Patterson, for your friendship, for your thought partnership, and for pushing me to learn the system and to see and understand all of its moving parts

To Andrés Alonso, John Kim, Matthew Tallon, and the Public Education Leadership Project, PELP has made me a better leader and without it I may have never met Gwinnett

To Lorri, for your friendship and support, for guiding me through every logistical piece of my residency, and for always lending a thoughtful ear

To Richelle and Amy and all of the design partnership team members, for jumping on board the pilot and building the plane with me

To the CIET team, for letting me join you, learn from you, and work alongside you in working for the future readiness our children deserve

To Kevin, Nancy, and Sheila, for showing me the ropes in Gwinnett and for many insightful conversations in the back office

To Cohort 6, for your willingness to show up and share a Coke

To my Royals and my coach, for helping me be a better me

To my mom and dad, for raising me with a spirit of service to the world and for supporting my passion for education

To the extended Mostaghimi and Castevens families, for your support over the years and through the countless moves

To Laquita, Sabrina, and Richelle for reminding me why I do the work

To Kaveh and Laleh, for spending many a bedtime listening to Baba’s “GCPS story.” You cannot read this yet, but I do this all for you, so that your future is bright and so that your generation may guide our world out of darkness.
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Abstract

In a world at the brink of a technological revolution that will cause changes to employment and life on a scale that has not been seen in generations, the American pK-12 public education system finds itself needing to pivot to meet future learning requirements even as it continues to execute on existing requirements. Despite this need, few public education systems have the structures in place that would enable them to pivot. Though organizational adaptation theorists have studied how private companies successfully manage such pivots between exploitation of existing work and the exploration of future possibilities, little research exists on what such adaptation would look like in the context of public education. This capstone utilizes organizational adaptation theory to explore how, within the complexities of the public environment, large public education systems can organize to effectively execute on present requirements and pivot to meet future needs. It specifically examines ambidexterity theory, punctuated equilibrium theory, disruption theory, and dual-operating system theory alongside existing practice in the public education sector to develop a preliminary modified model of organizational adaptation for Gwinnett County Public Schools (GCPS). The capstone examines the work of my strategic project, which consisted of engaging with key GCPS stakeholders to (1) make the case for the need for exploration in GCPS, (2) develop a defined GCPS exploration system architecture, and (3) conduct a small-scale pilot that tests critical components of the exploration system architecture and probes the broader system to gauge potential hurdles and opportunities for the full implementation of an exploration system in GCPS. The goal of the strategic project was to develop a model and knowledge base for GCPS to pursue further development of an exploration system that would enable the system to continue to capitalize on its current successes and to adapt to meet future requirements. The pilot’s promising results support further investment in and testing of an exploration system in GCPS. Through the analysis of a strategic project, I explore the implications of these findings for myself as a leader, my site, and for the American public education sector.
Introduction

Context

Eighteen years into the twenty first century, a scan of the education headlines of most American newspapers, without knowing the publishing date, would make one think that America is actually nearing the end of the twentieth century. Article after article, study after study, focuses on the need for students to be ready for 21st century jobs and how the American public education system is not preparing students en masse for the rigors of a 21st century world. Underlying this reality is the argument that, unlike every other major industry, if one were to take a picture of the average modern day classroom and compare it to one from a century ago, it would look very similar, with pupils in desks or at tables receiving direct instruction from a teacher at the head of the classroom or perhaps working on a tablet or on a worksheet.

Though the century picture argument is not entirely true, in that even if direct instruction is the primary mode of teaching, the content and many secondary methods of instruction are fundamentally different (not to mention the fact that access to public schooling has been expanded to all children in America), at the core of the argument emerges a basic truth that the American public education system was not set up to make dramatic leaps in performance. As a result, the system, as a whole, has been unable to improve the delivery of learning at a pace that matches the needs of a rapidly changing world. The public education system’s response time to changes in the world lags considerably. Schools often embrace advances in technology or other changes at scale sometimes decades after the need emerges, particularly among schools that serve students of color and students in poverty.
Exacerbating the problem is the reality that the world is on the brink of a technological revolution where “advances in robotics, artificial intelligence, and machine learning are ushering in a new age of automation, as machines match or outperform human performance in a range of work activities, including ones requiring cognitive capabilities” (Manyika et al., 2017, p. I). Furthermore, the “major transitions [that] lie ahead… could match or even exceed the scale of historical shifts out of agriculture and manufacturing” and estimates of the timeframe for these transitions place them well before the mid-21st century in even the most conservative estimates (Manyika et al., 2017, p. I). According to some estimates, “65% of children entering primary school today will ultimately end up working in completely new job types that don’t yet exist” (World Economic Forum, 2016, p. 1). Meanwhile, an Oxford analysis in 2013 predicts that as much as “47 percent of total US employment is in the high risk category” of being automated perhaps as soon as 2030 (Frey and Osborne, 2017, p. 265). Further complicating matters, technological innovations are increasingly creating a dual-labor market where one tier of jobs requires substantial amounts of higher order thinking and skill and another tier requires little to no thinking as technology routinizes nearly every task.

As a result, public education systems are once again behind the eight ball in terms of preparing students for the world into which they will graduate and live. In order to succeed, public education systems must begin to organize in ways that enable them to deliver on a fundamentally different type of graduate. On the one hand, public education systems must deliver graduates that can create new, un-automatable, types of value and can work alongside technology in an increasingly technologically complex world. On the other, systems must cultivate graduates that believe in lifelong learning and can engage in critical
thinking and collaboration in their lives and communities, even if their particular jobs are routinized. Even if one does not believe the full scope of the automation forecasts, public school graduates are already entering into a vastly different world compared to their parents and education ought to adapt to ensure that students are prepared for the world they will live in as adults.

With the rapid approach of technological change and pressure from constituents, many public school systems have recognized that they must approach schooling differently in order to meet the evolving needs of students and families. While many districts have piloted new programs and models of personalization, project-based learning, and other instructional modes, they have often found themselves using the new methods to enact old modes of learning. For example, despite their desire for real change, districts often end up with changes like placing textbooks on tablets or electronic multiple choice assessments, instead of really preparing students in new ways. Furthermore, pilots of new instructional delivery models are often implemented at a surface level or as an add on to traditional instruction, with schools embracing shiny new ideas, ornaments of sorts, that adorn a “Christmas tree” of school-based showcases that “look good” with little fundamental change to the core operations of instruction and student learning (Bryk, 1993, p. 14). Despite being faced with a rapidly changing world and pressure from constituents, most school systems have been unable to both execute on present day requirements and explore new models to meet future requirements.

Such a reality is not surprising as the requirements for an organization to execute effectively on current practice and those needed to deliver future success are vastly different and in tension with one another. Modern public school systems were designed to
execute on a standardized model, which, though a remarkable innovation at the time, now hinders the system from organizing to learn how to prepare students for a fundamentally different world. Focusing on high quality delivery of current practices takes substantial resources and can only be achieved through an unwavering focus on establishing a culture, systems, processes, and metrics that align to such execution. Meanwhile, focusing on high quality delivery of future practices requires a similar level of focus, but on establishing a very different culture, systems, processes, and metrics that align to future goals. Activities and values, such as taking risk and experimentation, that need to be rewarded in systems seeking future readiness are often at odds with the activities and values, such as following precise procedures to reduce negative variability, that are needed for consistent execution of existing work.

Given the competing needs of execution on current and future requirements, but the clear need for public education systems to do both, a core question emerges: how can public education systems organize to effectively execute on present requirements while pivoting to meet future requirements? While the concept of executing and pivoting, called exploiting and exploring in the private sector, has been well researched and developed (and has seen success) in private business through a model called organizational ambidexterity (March, 1991), private sector ambidexterity research does not translate as neatly into the complexities of public school systems. Whereas a private company can quickly make important production decisions, such as shutting down a factory, moving their product from DVDs to online streaming, or discontinuing whole product lines, the public sector does not have the same flexibility. The public aspect of public schooling creates a thick layer of
complexity due to the importance of stakeholder voice, competing constituencies, and the expectations of the public value created in schools funded by taxpayer dollars.

While shutting down a plant or changing product lines can earn a private sector CEO a raise for potentially improving profits, shutting down a school or ending an ineffective, but popular, program can cause significant political and public backlash that could result in the end of a superintendent’s career, even if it does improve the bottom line of student success. Unlike most private companies, because school systems serve multiple bottom lines and powerful constituencies, negative impacts are generally seen immediately, and positive impacts often significantly lag behind implementation. This capstone utilizes organizational adaptation theory to explore how, within the complexities of the public environment, large public education systems can organize to effectively execute on present requirements and pivot to meet future needs.

**Residency Site**

Enter Gwinnett County Public Schools (GCPS), a microcosm of America and American public education and a perfect candidate for examining how to pivot to meet the future requirements of education while continuing to exploit current practices. Located northeast of Atlanta with a student population of nearly 180,000, GCPS is the twelfth largest school district in the United States. Though the district was a predominantly white, middle-class district for most of its existence, in the past 25 years it has undergone a significant demographic shift that has made it, as illustrated in Figure 1, one of the most diverse large districts in the country. Over the same period, the percentage of students who qualify for free or reduced price lunch in GCPS schools increased to a current level of over
Meanwhile, GCPS has continued to excel, having been recognized as a high achieving district and garnering countless awards including two Broad Prizes and most recently being named a 'Great District for Great Teachers' by the National Council on Teacher Quality.

Figure 1: GCPS Student Diversity over the Years

For the last 23 years, GCPS has been led by CEO/Superintendent J. Alvin Wilbanks, the longest currently serving superintendent of a large US school district, and has had strong and consistent school board leadership. While GCPS’ vision of becoming “a system of world-class schools where students acquire the knowledge and skills to be successful in college and careers” sounds similar to vision statements by large districts across the US, the district has diverged from the norm in its ability to execute on building schools that are actually globally competitive (Internal GCPS Document, 2018). Home to the Gwinnett School of Math, Science, and Technology (GSMST) a consistently nationally
top ranked high school, GCPS has multiple high schools approaching similar caliber in their programming and results. Furthermore, as shown in Figure 2, the school district regularly tracks its Programme for International Student Assessment (PISA) performance against other Organisation for Economic Co-operation and Development (OECD) nations, has consistently ratcheted up its academic standards to meet increasing standards, and has explicitly organized itself around best practices from the business and education sectors.

Figure 2: GCPS High Schools vs. International Benchmarks

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Source: Internal GCPS Report (November 2017)

During his tenure in GCPS, Mr. Wilbanks has led the district to success by incorporating his own background in business to transform GCPS into a tightly run, business-minded organization built around the management practices of W. Edwards Deming, the organizational change practices of John Kotter, and the coherence model of the Harvard Public Education Leadership Project (PELP). As a result, GCPS has been known for its unwavering commitment to business practices, such as continuous quality improvement (CQI) and its embrace of the McKinsey Performance Trajectory (Appendix A), which has been used as the foundation for moving individual and school performance towards excellence.
GCPS embarked on its current trajectory by pioneering innovations in standards-based education beginning with the introduction of the Academic Knowledge and Skills (AKS) standards and the standardized Gateway assessments of student achievement in the mid-1990s, years before the requirements of No Child Left Behind (NCLB). It built on its success by establishing the Quality-Plus Leadership Program, a leadership development pipeline for principals and district leaders, and piloting new school model and program designs that enabled schools to meet the varying needs of students. Meanwhile, the district utilized CQI practices to milk as much value from the improvement on the new ideas as possible. As a result, GCPS has been in a period of sustained relative high performance as compared with its similarly situated peer districts.

If GCPS is performing so well, why does it need to organize itself differently for the future? Why not just keep doing what it has been doing?

First, GCPS has recognized early indicators that it needs to explore new ideas to continue its high performance. While enjoying over two decades of accolades and success, GCPS’ focus on CQI has led it to recognize that its overall performance appears to be plateauing. An examination of average composite SAT scores (See Appendix B) from GCPS’ top four performing high schools as compared to the national average composite scores between 2008 and 2016 reveals a slightly positive, but generally plateauing, trend of scores over time. As such, an opportunity exists to achieve more among students in the high performing range. Meanwhile, during the same time period, a similar examination of average composite SAT scores from GCPS’ bottom four performing high schools as compared to the national average composite scores reveals a slow decline in composite SAT scores. As such, GCPS also has room to improve outcomes in low-performing
schools. The overall plateauing of performance also comes at a time of increased pressure from charter school advocates as well as from private schools seeking to expand their footprint in the county.

Second, GCPS’ constant focus on becoming a system of world-class schools has led it to (1) raise its own expectations by explicitly beginning to compare its performance to that of top performing countries across the world and to (2) begin exploring new assessments and metrics that better capture the full depth of analysis and collaboration skills needed for students to be successful in the future. In order to reach the higher standards of performance that ensure GCPS graduates are globally competitive against current and future standards, GCPS is recognizing the importance of exploring new teaching and learning models that seize on its existing strengths of high quality execution to increase its success. For GCPS to continue to succeed, it must continue to transform itself to meet the evolving needs of its students and the ever-increasing standards for college and career readiness. This reality is especially poignant in GCPS where the district has been pioneering new types of assessments, such as Curriculum Embedded Performance Tasks (CEPT), that begin to measure both content knowledge and student skills that are critical to student career readiness. Work on new assessments and the focus on international standards has led GCPS to recognize the importance of transforming the classroom experience of students so that they can meet these newer, more rigorous performance assessments.

Third, the most opportune time for an organization, especially a public organization, to explore new solutions for the future is when it is performing well and has the bandwidth to explore new ideas without sacrificing execution on its current
requirements (Tushman, personal communication, 2017). GCPS’s continued success has garnered it significant amounts of political capital and trust among its stakeholders, thus allowing it a significant amount of public leeway in its ability to explore. In an environment of declining performance, public stakeholders lose trust in new decisions and are, interestingly, more likely to advocate for returning to the basics than to allow organizational exploration, which may be seen as part of the reason for an organization’s decline (Sinofsky, 2013). Furthermore, organizations at a peak of performance are often at a peak in terms of human and financial capital which enables them to make the most clear eyed decisions about the future and can, in the best scenarios, allow them to invent their own future. GCPS is in precisely the right position to innovate. The district is performing at a relatively high level on its core functions, has the human capital bandwidth to dedicate effort to exploring innovation, and has a strong leadership team in place with significant public trust that would allow it maintain focus on execution while pushing for innovation.

Finally, over the last four years, GCPS has embarked on the early stages of building an exploration arm under the umbrella of innovation, thereby creating some initial fertile soil in which to seed exploration work. As part of the early exploration work and through his engagement with PELP, Mr. Wilbanks has studied and followed the literature on organizational ambidexterity as a potential mechanism for supporting exploration within GCPS. Furthermore, in 2013, Mr. Wilbanks established the Creativity, Innovation, Entrepreneurship, and Transformation (CIET) team. CIET is a team consisting primarily of principals from across the district and a few central office personnel and directly reports to Mr. Wilbanks. The team is tasked with defining and providing early seed funding for exploration, which if refers to as innovation. Over time, CIET has started the conversation
about the role of new ideas and models in GCPS, has championed components of exploration across the district, and has begun to move into the thought partnership space for potential exploration work with interested schools and teams across GCPS. Despite this important early work, the existence of the CIET work as a stipend add-on position to already full time principal and district level positions has prevented it from having the needed bandwidth and focus to fully lead district-wide exploration. Furthermore, its members’ dual roles as principals deep in the core execution functions of the district have caused its focus to be more on new and improved methods of execution on existing processes and priorities as opposed to an effective exploration of and piloting of future possibilities.

**Project**

My strategic project focused on examining the question of how GCPS, a large public education system, can organize to effectively execute on present requirements and to meet future requirements. More specifically, I was given the dual task of (1) examining private and education sector organizational adaptation theory and practice and (2) leading the development and pilot of a system, structure, and process for organizational adaptation. I was to design an adaptation model that would enable GCPS to continue to capitalize on its successful execution of current programming while creating an environment in which ideas that will help GCPS meet future requirements could be seeded, take root, and expand as appropriate.

In order to test the theoretical frame via practical application, the majority of the focus of the strategic project and this capstone was on the implementation of critical early
exploration system tests. The exploration systems tests consisted of (1) the creation of a pilot exploration system that would incorporate many of the fundamental principles of a full scale exploration system in a test environment with structured feedback loops and (2) the systematic probing of the broader execution system to gauge potential hurdles and opportunities for the full integration of an exploration system into GCPS. More specifically, the pilot exploration system was built around a new design thinking partnership with The Teachers Guild where approximately 75 teachers across four schools were engaged in learning the design thinking process and utilizing it to explore and pilot new ideas around a teacher developed design question. The pilot exploration system was provided as many of the same buffers and supports as possible in a pilot environment that would be expected within a full-fledged exploration system.
Review of Knowledge for Action

“The basic problem confronting an organization is to engage in sufficient exploitation to ensure its current viability and, at the same time, to devote enough energy to exploration to ensure its future viability. Survival requires a balance…”
—Daniel Levinthal and James March, 1993, p. 105

The corporate graveyard of America is littered with the headstones of companies that at some point were seen as nearly invincible and yet, somehow, succumbed to the pressures of a changing environment around them. These were companies, like Circuit City, Kodak, and Blockbuster Video, that effectively executed on a primary business, but were unable to find their way into new areas of growth, causing them to fall from the seeming pinnacle of success to bankruptcy in dramatic and rapid fashion. Yet not every company suffered the same fate. In fact, some companies, like the Ball Corporation, USA Today, and Netflix, have seemingly been able to weather every storm, adapt to new environments, embrace new products or modes of delivery, and emerge stronger each time even as their competitors faltered.

How did the successful companies organize themselves to exploit their current business models while also exploring opportunities for future growth? What are the implications of their success on how public school districts can organize to execute on present requirements while exploring new modes of instruction and organization to meet the future needs of students? Furthermore, what school districts have attempted to organize in ways that enable execution and exploration? This Review of Knowledge for Action will dive into these questions by addressing the central research question: What

1 This capstone uses the term execution synonymously with the business term “exploitation” because the latter term conjures inaccurate associations that do not convey the meaning of the business term in the public education environment.
**does the literature and practice say about how organizations organize to effectively execute on present requirements while adapting to meet future requirements?**

The sustained success of organizations is determined by their ability to execute effectively and adapt to new circumstances. The challenge, however, is striking the right balance between execution and exploration because an imbalance may cause an organization to falter. An overreliance on execution can lead to organizational stagnation because the organization neglects new learning and new capability acquisition. Meanwhile, an overreliance on exploration causes an organization to neglect its existing customers and the products that bring in the revenue or success that enables its continued survival. The challenge is further complicated when an organization, like GCPS, is performing highly on existing requirements, thereby adding the wrinkles of convincing the organization that exploration is needed and that exploration can occur without undoing the core processes that enable its existing success.

In order to tackle the organizational adaptation research question, I will (1) explore what is currently known about the critical elements of managing exploration within organizations by zooming in on four theories related to organizing to explore and execute: ambidexterity (Benner & Tushman, 2003), punctuated equilibrium (Burgelman, 2002), disruption (Christensen, Raynor, & McDonald, 2015), and dual-operating system (Kotter, 2012), (2) analyze their similarities, differences, and potential opportunities for co-use, and (3) examine organizational adaptation in the public school context.
Defining Organizational Adaptation

Organizational adaptation “refers to modifications and alterations in the organization or its components in order to adjust to changes in the external environment” that lead “to some discontinuity or lack of fit... between the organization and its environment” (Cameron, 1984, p. 123). In this capstone, the discontinuity is caused by the changing requirements of future GCPS graduates and the organizational adaptation being examined is the process of exploration by which GCPS seeks to learn and prepare itself to execute on new educational outcomes. It is important to note that while organizational adaptation can be seen as reactionary, as it can be a response to existing discontinuities in the environment, organizational adaptation can also occur proactively or in anticipation of an upcoming discontinuity (Cameron, 1984). In GCPS’ case, this capstone delves into proactive or anticipatory adaptation as GCPS is anticipating changes in its future environment for which it is beginning to search for solutions.

Setting a Theoretical Baseline

The core work around organizing systems to both explore and execute stems from the premise that organizations undertake two broad categories of work (Schumpeter, 1934; March, 1991): (1) exploration, “the pursuit of new knowledge, of things that might come to be known,” and (2) exploitation, “the use and development of things already known” (Levinthal and March, 1993, p. 105). According to March: “Exploration includes things captured by terms such as search, variation, ... play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution” (1991, p. 71). The challenge, however,
is that exploration and exploitation are fundamentally different and incompatible tasks (March, 1991; Levinthal and March, 1993) that require different sets of systems, structures, and processes and, as such, “the interplay between the two occurs in the form of a zero-sum game where exploration and exploitation compete for scarce resources, attention, and organizational routines” (Gupta, Smith, & Shalley, 2006, p. 695).

Despite the zero-sum game, however, theory warns that “systems that engage in exploration to the exclusion of exploitation are likely to find that they suffer the costs of experimentation without gaining many of its benefits. They exhibit too many undeveloped new ideas and too little distinctive competence” (March, 1991, p. 71). On the other hand, “systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria” (March, 1991, p. 71). As a result, balancing exploration and exploitation “is a primary factor in system survival and prosperity” (March, 1991, p. 71). In the face of such incompatibility, organizational researchers have developed multiple theories, which are addressed next, for how a single organization can organize itself to approach the work of exploration and exploitation.

The Theories

**Ambidexterity**

One of the most utilized theories for organizing exploration within organizations is the theory of ambidexterity (Benner and Tushman, 2003; O’Reilly and Tushman, 2004). Ambidextrous organizations are organizations that separate exploration and exploitation into two separate units that can be managed under a single senior executive or executive team (O’Reilly & Tushman, 2004). Within this separated structure,
“exploratory units are small and decentralized, with loose cultures and processes” (Benner and Tushman, 2003, p. 247). An exploratory unit is allowed to create new systems that are unencumbered by the day-to-day realities and challenges of the organization so that it can focus exclusively on discovery and future readiness. Meanwhile, “exploitation units are larger and more centralized, with tighter cultures and processes” (Benner and Tushman, 2003, p. 247). The exploitation unit within an organization focuses exclusively on improving existing services and outcomes with a desire to get the most marginal productivity out of the existing investments and products.

Furthermore, there is early evidence from the technological exploration context of private industry that the benefits of ambidexterity are greater than the sum of the contributions of each unit (He and Wong, 2004). These early findings show that there may be additional benefits to organizations from the interaction between the explore unit and exploit unit of an organization. The research does not, however, provide any analysis as to the reason for the additional benefit. Over time, as the marginal benefits of core exploitation activities diminish, organizations will shift their focus to ideas formerly firmly placed in the exploration realm (Tushman, personal communication, 2017). In doing so, an organization will slowly draw down on its execution of the prior core business and make the former exploration the new core business and will engage its exploratory arm in new explorations.

While ambidexterity seems relatively straightforward, developing a truly ambidextrous organization can be challenging. First, ambidexterity requires a highly integrated senior executive team or highly functioning CEO, which is often hard to come by. Often, senior executive teams have varying goals and are not strategically aligned in
the way needed to become properly ambidextrous, or CEOs have short tenures, which make ambidexterity particularly challenging for the organization.

Second, the integrated senior executive team and/or CEO must also be able to simultaneously manage completely separate business units. While the challenge of managing a single culturally and strategically coherent organization is difficult, successfully managing two separate units with their own cultures, resources, goals and strategies under a single umbrella organization is even harder. Imagine how challenging, for example, it must be for senior executives to toggle between completely different cultures between two different meetings by virtue of one being with the explore unit and the other being with the exploit unit of the organization, especially in the context of competing incentive structures.

Third, ambidexterity requires the existence of enough organizational resources to allow for a set of employees to work exclusively on the exploration work without necessarily adding immediate or direct value to the existing work of the organization. In small organizations or organizations with tight resource constraints, resources are allocated to the most immediate needs, even if there is a recognition that such an allocation neglects future needs and the long-term viability of an organization. In small, resource strapped organizations, finding the resources needed to duplicate operations in two separate business units may be challenging.

Finally, ambidexterity requires the exploratory and exploitation units, despite being separate and with different priorities and culture, to function with the realization that their work is aiding the single overarching organization. In other words, if the explore and exploit units are competing, they can cannibalize one another, negatively
compete for resources, and end up losing out on the benefits of being a part of a single entity. As such, managing the tension between the units and setting a culture of unity within a diverse structure is critical.

**Punctuated Equilibrium**

Similar to ambidexterity, the theory of punctuated equilibrium asserts that successful organizations must engage in both exploration and exploitation to be successful, however, “punctuated equilibrium refers to temporal rather than organizational differentiation and suggests that cycling through periods of exploration and exploitation is a more viable approach than a simultaneous pursuit of the two” (Gupta, Smith, & Shalley 2006, p. 693-694). Punctuated equilibrium theorists assert that successful exploitation work in organizations creates a strong inertia that is nearly impossible to break thereby rendering any form of ambidexterity impossible. According to the theory, the strong inertia can only be overcome when sudden events, such as “severe crisis in the performance of an organization, major changes in its environment, and succession of its chief executive officer,” spark a desire for deep change (Romanelli and Tushman 1994, p. 1144). Once the crisis or major change occurs, organizations enter periods of “radical and discontinuous change of all or most organizational activities… to break the grip of strong inertia” and such change is “radical, brief, and pervasive” (Romanelli and Tushman 1994, p. 1143). In the punctuated equilibrium model, exploration is not an ongoing occurrence or something that an organizational naturally aspires to, but is instead something that an organization is stimulated or forced to do because of changing organizational environmental factors.
While punctuated equilibrium is descriptive of what happens to organizations over time, it does not provide useful prescriptions for action by existing organizations that are not in crisis nor does it provide a perspective on whether entering such a cycle is an optimal state for an organization or something suboptimal that happens when organizations reach periods of crisis. In fact, the theory posits a somewhat pessimistic, or perhaps opportunistic, view of organizational change, where organizations must wait for an extreme failure or other shock to the system to break free of the inertia of the status quo, rather than a proactive approach that organizations can take to be successful.

Furthermore, punctuated equilibrium asserts that since exploration and exploitation are a zero-sum game and cannot be pursued successfully simultaneously by an organization and “small changes in individual domains of organizational activity [do] not accumulate incrementally to yield a fundamental transformation,” (Romanelli and Tushman 1994, p. 1144) the only practical pathway to maintain an organization’s position and relevance is to rely on a “temporal cycling between long periods of exploitation and short bursts of exploration” (Gupta, Smith, & Shalley, 2006, p. 698).

Although punctuated equilibrium theory’s perceived description of how organizational change occurs is rather convincing in its simplicity, it may simply describe reality for organizations that are unable to prepare for the future and may serve more as a warning for how change will occur absent an exploration strategy, as opposed to what must be for all organizations. In many ways, it precisely describes what happens to many public school districts across America: faced with change on the horizon, a district will continue to do what it has always done until the last moment when it can no longer continue to pretend change is not occurring, at which point it is organized to frustratingly
slow down the pace of adapting to new circumstances as much as possible, no matter the consequences. As a result, beyond the potential opportunistic use of extreme shocks to a system, punctuated equilibrium theory is limited in its usefulness to organizations seeking to proactively prepare for adaptation and to engage in exploration without the onset of a significant crisis or change.

Disruption

While ambidexterity and punctuated equilibrium assert that organizations are able to explore, whether through preparation or through crisis, the theory of disruption takes a much more pessimistic stance towards organizational exploration by arguing that organizations are not and cannot be structured to explore (Christensen et al., 2015). Disruption theory asserts that existing organizations in a market are under a constant threat of disruption to their businesses by new market entrants that focus on building solutions at the low-end of a market or in a new market. Over time, disruptors improve their low-end or new market solutions within new businesses with cheaper cost structures or other organizational advantages that cannot be mimicked by existing market players. As they improve the product or services, the disruptors start to pick away customers of existing businesses, starting with the least profitable, such that existing businesses ignore the disruption. Over time, the incumbent market players improve their products to serve a higher and higher end of their customer base, ceding more and more of the lower end to the disruptors until eventually they are replaced by the disruptor.

As a result, disruption theory asserts that organizations are not built to disrupt themselves, or in ambidexterity and punctuated equilibrium terms, an organization cannot
both explore and exploit. Instead disruption theory asserts that the resources, priorities, processes, and profit models of organizations necessarily cause incumbents to focus on sustaining innovations, i.e. execution, that simply improves the existing product in a direct tradeoff with the ability to engage in exploration. While Christensen provides some interim solutions that enable incumbent organizations to slow or fend off potential disruptors, disruption theory sees the downfall of the incumbent as inevitable (Wessel & Christensen, 2012). When faced with the question of what to do with an emerging disruptive idea within an incumbent organization, disruption theory asserts that a completely autonomous business unit should be created that must be under entirely separate management with the understanding that the legacy business will eventually be relegated to a much smaller market footprint or to bankruptcy. In effect, disruption theory says that to avoid complete disruption a company must create a new, separate company that ultimately lives on while the existing legacy company slowly fades into history.

As a result, disruption theory provides limited guidance to incumbent organizations other than telling them to create stronger bonds with their core customers and to continue to improve the quality of their offerings while recognizing that their time will be cut short by a disruptor. For public organizations, such as school districts, spinning off a disruptive innovation into a separate organization may not be an option. Furthermore, unlike the private sector, which is ruled by free market forces that enable the rise and fall of companies, the public education sector is highly regulated, funded primarily by public tax dollars, and has a significant public political constituency. The regulations, funding models, and politics all significantly decrease the probability of a fundamental challenge to public school systems by potentially disruptive alternative
organizations. These public sector realities are in large part why public school systems have, with a few notable exceptions such as New Orleans, Detroit, and the District of Columbia that have all had significant numbers of their students pulled into charter environments, been able to avoid complete disruption by existing competitors such as homeschooling, private schools, and public charter schools. While charter schools have achieved a near total displacement of traditional public schools primarily in New Orleans because of a significant natural disaster rather than the traditional case of disruption via competition, as a whole, charter schools have been unable to unseat the entrenched traditional public education system. As a result, in the traditional framing, disruption theory is rather nihilistic from the perspective of the incumbent organization and may not actually apply in the same way in public education that it does to the private sector.

From a different perspective, however, disruption theory may provide some guidance for public education systems that falls partially in line with the model of ambidexterity. Disruption theory may present a lens through which to view organizational change from the perspective of disruption from within the public education system. Traditional schooling methods or models are very susceptible to being replaced by new methods or models that, due to technology or other changes, could serve underserved students or families in more efficient and effective ways. Over time, such methods or models could entirely replace traditional schooling methods and models even while still existing under the umbrella of a public education system. This rendering of disruption theory is not entirely incongruent with the model of ambidexterity. For example, a school system could produce a new method, model, or mode of instruction that is spun off into a separate exploration unit. Over time, the exploratory idea could be
so successful that it ultimately replaces or, in Christensen’s language, disrupts the existing model of schooling, thereby causing the footprint of the existing model of schooling to be dramatically reduced or to disappear altogether.

Where the theories become incongruent, however, is that ambidexterity theory asserts that such a change can occur under the umbrella of a single organization, i.e. that organizations, when effectively organized, can pivot to the new idea and continue to thrive as an upgraded original organization. Meanwhile, disruption theory asserts that such a pivot is impossible for the original organization, as organizations are unable to properly change to meet the requirements of the new model. In the disruption lens, organizations are created with specific resources, processes, priorities, and success models that inform their cultures. As such, organizations are fine tuned to do what they currently do and attempting to get them to implement new models or have new outputs is impossible. The tension between disruption theory and ambidexterity boils down to whether an organization can successfully transition from the exploitation of one idea to the exploitation of a newer one or if organizations are fundamentally incapable of making such a transition. For public school systems, then, the implication of disruption theory, even within the alternate internal disruption frame, is still that disruption is inevitable and that a true ambidextrous pivot is impossible for an organization to achieve.

Dual-Operating System

Finally, the dual-operating system theory posits that organizations do not need complete ambidexterity, meaning discrete exploration and exploitation units, in order to successfully do both. Instead, it asserts that organizations can establish a dual-operating
system that enables the core structure to continue the execution work while a team of core structure members engage in exploration (Kotter, 2012). In the dual-operating system model, the exploration work is done by a group comprised of 10% of an organization’s workforce that is focused on developing innovations. Kotter asserts that the creation of a second operating system enables organizations to overcome the natural tendency of reverting back to known processes (Kotter, 2012). The secondary system is a flexible network of volunteers adjacent to the traditional hierarchy that works to solve particular challenges facing the organization. In the dual-operating system model, the people that execute at a variety of levels and business functions on the core business of the organization are the same people that work in flexible volunteer teams to explore new adaptations.

While the dual-operating system appears to be an easier and cheaper way out of the challenges of creating an ambidextrous organization or attempting to spin off a completely autonomous business unit, the system could be challenging to implement and potentially limited in its ability to ensure true exploration. First, the dual-operating system does not account for potential tradeoffs between exploring new ideas and improving the existing system. Case in point: what happens when an employee focuses on voluntary work and comes up with an amazing solution, but in the meantime fails to accomplish a core non-voluntary assignment?

Second, despite the assertion that the second operating system can form around a non-hierarchical, new culture, the stickiness of the original hierarchical culture may cause it to be replicated in negative ways in the second operating system. For example, how a senior manager interacts with a line-worker within the flatter second operating system is
likely to be significantly impacted by their relationship within the traditional hierarchy. It is likely that the same norms of communication, standards of conduct, and deference will be replicated in the second operating system. Furthermore, these same social dynamics will likely exist for individual organizational members as well since they will have subconsciously internalized their workplace environment from prior experiences, thereby limiting their ability to explore in a new environment until they are able to disrupt what they previously learned. As such, the voluntary second operating system may replicate existing hierarchies and cultural norms that are causing the very challenges that an organization is attempting to solve, thus rendering it as ineffective at exploration as the original hierarchy.

Third, imagining the dual-operating system with 10% of a large organization involved in a loose structure conjures images of significant disarray and incoherence. In an organization like GCPS that could mean more than 2,000 employees engaging in a voluntary flexible network adjacent to the traditional business structure. Managing performance or, at a minimum, vision in such a large, public environment would likely be unwieldy and problematic.

Finally, the dual-operating system model appears to be better positioned to address existing exploitation problems than to tackle exploration. The core of the theory is that the adjacent flexible network of individuals will be able to tackle core organization challenges in new and more successful ways, which speaks more directly to a process of ongoing improvements in exploitation rather than creating a system that can truly explore. In fact, given that individual incentives are likely aligned to the core business work of participants in the secondary system and that “individuals tend to exploit existing
knowledge rather than to explore new knowledge, because of the high chance of failure corresponding to the latter activity,” individuals are more likely to bring forward existing problems from their current work for additional troubleshooting as opposed to spending bandwidth on exploration of new challenges (Lee and Doyle, 2017, p. 21).

**Organizational Adaptation in Public Education and the Denver Case**

While organizational adaptation theory has been used for decades in the private sector, it has been less thoroughly explored in the public education sector in part because the goals of public education are significantly less agreed upon (Labaree, 1997) and less defined than the profit goals of the private sector. Organizational changes in public education systems, as a result, have historically focused on expanding access to public schooling, changing school governance structures, building new mechanisms for accountability, or modifying the amount of autonomy principals receive, but most avoid the most difficult challenge: retooling the instructional core to ensure that students are prepared to meet future requirements.

Charter schools, often founded as traditional system disruptors or with the belief that they could serve as separate exploration arms for public education that could eventually pass learning back into the traditional public education system, have largely not lived up to either goal. Through the separation of charter schools from the traditional public system enabled some charter schools to attempt new ideas, the separation also precluded their ideas from permeating the traditional public system. The separation and resulting politics caused charter schools to be perceived as competitors to the traditional system and their ideas to be seen as niche solutions as opposed to solutions for the
broader public education system. Meanwhile, beyond some niche organizations such as Transcend Education, XQ, and NewSchools Venture Fund that have focused on reimagining individual public school designs, i.e., engaging in exploration at the individual school level, as a doorway into impacting the broader public education system, few organizations have worked extensively on how large, existing systems can be strategically organized to execute and explore.

In terms of public school systems seeking to execute and explore, one outlier worth examining is Denver Public Schools (DPS), which, under the leadership of Superintendent Tom Boasberg, set out to explicitly become ambidextrous (Tushman, Maclay, and Herman, 2016). For DPS, exploration work was inextricably entangled with the notion of school autonomy. As a result, DPS attempted exploration by enabling substantial autonomy for schools, i.e., “leaving people alone” (Tushman, Maclay, and Herman, 2016, p. 7), but quickly recognized that while elements of autonomy were necessary for exploration, autonomy alone was insufficient to produce meaningful improvement. Meanwhile, DPS’ focus on autonomy was complicated by its framing of exploration as personalization and the technological blending of instruction. Over time, DPS’ goal became to provide flexibility for employees and to empower them to take risks and to fail forward. According to one DPS Office of School Reform and Innovation (OSRI) staff person, however, “the system is tasked with cultivating young adults who are growth-oriented, who are creative and innovative problem solvers, and who are resilient, yet the system itself is not very growth-oriented or innovative” (Tushman, Maclay, and Herman, 2016, p. 8). The challenge, however, was that “for some teachers these innovative approaches presented a dramatic shift from their training, expertise and
experience,” which presented hurdles to schools taking advantage of the autonomies provided and left DPS in a conundrum of how to respond (Tushman, Maclay, and Herman, 2016, p. 8). To combat the lack of change, DPS launched a strategic school design initiative to support individual school efforts and adapted principal supervisor roles to serve as principal change management coaches.

By 2014, DPS launched the Imaginarium, a central office design lab similar to IDEO with a professional team that supported schools and teachers in “the design and implementation of innovation and personalized learning efforts across the district” (Tushman, Maclay, and Herman, 2016, p. 12). The Imaginarium provided a range of services to individuals and schools with new ideas, including support in pilot design, implementation, and coaching. Even with the numerous supports, many innovation schools continued to feel hindered by the broader system, so in fall 2015 Boasberg created a separate innovation zone under the leadership of a separate 501(c)3 organization with a board of directors that would govern the zone. Although the separation gave additional autonomy to those who felt hindered by the broader system, it also caused exploration to become siloed and not well linked to the rest of the school system, thereby leading to a few critical questions: “How do you create the space and support for innovation? How do you keep that from being isolated in a vacuum so the rest of the organization is able to learn from, profit from, the innovations being developed?” (Tushman, Maclay, and Herman, 2016, p.13). Throughout this process DPS continued to make a strong bet that autonomy was the lever for exploration around personalization, yet according to one account, DPS’ “ten-year push for serious change in the district …
produced incremental results, but not the dramatic results for all kids that we wanted” (Tushman, Maclay, and Herman, 2016, p. 16)

DPS’ attempt at organizational ambidexterity has important implications for future iterations of ambidexterity as a form of organizational adaptation in the public school environment. While some would categorize the DPS case as an example for why an ambidextrous organization cannot work in the public school environment as it failed to produce its promised results, a closer analysis reveals that the DPS case serves more as a cautionary tale about the importance of embracing the full theory of ambidexterity, including the need to balance between exploration and exploitation, than as an indictment of the design of ambidexterity.

The DPS case does provide a positive case study of how to execute on certain aspects of ambidexterity such as creating a separate exploration subunit, in the form of the Imaginariaim, with its own incentives and culture, which could help guide the system towards doing some things in a different manner and with different goals. DPS’ experience with ambidexterity also provides evidence for the need for an organization’s exploration unit to be shielded from the existing execution structures because of the natural tendency of the execution unit to reduce exploration and combat change. Finally, the DPS case highlights the importance of deliberately constructing linkages between the exploration system and the execution system that enable great ideas to permeate the broader system rather than becoming permanently siloed into particular spaces.

The DPS case also provides a cautionary tale for making sure that ambidexterity is fully implemented including a true balance between exploration and exploitation. For DPS, the exploration arm appeared to become the primary focus of the district as DPS
rapidly embraced autonomy and personalization as the strategy for moving the whole system forward. Simultaneously, DPS lost its focus on the exploitation of its existing models thereby causing the system to become imbalanced and to suffer, as ambidexterity theory predicts, the impacts of overly exploring, i.e., the creation of too many “undeveloped new ideas and too little distinctive competence” (March, 1991, p. 71). Furthermore, DPS equated exploration with personalization and blended learning in an environment of extreme autonomy and placed a significant, early bet on the specific ideas instead of taking a true exploratory stance. In a true exploration unit, personalization and blended learning would be incubated alongside many other ideas within an environment that allows for the failure of individual ideas without damaging the broader system. Moreover, exploration is about much more than autonomy. Exploration is about creating systems and structures that support the development, incubation, delivery, and implementation of exploratory ideas. The DPS case confirms that exploration must be about setting up an environment that creates focused opportunities for attempting promising ideas in service of the goals of the broader organization, buffers the primary system from the failure of new ideas, and ensures that failures yield meaningful learning for an organization.

**Connecting Theory to Practice**

While each of the four organizational adaptation theories and the DPS case provide important lenses through which to examine exploration within an organization like GCPS, each also leaves something to be desired as they do not account for complexities of exploration and organizational change in the public education sector. In
addition, the theories apply differently to the significantly different contexts within which public education systems exist. For example, punctuated equilibrium may best serve a system with significant amounts of turnover at the board, superintendent, and cabinet levels as it provides a frame by which a new superintendent or board can take advantage of the nearly cyclical shocks in such a system. The dual-operating system model may hold some lessons for small, stable school districts that cannot afford to create an entirely separate exploration unit but have internal innovators that can impact the system. Disruption theory, could be a useful lens for a community that is at its wits end with a crumbling public education system and wants something entirely new to come about.

The theory of ambidexterity, when applied alongside the DPS case learnings, provides the most actionable and contextually feasible solution for organizational adaptation for a stable, high performing public education system like GCPS. Unlike the other theories, ambidexterity promotes active exploration instead of the passive reliance on system shocks that is required by punctuated equilibrium, avoids the nihilism of disruption, which also does not entirely mirror the feasible realities of a high performing public education system, and ensures true exploration instead of the new forms of execution improvement that would likely occur under a dual-operating system. GCPS’ size and the fact that it still has a significant amount of value left to reap from its existing successful systems make it a great candidate for ambidexterity. GCPS’ high level of coherence and unity around a high performing and stable executive team and CEO/Superintendent makes it an ideal candidate for setting up a subunit that is managed separately. That said, ambidexterity can only fully develop if the CEO and senior executive team are disciplined about allowing the exploration unit to develop an
autonomous, exploration culture that is truly focused on future requirements. Ensuring that the core logic, systems, processes, and structures that have led to so much success in the exploit unit do not overpower a budding new culture and environment in the explore unit will be of the utmost importance if the exploration unit is to function appropriately and GCPS is to achieve a balanced ambidextrous approach.

At the same time, the theory of ambidexterity needs to be modified to be socially and politically feasible in the public education arena. While the idea of a corporation shutting down a factory in order to shift resources to a new, budding area sounds excellent from an organizational perspective, though likely not from an employee’s perspective, imagining a large district trying to shut down schools to migrate resources to another venture sounds like an absolute nightmare and near impossibility given the social and political forces that support the existing system. Superintendents and school boards across the country have experienced the political nightmare of shutting down a single low-performing school that is in dire circumstances. Imagine the fallout of attempting to make the case for a full scale shutdown of all schools to shift to a new model.

As such, a modification needs to be made to the ambidexterity model to make it work in the public school environment. Instead of a shut down and transition to new ideas model, ambidexterity in the public school environment could take the form of formal linkages between the exploration and execution units that allows promising exploratory ideas to push the evolution of the execution system in a politically palatable manner. The linkages would support adaptation throughout the organization and would be structured though an executive team that guides the transition of high potential ideas from in exploratory arm into the main system. The executive team would be a group that has
enough expertise, clout, direct authority from the Superintendent, and relational influence to clear roadblocks that could interfere with the successful transfer and implementation of new ideas. Roadblocks could include things like evaluation metrics that disincentivize the implementation of the new idea, policies or procedures that interfere with the idea’s success, and resource use restrictions that prevent proper investment. The team would need to develop a system for ensuring that the best current thinking of the exploration unit is appropriately messaged, incentivized, and scaffolded to ensure that the reforms could take root and be successfully implemented by educators and administrators.

Though there is no formal research base supporting the linkage model, it would align with the latest thinking of ambidexterity theorists who are looking at its feasibility in the public education environment (Tushman, personal communication, 2017) and the lessons learned from Denver Public School’s experience with ambidexterity.

**Successful Exploration: Lessons from Successful Education Reforms**

Despite the prevailing argument of this capstone that exploration is critical to the long-term success of public education systems, not all exploration is made equal in terms of its impact, nor will all types of exploration be successful. Furthermore, because public education systems are responsible for the best use of taxpayer dollars in service of student success, they have the responsibility of creating an environment that increases the probability of positive outcomes from their investments in exploration. Since the work of exploration in public education falls under the umbrella of reform, it is important to briefly examine some of the key attributes of successful education reforms that can inform the work of exploration and improve the probability of its success.
Though the common narrative of education reform in America has been that reform has not and does not work, under closer scrutiny, the sentiment does not entirely bear out. In a seminal 2017 piece in the American Educational Research Journal, David Cohen and Jal Mehta analyze why some reforms succeed and discuss five primary conditions that enable their success. First, the piece finds that some successful reforms “offered solutions to problems that the people who worked in or around education knew that they had and wanted to solve” (Cohen and Mehta, 2017, p. 646). While this finding seems obvious, explorers and reformers often present solutions in search of problems and attempt to fit ideas into systems that do not appear to want or need them. Additionally, the solution cannot simply solve any problem, it must address a problem that educators or those in education recognize that they have and want to solve.

Cohen and Mehta’s analysis of problem framing as being integral to successful reforms mirrors John Kingdon’s analysis of how problems in the realm of public policy are addressed during political windows of opportunity (2003). In his analysis, Kingdon differentiates between problems, which are readily identifiable and acute challenges that people see and feel and want to fix, and conditions, which are experienced, sometimes subconsciously, as background realities with no clear solutions (2003). In education, for example, imbalanced funding between wealthy and poor school districts, while clearly problematic to education outcomes, is experienced by most as a condition or the background environment in which the American public education system exists. As a result most solutions in public education attempt to work within the bounds of the existing funding conditions instead of attempting to upend them. Relating back to the Cohen and Mehta analysis, successful reforms address problems that people in education
see and want to fix as opposed to conditions, which may be problematic but that are not felt as acutely or are not seen to be as actionable within the actors’ sphere of influence. As such, successful exploration ought to embrace real, felt, actionable educator problems.

Second, and a slight nuance on the previous discussion, Cohen and Mehta find that some successful reforms “offered solutions that illuminated a real problem that educators had not been aware of or couldn’t figure out how to solve, but they embraced the reform once they saw or believed that it would help” (2017, p. 646). In other words, exploration does not need to be limited to problems that educators recognize or that educators know solutions to, instead, exploration can be successful when, in Kingdon’s parlance, it is able to bring a condition to the foreground and cause it to be viewed as a problem while also providing a believable solution. Underlying this discussion is an interesting undercurrent about the role of agency in problem framing. When educators feel that they can successfully act on a problem, they are more likely to identify it as a problem, have interest in solving it, and embrace potential solutions.

Third, Cohen and Mehta find that some reforms succeeded because there existed a mobilized public constituency that brought “strong popular pressure on and/or in educational organizations or governments to accomplish some educational purpose” (2017, p. 646). As a result of the democratic nature of the American public education system, ideas with strong backing by key constituents are often able to push through to implementation. On the flip side, reforms that “provoked hostility from influential actors in the environment; or failed to convince parents and students of their value” faced an impossible hurdle to success (Cohen and Mehta, 2017, p. 646). As such, for exploration
to be successful it should tap into existing support from key actors within and outside of educational institutions to ensure that it gains the backing needed to be fully embraced.

Fourth, successful reforms built “the needed educational infrastructure” (Cohen and Mehta, 2017, p. 644), meaning that they provided, or helped educators capitalize on existing “educational tools, materials, and practical guidance educators needed to put the reform into practice” (Cohen and Mehta, 2017, p. 646). Great ideas with poor support for implementation in any environment is a recipe for failure, but even more so in the public education environment where educators lack the bandwidth to take on new ideas with no support. To that end, for exploratory ideas to be successful, significant work must be done to either ensure that the ideas are simple enough where they need minimal capacity building or that the ideas have a significant scaffolding, support, resources, and materials behind them to ensure success.

Finally, in public, locally controlled, democratically governed environments, successful reforms were “consistent with the values of the educators, parents, and students they affected” (Cohen and Mehta, 2017, p. 646). While values consistency is critical in system-wide reform efforts, reforms do not necessarily need to be aligned to the prevailing values of a system if they fall into the category of niche reforms that impact a subset of people, in which case aligning to the values of the subset stakeholders is critical. That said, even in a world where strong alignment exists in a subset, if the values of a niche reform are too inconsistent with the prevailing values, it is likely that the prevailing system will prevent the reform’s execution. For example, an idea for sex education in schools that directly addresses gender identity issues in a deeply socially conservative district could find enough supporters within a particular neighborhood
school to enable it to be a niche reform that aligns to their values, but the overall school system is unlikely to fund or support such an initiative because it may run too counter to the prevailing opinions or values of the organization and its public.

In short, for exploration to be successful, every effort must be made to (1) link exploration to known, felt educator problems or bring to the fore a real problem with a solution that educators find compelling, (2) build or tap into popular support for the idea, (3) provide the necessary education infrastructure to enable the idea’s uptake, and (4) align solutions with the values of stakeholders.

A Note on the Positioning of this Capstone

Before jumping into the theory of action, it is important to briefly note that discussions of this capstone touch upon three fundamental questions facing the American public education system as a whole: (1) how can the system be organized to learn how to meet future educational requirements, (2) how can reform be organized to actually shift practice, and (3) how can the system and organizational reform work be done in a politically difficult public environment. While all three of these questions are critical, they are far too deep for a single capstone or project to address. This capstone will focus primarily on the first question, how the system can be organized to learn how to meet future educational requirements, through the lens of the impressive work already underway in GCPS, and recognizes that the progress made on the question via this capstone addresses only the tip of a much larger iceberg which must be explored deeply in the decades to come.
Theory of Action

Based on the Review of Knowledge for Action and GCPS’ unique context, I propose the following theory of action:

IF I can work with key GCPS stakeholders to:

(1) Make the case for the need for exploration and future readiness in GCPS,

(2) Develop a defined GCPS exploration system architecture, and

(3) Conduct a small-scale pilot that tests critical components of the exploration system architecture and probes the broader system to gauge potential hurdles and opportunities for the full implementation of an exploration system in GCPS,

THEN GCPS will have a model and knowledge base for pursuing further development of an exploration system that will enable it to continue capitalizing on its current successes and to adapt to meet future requirements.
Description, Evidence, and Analysis of the Strategic Project

The What and How

On June 6, 2017, I began serving in the newly created role of Executive Director of Innovation and Program Learning for GCPS. As Executive Director I was charged with creating a system, structure, and process for exploration, a la the theory of organizational ambidexterity, in GCPS. I reported to Dr. Jonathan Patterson, Associate Superintendent for Curriculum and Instruction. Dr. Patterson reported directly to Superintendent J. Alvin Wilbanks and sat on Executive Cabinet. He was entering his fifth year as Associate Superintendent and had spent over 20 years in various positions from teacher to administrator in GCPS. Additionally, I served as a consultant to the Creativity, Innovation, Entrepreneurship, and Transformation (CIET) team.

Working with CIET

The seven member CIET was a team established by Superintendent Wilbanks in 2013 to lead the work of innovation in the district. CIET, led by Dr. Jeff Mathews, principal of Peachtree Ridge High School, Mr. IV Bray, principal of GSMST, and Mr. Jorge Gomez, Executive Director for Policy, was comprised of primarily middle and high school principals in addition to two Instructional Support Center (ISC) (central office) staff members. CIET reported directly to the Superintendent. CIET had the authority to provide seed funding for innovations and to support innovation across the district.

My strategic project focused on answering the question of how GCPS can organize to effectively execute and explore. More specifically, I embarked on building and piloting an exploration system, structure, and processes that would enable GCPS to continue to
capitalize on its successful execution of current programming while creating an environment in which new ideas could be developed and incubated. The strategic project focused on conducting a small-scale exploration system test that would incorporate many of the core principles of an exploration system in a test environment with structured feedback loops that would help me probe the broader system to gauge potential hurdles and opportunities for the full rollout of an exploration system in GCPS. In tandem with the research and pilot rollout, I led efforts to educate and persuade key stakeholders of the need to explore in order to be future ready.

I began by building a theoretical architecture for exploration in GCPS. I conducted an in depth study of the research, theory, and practice behind organizational adaptation with a focus on how organizations can be organized to execute and explore. I then matched the research to existing work on the ground in GCPS that was done by the CIET team and the Office of the Superintendent. I also took time to meet and learn from existing stakeholders from across the school system to build a broader base of ideas for the potential organization architecture. I utilized the meetings and conversations to start making the case for the need for future readiness in GCPS and to begin the process of building a coalition of stakeholders that, at a minimum, understood the need for GCPS to develop a system that will prepare it for the future.

In order to match existing district models and terminology, the exploration model would refer to the exploration system as the transformation system until the term exploration took root and the exploitation system as the core business or execution system.

\footnote{Note: In GCPS the terms exploration, innovation, and transformation were frequently used interchangeably but with the understanding that what was being addressed by the terms was the exploration work of the district.}
To guide the development of the model, I met with the CIET team and worked with its members as part of their scheduled meetings to build the following theory of action for the exploration system architecture:

IF we create a transformation system for focused innovation with dedicated resources, staff, and incentive structures, build a strategy and process for stimulating, surfacing, and incubating innovation, and establish a mechanism for successful innovations to be integrated back into the common practices of GCPS’ core business model,

THEN great ideas from all levels of GCPS and beyond, solving GCPS’ most pressing challenges, will come to the forefront, authentic organizational enhancement, leading to pattern-breaking performance improvements, will occur, and future readiness will receive the needed resources and attention, which will significantly improve student achievement.

Baked into the notion of incubation in the theory of action was creation of appropriate scaffolds, support services, and resources for the spread of successful ideas. Meanwhile, the term innovation was used to refer to future oriented exploration work.

With the theory of action in hand, I led the CIET team in designing a hybrid exploration system for GCPS that involved developing the concept for a GCPS ambidexterity model that also accounted for an existing quasi-dual-operating system architecture which supported its exploitation unit. The concept translated organizational adaptation theory into GCPS friendly language and took into account existing infrastructure. The model would ultimately include a menu of potential structures within
the exploration arm that would be presented to Superintendent Wilbanks for review (See Appendix D for Model Iterations).

Furthermore, I worked with the CIET team to narrow the focus of the exploration work and make explicit the value it would bring to the district. Ultimately, based on the research on the future of work (Manyika et al., 2017; World Economic Forum, 2016; Frey and Osborne, 2017), we determined that the work of exploration should embrace ideas that (1) place the cognitive load on students, i.e., the students should be doing the hard work of thinking, (2) provide students, where possible, with genuine choice around how, what, and where they learn, and (3) engage students in meaningful learning connected to the world around them and the world into which they will graduate. These ideas all directly linked to the need to develop graduates that were strong collaborators and problem solvers and that knew how to learn new things, all traits that would be critical for future readiness. Additionally, we developed five guiding principles for exploration in GCPS: (1) exploration is not just electronic technology or blended instruction, (2) exploration should help students, teachers, principals, and others to want to do what they need to do and to do it better, (3) exploration should tackle real and meaningful problems, (4) exploration should leverage the existing capacities of people, processes, and systems, and (5) exploration should focus on the future while keeping an eye out for solutions to present challenges.

Finally, because of GCPS’ system-wide adoption of CQI as a framing district principle, it was important to properly explain the relationship between exploration and CQI and to begin rolling out the explanation to district constituents (Internal GCPS Document, 1996). For district purposes, we differentiated exploration from Gwinnett’s CQI model by highlighting that while CQI, as used in GCPS, explicitly focuses on
consistent incremental improvement over time to existing processes, exploration focused on leaps in progress and new ideas that would enable GCPS to fully capture its future potential. Furthermore, while initially, some GCPS employees felt that CQI and exploration were fundamentally at odds with one another, we developed a framework to show the interaction and complementarity of the two concepts. Within the framework (Figure 3 below), we expressed that exploration would give rise to innovations that serve as the foundation upon which CQI can squeeze out substantial, though diminishing, value over time. Per the framework, the diminishing marginal utility that can be harnessed from any specific innovation requires continuous rounds of exploration to occur that periodically yield new innovations that can then allow a new generation of CQI to occur at a higher tier of performance.

Figure 3: The Complementarity of Exploration and CQI

(A) In the presence of a single innovation point, an organization can expect diminishing marginal returns to CQI and the existence an upward limit to performance improvement.

(B) In the presence of periodic innovation points, CQI can occur at successive higher performance tiers meaning that there is no theoretical upward limit to performance improvement over time.

The Design Thinking Pilot

Once CIET and I developed a workable model, it was time to test it out in a beta environment. I decided the most appropriate pilot of an exploration system would be one in which I worked with a team to mirror, as closely as possible, the designed exploration
system at pilot scale, pushed the system to react in ways similar to how an exploration system would be reacted to by the broader system, and engaged in meaningful exploration work with people within the system to examine their participation and responses. As such, I determined that a partnership with the IDEO incubated Teachers Guild around the creation of a design thinking partnership would be the perfect small-scale test. The selection of the design thinking partnership as the project of choice occurred for a few key reasons: (1) the edgy, San Francisco-based design thinking work was perfectly countercultural to the corporate business culture of GCPS, which is an important aspect to test as an exploration arm would need room to have its own creative culture, (2) the pilot with four schools and approximately 75 teachers across two high school feeder patterns was small enough to allow for dedicated time, resources, and staffing, while also being large enough to prove the test of a system in a diversity of schools, (3) the pilot, if successful, would add real value and capacity to the school district and to students, and (4) the pilot focused on exploration instead of improvement of existing ideas thereby making it a perfect match for a system test.

I structured the Design Thinking Partnership Pilot to include four schools, two middle schools and two high schools, which were situated in two neighboring clusters. The pilot included a Design Collaborative that I structured to include a sample of CIET team members, the principals or designees of the four schools, and the Senior Design Team Leaders to help provide input and to explore potential opportunities to learn from and support the pilot. The CIET team received regular updates on the pilot. To support the pilot, Dr. Patterson provided a budget for necessary stipends, substitute teachers, and supplies. As part of the partnership, the Teachers Guild provided its services free of charge to GCPS.
I utilized the recommendation of each partner school principal to build a thirteen person Design Leadership Team comprised of teachers that were interested in learning about design thinking and in leading their colleagues through learning cycles. From the thirteen, with their principal’s recommendation, two were designated as Senior Design Team Leaders and were tasked with leading the pilot work at their schools and completing additional cluster leadership responsibilities in the pilot. The remaining eleven were designated Design Team Leaders.

The Design Partnership Leadership Team would be directly trained in the design thinking process by the Teachers Guild and would in turn lead the training and piloting of the Design Thinking Partnership with other teachers, called design team members, in their respective schools. The middle schools, which had smaller student bodies, each had a team of two or three design team leaders and the high schools each had four design team leaders. I chose the schools to provide a sample of varying schools and environments such that the results of the pilot would be more applicable to the whole school district. One high school was a relatively new, Title I high school that served predominantly students of color, had faced significant teacher and school leadership change over its short existence, and was struggling to reach academic success. The other high school served approximately 30% students in poverty and was widely recognized for its strong, consistent leadership and teacher tenure as well as its consistently high academic achievement results. Despite being selected, all partner schools were given the opportunity to opt-out of the pilot, though none exercised the option.

The Design Thinking Partnership pilot consisted of engaging design team leaders and members to develop a design question around which participants would design and
pilot solutions utilizing IDEO’s six stages of design thinking as adapted by The Teachers Guild (2017). Design team leaders along with school administrators engaged in a four-hour Creative Leadership Institute led by Teachers Guild staff that introduced GCPS staff to the entire design thinking process, the idea of a culture of creativity, and the year ahead (See Appendix E for Design Thinking Pilot Artifacts).

Following the Creative Leadership Institute, design team leaders recruited approximately 60 teachers from their schools, known as design team members, to join the design thinking partnership, receive design thinking professional development, and utilize design thinking to identify and address critical student needs. The pilot was designed to be rolled out in six cycles matching the six stages of design thinking (empathy, ideate, build, test, iterate, and scale). Each cycle included a virtual training session in which design team leaders engaged virtually with staff from the Teachers Guild to receive just in time training on the next step of the design thinking process. Immediately following the virtual training session, design team leaders engaged in a “level setting” meeting in which design team leaders would norm across the four schools on what they just heard and would plan with other leaders from their schools how they would deliver the professional development to their team members. The following week, design team leaders would return to their schools and would run a design thinking workshop for their design team members, engaging them in the latest step of the design thinking process. This capstone covers the first three steps of the design thinking process, which were completed by mid-January 2018.

For the first design cycle, empathy, design team leaders and their members engaged over 330 students across the four schools in empathy interviews and activities that enabled teachers to get a first-hand understanding of the challenges facing students. Through the
empathy interviews, teachers recognized that “students wanted to feel known and heard and wanted their learning to match their goals and interests.” During the empathy phase, teachers were genuinely surprised by what was revealed by their students in the empathy interviews. Students revealed high levels of stress, a feeling of a lack of rigor in their coursework, a desire to be known and heard in the schools, and a desire to build meaningful relationships with their classmates and teachers. One design team leader reflected:

“I had no idea this is how our students felt. We always come up with solutions to what we think the problems are, but now I’m realizing that maybe we have been tackling the wrong things. I feel like now I have a better idea of the problems students are facing so that I can help be part of the solution.”

The design team leader’s reflection was echoed in various ways by many other design team leaders.

At the same time, a widely held concern began to emerge among design team leaders that they believed that “there was no way that the district would actually allow them to try out the ideas they would come up with.” The empathy interviews and multiple iterations of teacher engagement ultimately led teachers to three top choices for their design question: (1) how might we design learning opportunities that celebrate students’ identities, interests, and experiences, (2) how might we design personalized learning experiences that bring forth our students’ passion for learning, and (3) how might we build environments that empower students to push the boundaries of their abilities and fail forward. A formal vote of the design team members yielded 52 out of 60 possible responses with 38.5% supporting design question 1 from above, 38.5% supporting design question 2

3 All quotes from individual were from personal conversations, meetings, calls, and interactions with key stakeholders. The sources have been anonymized to enable full disclosure of ideas.
from above, and 23.1% supporting design question 3. As a result of the tie vote and no clear winner, the senior design team leaders came together with Teachers Guild staff who were supporting design question development and decided that a hybrid question would likely best meet the needs of the team. The hybrid question became: how might we celebrate students’ identities, interests, and experiences to make learning more personal, meaningful and relevant? Due to the tight timeframe of the design thinking cycles, the team decided to use the hybrid question as a placeholder around which to ideate until the formal, final question wording was developed through a feedback process with the Teachers Guild.

Starting in late October, the design thinking partnership entered the second cycle of the design thinking process: ideation. The hybrid design question was presented to the design team leaders during their virtual training session with the Teachers Guild and the reception was cool and reserved. Teachers felt that the question accurately captured their original intent. Afterwards, senior design team leaders reflected that the design team leaders seemed okay with, but not particularly excited by, the question. A week after the virtual training session, design team leaders engaged their design team members in ideation around the hybrid design question with the non-public goal of spawning a minimum of 100 ideas for solutions to the design question from across the four schools. Members of the Teachers Guild team set the goal based on their work in other districts. I purposefully kept the numeric solutions goal private so that design team leaders and members did not feel forced to make up extra ideas in order to reach a specific goal. Design team members watched an IDEO video that modeled ideation, had an opportunity to ask questions, and then split up into groups with warm up design questions to get them into the brainstorming
headspace. Ideas were recorded by the teachers without edit onto Post-It notes that were placed on surfaces visible to the whole group. Design team leaders pushed their groups to come up with the wildest and craziest ideas possible with the explicit intent that by pushing the boundaries of what was believed to be possible, individuals may uncover nuggets of brilliance that would fundamentally change how the team thought about the solutions.

During the ideation session, the design team leaders circulated and took part in ideation using the hybrid question. In multiple sessions, design team leaders felt that despite the open runway to be bold and think big, the ideas brought out by individuals during the ideation phase were in large part lacking spirit and vision and were well within the bounds of what was currently possible for teachers. For example, one design team member’s bold idea as expressed on her Post-It note was: “imagine a world in which classrooms did not have straight rows.” In the meantime, the Teachers Guild released an online ideation platform and asked teachers to input their ideation results into the platform so that teachers could see and interact with ideas across clusters. The design team leaders encouraged their teachers to take the ideas from their session Post-It notes and to place them on the digital platform.

Due to the suboptimal results of the initial ideation, meaning that ideas largely lacked creativity and did not push the boundaries of possibility, design team leaders at all four schools decided to do a second round of ideation. Design team leaders hoped that the initial exposure to ideation, the exciting final wording of the design question, and a week of think time would spur teachers to return with bolder ideas. The second ideate session, because of the tight timeline would occur after design team leaders were trained by the Teachers Guild on the next step in the design thinking process, build, though they would
not deliver build professional development sessions until after the second round of ideation. Meanwhile, prior to the build virtual training, the senior design team leaders worked with me to come up with a final design question wording that could then be passed onto the Teachers Guild for feedback and approval to ensure that the question was not too narrow or too broad and that it met Guild standards for design questions. The question, dubbed Version 4.0 was “How might we activate our students’ innate curiosity to engage their passion for learning?” The final wording coming out of the Teachers Guild-GCPS back and forth was Version 5.0: “how might we activate our students’ innate curiosity to nurture students’ passion for learning?”

On October 30, 2017, the virtual professional development for design team leaders on the topic “build” was held after school. While I had attended all prior virtual sessions, I knew I would be joining mid-session, due to another meeting, so I had engaged with the senior design team leaders to lead the session thinking that it would be a routine meeting. En route to the virtual session, I received a text from a senior design team leader stating: “Hey. We are having a LOT of pushback on the question. When will you be here?” Followed by a text saying “We need to further discuss during level set. Be ready for push back…..” Upon arriving I was struck by how deflated the room was. Unlike previous virtual trainings, design team leaders were visibly checked out: doodling, slouched over with heads resting on their hands, and texting. I was quietly informed by a design team leader who was sitting next to me that the newly worded (Version 5.0) design question did not go over well with the group.

When the virtual session was over, I pulled the team together and opened up the floor to dialogue so that I could diagnose what had happened. It was relayed to me by
design team leaders that they believed that the new question had somehow been “censored by the county office” and that they “knew that they didn’t really have the freedom to come up with their own question.” Design team leaders believed that their initial concerns about interference by “the district” was becoming a reality. After a few minutes of clarifying conversation about the origin of the new question as coming from within our design thinking team, the design team leaders calmed down but ultimately decided that they wanted a new wording to ensure that the question better captured the results of their empathy interviews. In the ensuing 48 hour virtual brainstorming process, the design team leaders, with the support of 83.3% of design team leaders, selected the final design question: how might we empower student voice to fundamentally redesign students’ learning experience? In a note accompanying the final design question, teachers defined student voice, not as the traditional euphemism for student advocacy, but as the essence of who students are, their identities, cultures, and families.

Moving into round two of ideation, design team leaders presented the final design question and they framed the first session as a practice session that was meant to get everyone in the right mindset for ideation. The second round of ideation, for the most part, yielded precisely the results the design team leaders were hoping for: bolder ideas that were far less constrained by the real and perceived limitations of the current system (see Appendix F for a sample of solutions from the session). It also enabled a school that had poor turnout at its first round of ideation to restart a bit and get more design team members involved. The results of the ideation phase were then used to enter into the build phase. Again, however, design team members pushed back during the ideate phase asserting that it was “unlikely that any of these ideas would be allowed to be tested.” I told them that
they should worry first about coming up with the ideas and that we had permission to test ideas within reason and would worry about permission for bolder ideas once the ideas were at a point where they were ready to be tested.

Following the formal ideation cycle, design team leaders and members continued to ideate as expected in design thinking and meanwhile they moved into the build phase of the work. During the build session, design team leaders and members formed small teams around ideas from the ideate session that they found particularly compelling and wanted to potentially test in the spring semester. On December 16, 2017, design teams brought low-fidelity builds, meaning sample models or visual representations, of their ideas to present at an Innovation Summit. The Innovation Summit was designed to be a place where teachers could share their ideas, celebrate their hard work, receive feedback from their peers, receive some additional professional development from the Teachers Guild, and, most importantly, present, for the first time, their ideas in front of administrators including principals and a senior district staff member.

At the Innovation Summit, teachers presented 17 ideas for solutions ranging from flexible scheduling models for high schools to specialized professional development for teachers to learn how to better understand their students. Teachers presented in a variety of formats ranging from posters, to mock ups of ideas, to PowerPoint presentations to the approximately 40 attendees. Attendees included principals and representatives from the participating design thinking partnership schools as well as other schools that were interested in learning about the design thinking partnership with an eye towards potential future partnership. In addition, high level staff from the Curriculum and Instruction Division from the ISC participated. One district leader in attendance commented: “It’s neat
seeing the ownership that the teachers are taking in their ideas and their commitment to improving them.” Another attendee privately mentioned to me: “None of these ideas are impossible. They may take us rethinking some things, but all of them are feasible.”

During a whip around at the end of the event, visitors, including district staff, expressed thanks to the teachers for their great work and for including them in such a powerful experience. Finally, in a sign of appreciation, one district leader even offered to take care of the tab for the food for the event. As the guests began to depart, multiple district staff members expressed that they had just experienced a powerful moment that exhibited the impact of the pilot on teachers as practitioners and leaders. One district staff member also expressed interest in potentially integrating design thinking into other district professional development in order to support teacher leadership development efforts.

Following the science fair-like presentations of new ideas, administrators were thanked for their participation and the teachers entered into a professional development session that began to prepare them for the spring design thinking cycles: test, iterate, and share. Towards the end of the event, teachers were asked to share any reflections on first semester. While many comments were made, some particularly stood out including a veteran teacher who asserted that “this is the work that we ought to be doing.” Another asked what leverage I had to get permission to try such open-ended work in the district.

Making the Case for Exploration

Concurrent to the rollout of the design thinking partnership, I began to systematically make the case for the need for exploration in GCPS. First, I hosted a series of exploration system conversations with key district stakeholders. The exploration
conversation series consisted of (1) speaking formally with individuals from across GCPS about the problem of practice, (2) examining the resulting symptoms that they observed within the system, and (3) engaging in a deep dive into the concept of organizational ambidexterity and the system for exploration that was in development. The participating individuals included senior, mid-level, and on the ground ISC staff as well as principals and teachers from across GCPS. Most of the conversations took place in my office, and, as part of the conversations, I engaged participants in an exercise where I would lead them through the results of the problem diagnosis and root cause analysis process from prior conversations with stakeholders on whiteboards in my office and would add their contributions to the whiteboard. When conversations had to occur elsewhere, I brought back the ideas from the conversations and added them to the broader whiteboard discussion. In addition, individuals that had engaged in the exploration conversations would often drop in or call me after the initial conversation to add new pieces to the discussion or recommend others that should join in the conversation.

Second, I began to engage in opportunities where I would be able to talk about the need for exploration with broader or newer audiences in GCPS. In August 2017, during an executive directors’ meeting for the Curriculum and Instruction Division, I made my first group case for future readiness. I entered into the discussion via a conversation about CTAE and asserted that we needed to prepare students to be the CEOs of their own lives because students were most likely going to have to change careers multiple times in their lifetimes as the jobs themselves change and as the relationship between employers and employees continues to fragment. Later in August 2017, Dr. Patterson enabled me to speak before Cabinet to present on exploration (at that point still called innovation), its use in the
private sector by companies like P&G, and its connection to the existing district CQI process. In November 2017, I gave a briefing to Cabinet on the design thinking partnership pilot and its ideation results. All of the conversations with Cabinet and Executive Cabinet were part of the on-ramp process of getting key stakeholders to buy into the need for and development of an exploration system.

In December 2017, Dr. Patterson asked me to lead a workshop on problem diagnosis and innovation, a term I used publicly in place of the more academic jargon term exploration, for the entire Curriculum and Instruction Division. During the workshop, I laid out the first highly visible and public case for the need for exploration. During the presentation, I helped division staff to examine the changing nature of what students must learn to do in order to be successful upon graduation given the rapidly changing technological landscape. Furthermore, I led the audience through an examination of the data behind the McKinsey Global Institute data on the future of automation in order to show staff members that the world into which GCPS students were graduating was fundamentally changing and required new types of focus and new methods of teaching if students were to be prepared to engage in the new world (Manyika, 2017). Finally, in December 2017 I presented the design thinking partnership work and the early stages of defining exploration to executive cabinet and to cabinet in order to begin building a broad understanding within GCPS of the work that was being undertaken.
Evidence to Date

The strategic project and leadership moves associated with it have provided substantial evidence in relation to the theory of action. This section will explore the evidence related to each piece of the theory of action and in the section following I will analyze why what happened happened through the lens of my personal leadership.

Theory of Action Part 1: If I can work with key GCPS stakeholders to make the case for the need for exploration and future readiness in GCPS

For part 1 of the theory of action, I collected evidence related to shifts in stakeholder perceptions regarding need for future readiness, i.e., that the future will be different enough from the present so as to require significant changes in education, and for the appetite to make a real shift to become future ready, i.e., GCPS needs to embrace exploration to ensure its readiness. In particular, I examined conversations from across top-level meetings in GCPS and looked at the presence or absence of conversations relating to exploration and the messages, both positive and negative, related to exploration over time. The evidence was collected primarily from the exploration conversations series and meetings I attended across GCPS.

In terms of the theoretical need for future readiness, over the course of the strategic project there was a clear shift along a spectrum from early in the project where there was little conversation about exploration to the middle of the project where the conversation

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4 An important note is that in Gwinnett there is not yet an established, general use of the term exploration, as such, stakeholders refer to the concept of exploration as either transformation or innovation, which will be reflected in the quotes and conversations described below.
shifted to mixed messages about the need for exploration to the end of the project where there were clear indications of support for exploration by key stakeholders.

Upon arriving in GCPS, the conversation about exploration was limited to small pockets directly related to the CIET team and its related grants. Top district leaders had put together the initial model for ambidexterity (Appendix C) from conversations with a Harvard Business School Professor, Michael Tushman, at the PELP summer institutes in 2015 and 2016, but few below the top tier of district leaders had seen the diagram or knew about the concept of ambidexterity or exploration and those who knew the terms had limited understanding of their meaning. The first week of my residency was in June 2017 and coincided with GCPS’ flagship summer professional learning experience for system and school leaders, Summer Leadership Conference (SLC). During the conference, GCPS’ innovation message was largely missing from the mainstream conversation, though it did exist in some smaller workshop sessions. When messages around innovation did emerge, they were deeply mixed as innovation was sometimes spoken about positively and sometimes spoken about negatively.

Outside of SLC, early in my residency I found that knowledge of exploration and ambidexterity was confined to a few distinct district subunits and the work of exploration was largely conducted as an add-on to existing work. The CIET team, which was staffed by principals and district leaders on a stipend working closely together, and a part-time retired principal, who was responsible for looking at international assessments and how GCPS should be preparing for them, both had a working knowledge of ambidexterity theory. Beyond those two groups, most people had never heard of ambidexterity theory or at best had a very surface level understanding of it. Meanwhile, among high level staff
engaged with my residency, there were ongoing debates internally about the promise or lack of promise of exploration. This debate was primarily around the question of whether innovation and exploration could be used to solve district problems or if exploration was only feasible or good in high performing pockets of the district. The dominant position held by senior district leaders was that “you can’t innovate your way out of a ditch” and that exploration, in alignment with the district’s use of the McKinsey Performance Trajectory fell in the empowerment portion of the trajectory.

By August 2017, the conversation about exploration and future readiness had become more widespread, but was still kept quiet and not publicly pushed for or spoken about. In fact, in one high-level district staff meeting in August, during a conversation about innovation and continuous improvement by schools, Mr. Wilbanks stated: “You won’t ever hear me tell a school to innovate.” During this same time period, the exploration conversation series revealed evidence that exploration in various forms had already been occurring under the radar in pockets throughout the districts, but that the prevailing perception was that the district did not support exploration. When asked what they do when they have an innovative idea, i.e., something that would be considered exploratory, teachers, principals, and administrators responded that they would not bring attention to it and would work to keep it hidden for fear of having the idea shut down for not following standard district protocols. Echoing this sentiment, in an August 2017 conversation, when asked to talk about how exploration occurs in schools, one high school principal stated:

“Look, if I have a really innovative idea that might have some risk, I don’t tell anyone about it until I know for sure that it is going well and I have one or two years of data on it. Even then, I bring it up to others as a small, pilot idea that we
are testing out and that we just happen to be getting great results. If it doesn’t go well, I just pretend it never happened and we move on.”

In a separate conversation in August 2017, a middle school principal asserted that “principals have a tremendous fear factor about being beaten up for innovating and trying new ideas.”

Over time, conversations related to exploration began to shift. By September, in the exploration conversation series people became increasingly open, willing to discuss nuances in the roots beneath GCPS’ stance towards exploration, and even began to tell me more about the types of exploration work being done in their buildings. During one exploration conversation, a mid-level ISC employee for the first time named that perhaps the ISC played a role in how innovation was perceived in GCPS stating: “I don’t think principals and teachers feel that we at the ISC support them in innovating.” Still, no clear single message or direction was emerging as to the acceptance of exploration. One principal of a high performing school, when asked about whether he was willing to innovate, since he was in the innovation portion of the McKinsey Performance Trajectory, asserted: “We have to do in the box and only in the box.” Similarly, another stated in an interview: “We don’t have time to fail. If something doesn’t work, we don’t have that time.” On the other end of the spectrum, a principal from a high-performing middle school stated: “you don’t have to stop innovating to do better on the WSA [weighted school assessment], the innovation can actually improve performance. But new principals or others aren’t thinking that way.”

The movement in conversation around exploration coincided with two important events: the naming of the founding principal for the new Paul Duke STEM High School,
which was opening in August 2018 as the first themed, GCPS relief high school,\textsuperscript{5} and a request from Mr. Wilbanks for all staff to complete a first-ever organizational alignment survey. The alignment survey included questions such as (1) “I am empowered to do my job without getting slowed down by bureaucracy,” (2) “We look outside our organization to learn better ways to do our work,” and (3) “In GCPS, we have effective methods for generating new ideas to improve our work.” Within this context, a senior district leader commented during a survey-related meeting, “we need appropriate innovation… we need to be trying to get it aligned to the curriculum and standardized assessments.”

By late October 2017, the message began to shift again and messages began to align towards the importance of exploration. For example, Mr. Wilbanks, in a conversation with members of executive cabinet about new school and program development, asserted: “We talk about being different, but it’s funny how we do the same thing when given the chance to be different.” Echoing this sentiment, a district executive who had previously spoken about the need for appropriate innovation, asserted: “They really need to get outside of the box. They should be getting nos on the concept design.” While the speaker was intending to express that the ideas coming from innovators needed to be pushing the boundaries of acceptable practice, the irony was that per earlier conversations with individuals involved in new school and program development, the very reason development teams were not pushing the boundaries was because they feared being told no. Later, in a separate conversation about innovation with district leaders, Mr. Wilbanks began to signal a shift in intention regarding the district’s stance towards innovation stating: “This district has never

\textsuperscript{5} A relief school is a school designed to relieve overcrowding at a neighboring school.
told anybody they have to innovate…we have, however, told principals to come up with ways to engage their students.”

During the October to mid-November time period, messaging around support for exploration was mixed as individuals in the system were beginning to calibrate on their understanding of both where the district was heading in terms of exploration and what personal role schools and teams would play in it. In mid-November 2017, for example, in another executive meeting, a senior district leader, while discussing how schools improve, stated that “one of the worst things we see out there is schools innovating in an area where they are low-performing.” Meanwhile, a high school, under guidance of an ISC department that had been privy to, but not directly involved in, the design thinking partnership work with the Teachers Guild, engaged in an independently-developed day long design thinking session to determine the future of technology use in the school. Though the intent of the session was to show an openness to new ideas and exploration, it also made manifest the real mindset shift that needed to occur to embrace exploration. Near the end of the session, an open floor for feedback prompted a frustrated response from a senior school leader who stated: “I’m all about innovation and trying new things, but at some point my administrator hat comes on. I can’t pull my best teachers and kids to dream big without it going somewhere. Let’s spend most of our time on reality and the viability of it.”

By the end of November 2017, however, the perception of exploration and innovation took a decisively positive turn. During a cabinet report out on school performance, an assistant superintendent (AST) took a seemingly traditional GCPS stance on innovation when discussing why a school continued having performance challenges.

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6 Note: Assistant Superintendents in GCPS are principal supervisors and at the core of the accountability system of GCPS’ core business (execution) work.
stating: “They are doing a lot of innovative and great things, but they aren’t hitting the basics.” To everyone’s surprise, the Superintendent interjected stating: “I don’t think that is quite right. Innovation is okay. In fact, innovation is needed. It just needs to be done in the right way.” The exchange clearly shocked the otherwise routine meeting as indicated by participants exchanging glances and quickly taking notes. By mid-December 2017, it was clear that, despite a lack of clarity on the district’s perspective on how exploration should occur, exploration was no longer seen as a problem or something to silently pursue. In a training on increasing employee engagement, when participants were asked to make a list of what would make them want to even work better, a table of ASTs said: “The authority and opportunity to be creative and innovative.” A public statement like that six months prior would have been unimaginable. In the analysis section, I will examine the conclusions I came to about the first portion of the Theory of Action from this evidence.

*Theory of Action Part 2: If I can work with key GCPS stakeholders to develop a defined GCPS exploration system architecture.*

For part 2 of the theory of action, I collected evidence of working with the CIET team through multiple iterations of the organizational ambidexterity architecture for GCPS. In Appendix D, I have included various iterations of the exploration system architecture that were created with the input and comments of the CIET team. During the iteration process of the ambidexterity architecture, the CIET team members pushed back around initial designs, asserting that the initial designs did not have a mechanism for ensuring that high potential ideas would get back into the core business infrastructure. The conversations led me to develop the specific linkage infrastructure through an official Innovation Transfer
Team that would shepherd the work. Furthermore, CIET team members were worried about the bandwidth of their team to fully carry out the expanded work of the exploration system. As such, the team agreed on the need to include an ISC Innovation Support Team that would carry out the day to day business of exploration with the CIET team serving as a leadership and advisory board for the Transformation System.

After numerous iterations with the CIET team, I constructed a final system architecture for organizational ambidexterity in GCPS shown in Figure 4 below.

Figure 4: Final GCPS Ambidexterity Architecture

The final GCPS Ambidexterity Architecture builds off of the initial Pre-Residency GCPS Exploration System Model by developing out more detail about how the system would work and the various roles within the system. As with the original model, in this model, the term “core business” was used in place of exploit system and the term “transformation”
was used in place of exploration. The blue spring, originally labeled “CIET Focus,” was represented by the blue Innovation Transfer Team linkages box.

In the final model, the Core Business included not only the traditional teaching and learning structures, but also a focused parallel Dual Operating System, a la Kotter without the 10 percent staffing requirement, which would utilize cross functional teams, including existing Cross Functional Action Teams, to support the Core Business to better execute upon existing requirements. The Dual Operating System was designed to help bolster the Core Business system and to ensure its continued success even as they rolled out a Transformation System focused on future requirements.

Meanwhile, an operationally separate Transformation System was designed that would utilize the guidance of the existing CIET team as an advisory board for an ISC Innovation Support Team (IST) that would be tasked with supporting the investigation, incubation, and championing of exploration within GCPS. Similar to the Denver Public Schools Imaginarium, the ISC IST would serve as a capacity builder in GCPS around exploration concepts, would be a go-to place for the development of native solutions, and would serve as a point system for sourcing, vetting, and piloting promising external ideas. The ISC IST would move viable solutions to the Innovation Transfer Team (ITT). The ITT would consist of key leaders and stakeholders from the Core Business alongside important Transformation System leaders who would be tasked with double checking the idea’s validity and success, would conduct an in-depth inventory of what systems, structures, procedures, metrics, trainings, and other things would need to be changed for the idea to be incorporated back into the core business infrastructure. The ITT would then undertake the task of leading the needed changes in the traditional system, supporting and
championing the new idea, and building the necessary professional development, funding mechanisms, and other aspects for the idea to be able to successfully take root in the system.

Furthermore, the dual sided arrows in the blue linkage structure represent the two-way movement of ideas and expectations between the Core Business and the Transformation System as ideas and circumstances change in each unit. For example, if a student was involved in a successful new project-based learning experience in an elementary school that was working within the Transformation System, the experience would likely change the expectations of the student’s family for the student’s middle school and high school learning environment, even if the middle and high school were not part of the original exploration. Similar situations could arise as principals, teachers, and others seek to opt into Transformation System modes of doing business even though they may not be a part of the exploration work. As a result, the Transformation System, by virtue of doing things differently influences the expectations of and, therefore, the work of the Core Business. Similarly, as the Core Business continues its CQI processes, it will invariably change the nature of the problems that the exploration system is looking to solve, therefore causing the Transformation System to have to pivot to stay ahead. Alternatively, something may happen in the Core Business, for example strong support or pushback against a type of intervention by key stakeholders that fundamentally impacts what is culturally acceptable for the Transformation System to explore.

Theory of Action Part 3: If I can work with key GCPS stakeholders to conduct a small-scale pilot that tests critical components of the exploration system architecture and probes
the broader system to gauge potential hurdles and opportunities for the full implementation of an exploration system in GCPS

For part 3 of the theory of action, I collected evidence from the tests of critical components of the exploration system architecture by the pilot program to determine whether ambidexterity and the exploration system architecture could be feasible for GCPS and to probe potential hurdles and opportunities for the full rollout of an exploration system. Much of the core evidence collection was around testing critical components of successful organizational ambidexterity including: (1) the ability of the CEO or Executive Team to manage exploration and execution, (2) the ability of the separate exploration unit to build and maintain a separate culture with separate metrics of success, and (3) the ability of the exploration and execution systems to exist simultaneously under the umbrella of GCPS without damaging GCPS’ high performing execution system. Within each of these core components, I probed the broader system.

Throughout the residency process, one of the things I was most certain of was that GCPS would meet the requirement for ambidextrous organizations to have a high functioning CEO and Executive Team. In fact, the strength of the executive team was what attracted me to engage in a residency in GCPS. What was less clear for me was whether, in such a strongly structured, execution-oriented environment, the team could resist the urge to only execute and to simultaneously and successfully manage both the exploration pilot unit and the overarching execution system. While the Design Thinking Partnership pilot fell under my direct supervision as Executive Director of Innovation and Program Learning, it also fell under the management purview of Dr. Patterson and was brought before Executive Cabinet and Cabinet on multiple occasions giving Dr. Patterson
and the Executive Team numerous tempting opportunities to manage the pilot using an execution frame. As a result, the pilot offered a true test of the ability of Dr. Patterson and Executive Cabinet to balance the management of a large execution system with the added complexity of separately managing and supporting a pilot exploration system with a dramatically different feel, culture, and metrics.

Although at times there was a clear tension between allowing the exploration unit to truly explore and harnessing exploration capabilities to tackle existing execution challenges, Dr. Patterson and the Executive Team were able to resist the temptation of incorporating the exploration work into the execution unit and were able to hold separately the metrics of ideation and prototyping that were central to the design thinking work. Early on, private conversations with some Executive Cabinet members yielded questions about whether the ideas of the exploration pilot were good enough or whether they would really improve GCPS or if they were fluffy ideas with no present use. These questions led me to wonder whether the executive team understood the potential upside of an exploration unit beyond the particularities of the small-scale design thinking pilot.

Over time, however, as team members began to learn about the evolved ideas and impacts of the design thinking pilot on teachers, the conversation shifted considerably. As the threat of being sidelined as innocuous or unimportant faded, the new threat of being coopted by the execution system became apparent. For example, following the December 2017 Innovation Summit, Dr. Patterson asked me whether it would be possible to use the Design Thinking Partnership to tackle questions that the ISC or principals were working on instead of questions developed by the teachers. During the discussion, however, he seemed to recognize that such direct blending would be antithetical to the notion of a
separate exploration arm and would undermine the exploration arm’s focus on long-term results as all incentives would be around improving present execution. At the end of the day, Mr. Wilbanks’ ability to allow the pilot to play out as it did and to manage its existence alongside the rest of the system served as a clear indication that GCPS had the appropriate CEO and Executive Team ability to manage exploration and execution.

A second area of study was whether a separate exploration unit could actually build and maintain a separate culture and metrics given the strength of the execution system and its culture in GCPS. From the start, the Teachers Guild’s influence on the partnership ensured that the culture would be dramatically different in the pilot than in any traditional execution system work in GCPS. The culture was one where laptops and yellow pads were traded in for sticky notes and sharpies. Teachers embraced taking risks with ideas, presenting ideas in progress for feedback, and embracing the uncertainty of a design thinking pilot that almost by definition would spawn unpredictable achievements and embrace pivots along the way. Handheld confetti cannons and design mindset praise buttons permeated the professional learning environment. Ideas were quickly taken from the realm of theory to prototypes and practical next steps in the level setting sessions. The pilot embraced new metrics around the number of solutions brainstormed, the fit between solutions and empathy interviews with students, and the willingness to present ideas for feedback in mid-flight. Participants became used to the idea of iterating repeatedly on ideas, tools, and workshops in order to rapidly improve outcomes.

Although the pilot through round three of design thinking was able to successfully maintain a separate culture and metrics, the question still remains of how much the separation can or will be maintained as GCPS gains more ownership and control over the
pilot entering year two and beyond. In numerous cases comments from participants like “can we just cut the fluff and get down to business,” in response to new cultural norms, or “I wish we Gwinnettified this a bit more,” meaning having a more structured and bounded environment, in response to new formats for presenting ideas, emerged that signaled a desire to get back to “the normal way things are done,” i.e., the culture of the broader execution unit. Furthermore, there remains the question of whether the focus on future goals, such as ideas that enhance the ability of students to effectively collaborate using technology, would remain a focus as the new Performance-based Teacher Compensation System comes online in GCPS, which incentivizes annual success. While it is beyond the scope of this capstone to collect evidence of how the culture and metrics play out over time, evidence to date shows that maintaining a separate culture and metrics will need to be a continuous part of the work.

Finally, on the resource allocation front, the pilot was unable to fully test how well it could function with purely separate human capital structures. Since the very nature of a small-scale pilot required the use of staff members that were deeply embedded within the execution system, there was consistently a pull between the primary execution responsibilities of design partnership members in their roles as teachers and principals and what was experienced as the “side work” of the pilot. As such, many of the findings related to the ability of the system to fully function as a separate sub unit as deemed necessary by ambidexterity theory could not to be tested.

A third area of study was whether the exploration and execution systems could exist simultaneously under the umbrella of GCPS without damaging GCPS’ high performing execution system. Due to the very strong culture and high-performing nature
of the execution system as well as its size relative to the pilot exploration, there was never any potential for damage to the broader system by the pilot. In fact, there is evidence that the exploration work may have actually helped to strengthen components of the execution system through early linkages across the two systems. For example, a principal at a design thinking partnership school told me about the following December 2017 conversation he had with a veteran, high-performing teacher: “I had a teacher come up to me and say thank you. She said that before all of this design thinking stuff she was just going through the motions of teaching, but now is reexamining her lesson plans through a totally new lens. The process has reenergized her.” Furthermore, a key noticing by the guest attendees at the Innovation Summit in December was the sense of renewed spirit, teacher leadership, and focus on improvement that was palpable in the work being presented by teachers. As such, it appears that the exploration work, even at such a limited scale and over a short period of time, was already beginning to have positive spillover effects into the execution system.

In addition, early evidence exists that not only is an exploration unit when properly managed unlikely to damage the execution system, but that it may actually present an opportunity for the execution system to buffer itself from the potential harm of new ideas by creating a buffer between the small scale piloting of ideas and the uptake of such ideas into the broader system. As a result, with a strong linkage mechanism, the execution system would have a layer of protection between it and the potential ill effects of a pilot done in an exploration unit. Furthermore, having a separate exploration unit would help address a fear articulated by an elementary school principal of what would happen if the execution system was responsible for exploration given its proclivity
towards measurement and standardization. The principal stated: “I have this fear that in a year, ASTs will come to us with a dashboard of innovation where we should be doing the wows or we are considered duds.”

*Final Part of the Theory of Action: THEN GCPS will have a model and knowledge base for pursuing further development of an exploration system that will enable it to continue capitalizing on its current successes and to adapt to meet future requirements.*

Finally, in terms of the conclusion of the theory, as shown in the accumulated evidence presented for each aspect of the Theory of Action, the strategic project succeeded in building a model and knowledge base for GCPS to pursue further development of an exploration system. In the analysis section that follows, I will explore how this conclusion was reached.

**Analysis**

Returning to the primary question of this capstone, *how can public education systems organize to effectively execute on present requirements and to meet future requirements*, the evidence presented supports further examining organizing ambidextrously as a potential organizational adaptation solution for GCPS. While the short timeframe of the strategic project and the limited scope of the initial pilot does not allow for conclusive evidence that a fully ambidextrous model should be implemented, the strategic project does provide promising preliminary evidence in support of continued model development. At the same time, the strategic project does bring up some questions about how to ensure that high-quality exploration occurs. In this section I analyze the
conditions and actions that enabled me to successfully pilot components of an early model for ambidexterity in GCPS.

This analysis takes into account the impact of my leadership capacities and moves as carried out within the broader high performing system and leadership under which the project was carried out. While the observations and evidence appears to show an evolution in the thinking of Superintendent Wilbanks over time, the reality is that what I was experiencing and capturing in my analysis as the natural evolution of an idea over time was likely the result of carefully calculated moves by the Superintendent to ensure that he could bring his staff along with him in the journey to fully embrace the need for a system for exploration. In fact, the very concept of my residency was the outgrowth of conversations that had occurred in the summer of 2016 when Mr. Wilbanks brought the topic of ambidexterity and members of the CIET team to PELP where I was the GCPS facilitator. With that said, I also recognize that genuine shifts did occur among key stakeholders throughout the rest of the organization. The strategic project and my leadership moves played significant roles in shifting the broader system towards embracing exploration and the need for organizational ambidexterity. The analysis below ought to be viewed through the balanced understanding of my own leadership in the context of strong existing leadership in GCPS.

So, why did the results occur as they did? The results that were caused by my leadership moves were significantly shaped by my approach to the year through the lens of the Cohen and Mehta successful reform analysis.

First, I built the strategic project using my deep understanding of GCPS’ culture, which resulted from both my work with GCPS leadership at PELP and my prior work in
education in the southern, conservative cultural context of Mississippi. Within this culture, formal authority, through the explicit blessing of leadership, is particularly important as is visibly showing respect for the history, context, and traditions of the organization and its people. Through my cultural understanding and leveraging Cohen and Mehta’s analysis, I recognized that the work of exploration and ambidexterity fell cleanly into the second category of education reforms in the Cohen and Mehta model, which was that exploration and ambidexterity were solutions that highlighted a real problem that had not been on most educators’ radar. At the same time, I also recognized that to show respect for the existing work of GCPS, I would need to explicitly frame the work as building upon existing successes. As a result, I knew that I would have to make the problem of future readiness palpable to key stakeholders, the solution believable to educators, and the systems and structures connected to existing work.

From the start, my analysis of GCPS’ tightly coordinated structures and relationships signaled that I would have to place a significant amount of effort on making the case for ambidexterity and exploration without looking like an outsider or a salesman. As such, I made sure that my messages were clean, clear, and concise, and that they directly linked the work of exploration to existing and historical ideas and actions of GCPS. For example, when messaging the need for future readiness, I connected it directly to GCPS’ history of being a leader in education reform and in inventing its own future, citing examples like GCPS’ early embrace of accountability for student results years before the requirements of No Child Left Behind. Within this frame, the work of ambidexterity was simply a continuation of GCPS’ historical leadership. Additionally, I connected the work to GCPS’ competitive spirit by affirming the link between successful exploration and
GCPS’ desire to continue to be high performing. Furthermore, I had to ensure that pro
explosion messages did not always come from me and were endorsed by key stakeholders
in the system. For example, instead of approaching people directly when I needed to build
a pilot cohort for the design thinking partnership, I was able to have a principal serve as an
advocate and have conversations with the remaining principals to bring their schools on
board.

Another leadership tactic that I used was to follow a seed planting methodology for
spreading the ideas and mindsets that I needed the system to embrace for exploration to be
successful. The methodology consisted of inserting key messages and ideas in small doses
(seeds) throughout most interactions that I had with system leaders and staff. For example,
out of the exploration conversations, I learned that leaders had a practice of not discussing
ideas that had been previously stopped by or had failed in the execution system. Such
withholding of ideas would be directly problematic for a budding exploration system,
which would benefit greatly from pulling in existing ideas. As such, a seed that I needed
to plant was that a promising idea in the execution system is different from a promising
idea in the exploration system and, as a result, an idea that was not seen as promising before
might be a great candidate for exploration. As the seeding strategy rolled out, I would often
hear my own ideas repeated back to me in other contexts by people with whom I had not
shared the ideas in remarkably similar language to what I had originally used, thus showing
that the ideas were beginning to permeate key stakeholder groups. For example, in later
exploration conversations, key stakeholders would say things like: “I had a great idea a few
years ago dealing with student engagement that did not really go anywhere before, but I
think it might be successful in the exploration system you are talking about because it seems like the exploration system is looking at different things.”

Furthermore, a key reason for my success was early endorsements by Mr. Wilbanks and Dr. Patterson that I capitalized on to open many doors in combination with my deliberate efforts to keep those doors open. From the start, Mr. Wilbanks provided a direct, public endorsement of my residency as evidenced by his public introduction of me during the Summer Leadership Conference to all district leaders, something traditionally reserved only for new principals in GCPS. Meanwhile, both Mr. Wilbanks and Dr. Patterson continued to open doors for me by repeatedly introducing me to key stakeholders and by promoting my residency work in various district meetings. At the same time, early on, I realized that while the formal authority and endorsements would open doors for me in Gwinnett, I would have to establish my own credibility as a practitioner and value addition to the system in order to keep those doors open. Since the work of building an exploration system was not yet seen as a creator of value and exploration by its nature yields long-term results, I embarked on a variety of small projects with and for stakeholders that would enable me to build my political and social capital while also allowing me to learn alongside critical stakeholders at the ISC and at local schools. The small projects ranged from supporting the coaching of a new district principal to supporting the rollout of new texts in support of team development to providing consultative support on ideas across departments and divisions. Through the quick wins I gained from the mini projects, I was able to build enough political capital to enable me to be seen as a credible source of information.

Similarly, I recognized that a new exploration system would likely have to go through a similar process of receiving an initial endorsement by key leaders, but would
also have to prove its value to the larger system in order to continue to gain the support, authorization, and funding that it needed to succeed. While the need for value creation could cause an exploration system to select less exploratory and more exploitation oriented projects, the system could overcome this challenge by taking an approach similar to mine of performing some tasks that were more traditionally aligned and accepted to build the needed social and political capital to create buy in and support for its work on other less traditional explorations.

Second, mirroring the Cohen and Mehta findings, I recognized that the likelihood of exploration truly being embraced by the system would increase if I could mobilize a significant constituency in support of the work. To that end, alongside my mostly quiet work with CIET, I maintained a parallel public track to the work that would appropriately message and communicate the idea of exploration to the broader system. When given the opportunity to make my first presentation to Cabinet about the exploration work, I took the opportunity to not only transparently lay out a long on ramp for all to see, but also to ask for support and grace in the work. By explicitly and publicly letting my colleagues know that if and when I stepped on toes it was not on purpose and that they should come speak to me directly about it, I was able to avoid much of the traditional adult politics that gets in the way of the real work getting accomplished. Though Cabinet members experienced the move as odd and countercultural at the time, as demonstrated by the puzzled looks and smiles I received while at the podium, it enabled me to establish a trusting relationship with the team that allowed for future partnerships.

Meanwhile, for the pilot project to work, I knew I would need to forge strong relationships with teachers at all four pilot schools. As such, I began to actively build
relationships with teachers by sharing my own background as an educator and my belief that they were the source of a tremendous amount of untapped ideas and potential. I modeled the mindsets of exploration with them by being transparent that the pilot was a true pilot, meaning that it may fail. I created opportunities for teachers to give direct and indirect feedback and made sure to address concerns and new ideas as soon as they came to me. I actively highlighted the support aspect of the Instructional Support Center and reconfigured components of the pilot as concerns and additional information came up from teacher feedback about how to make the pilot work better.

During the early phase of the pilot when teachers were particularly wary of the ISC role and the potential for ISC manipulation of ideas, I engaged teachers in deep conversations about the experiences that led them to feel that way and personally reassured them that this pilot was different from their normal experiences with professional learning. To signal the reality of this narrative, when I made decisions that did not quite work out in the pilot, I talked about them and what I learned publicly with the whole design team. For example, when the rollout of the design question did not go as planned, instead of going with the Guild approved final version, I took the time to stop everything and revisit the design question to make sure that the teacher voice came through. Despite the increased stress and pressure of the last minute design question revamp, teachers expressed appreciation. One teacher even said that she had never met a district leader like me. When I asked her what she meant, she said district leaders are not normally willing to publicly admit that something did not go right and then ask for the advice and support of teachers to make it right. Over time these experiences built trust between the teachers and I and established the foundation for the continued success of the pilot.
Third, paralleling the Cohen and Mehta findings on successful reforms offering the education tools and guidance needed by educators, I knew that the exploration system architecture and the pilot would both have to be well developed and scaffolded and paired with capacity building to ensure successful uptake into the system. Critical to this work was my partnership with the CIET team, which bears significant credit for the successful creation of an exploration architecture. CIET’s thought partnership was indispensable to the successful development of a system exploration model because they were able to see and help me build a system that could be successful in GCPS’ strong culture and unique context. From the outset, CIET team members were critical partners in the work, questioning the function of every piece of the exploration system architecture to see how it would play out when taken from paper and deployed into reality. The CIET team’s pushes led to the strong linkage infrastructure and the push to have a formal way of passing exploratory ideas with appropriate supports into the broader system. There is nothing quite like the critical eye of a practicing principal to ensure that an idea is solid before release.

Looking back, I recognize that my experience with the CIET team unfolded the way it did because of the trust I had built with team members at PELP a year prior. Due to the PELP experience occurring prior to any discussions or thought about a residency placement in GCPS, the team was able to experience my genuine commitment to Mr. Wilbanks and the success of GCPS without the backdrop of any potential personal agenda. Were it not for that existing trusting relationship and the team’s genuine desire to build an incredible system for exploration for GCPS, one could imagine a team that had been tasked by a superintendent to lead innovation resisting the efforts of a Harvard graduate student who had been assigned to them to support their work. Through my partnership with CIET,
however, the new exploration architecture development process was able to leverage both the opportunity of my new set of eyes in GCPS and the deep experience of CIET members and their desire to make GCPS truly world-class.

Regarding the design thinking pilot, I worked diligently with our partners from the Teachers Guild and my Senior Design Team Leaders to ensure that design team leaders had high quality training and practical guidance about how to engage in design thinking and how to lead others in the work. The budget Dr. Patterson provided enabled me to provide the necessary resources and supplies for teachers to engage in the pilot. In addition, I was able to leverage my connection with the Teachers Guild’s Ed.L.D. resident to surface and troubleshoot any challenges during the pilot. Meanwhile, I was able to leverage partnerships with other key stakeholders across the system to help teachers to capitalize on existing resources that could be repurposed and utilized in the design thinking pilot.

Finally, per the Cohen and Mehta findings, despite the cultural differences between the exploration unit and the execution unit, both the exploration system architecture and the design thinking pilot were positioned to align well with the prevailing community norms and beliefs. For example, connecting exploration to CQI early on and having people understand their ideological consistency, while also recognizing the different requirements of exploration, helped district stakeholders to see the work as an extension of concepts they already bought into. In a high-performing and strategically-minded district like GCPS, the idea of being the inventor of one’s own future was something that was a natural extension of existing beliefs. Meanwhile, the design thinking work itself existed as a niche reform that was taken up by and impacted teachers who opted into the pilot. In short, the strategic
project provided promising evidence in support of the continued development of a model of organizational ambidexterity.
Implications for Self

The residency experience and the process of executing on the strategic project has yielded enough fodder for years of reflection on my own leadership in the education sector. At the core of the implications is that while leadership is about continuity and improvement, it is also inherently about change and how to convince people to be a part of it. Below I explore some of the key insights and implications of the work on my leadership.

1. Leaders should engage in authentic empathy as the starting point for change.

As leaders and practitioners, we often believe that the starting point for change is identifying a problem, often framed as an opportunity, and then building coalitions of support around solutions. Sometimes we even skip the problem identification step altogether and jump straight to solutions. I still believe problem identification and coalition development are critical, but have learned that in identifying a problem, it is not enough to know of it in the abstract or even through numeric data. Instead, the starting point should be directly empathizing with the people experiencing the challenge that requires change. I have learned that effective leaders engage directly with those who are experiencing a problem because it enables them to have a nuanced understanding of the problem and to develop solutions with, rather than for, those who are directly impacted. Through residency, I recognized that I sometimes engage in inauthentic empathy and allow quantitative data or my prior experiences to substitute for real empathy. Alternatively, I find myself engaging in a root cause analysis, such as the five whys protocol, without ever actually asking those impacted by a problem why they think it exists or whether it is a problem that needs addressing.
Upon reflection, I have realized that I often skip the empathy process with the best intentions, sometimes out of a desire to be efficient in my information gathering, a belief that I understand the problem due to my own current or former proximity to it, or even perhaps an overconfidence in my own training and expertise in solving the specific problems. In so doing, however, I end up foregoing the opportunity to uncover the real roots of the problems and potential sustainable solutions. As a result, I sometimes place resources or brainpower behind solving problems that I believe are significant, but that end up not being as significant to those who I believed experienced them. In looking at the world through this new lens, I have realized that in more cases than we would like to admit, in the education sector we waste valuable resources on solutions that nobody seems to want or need at a cost to solutions that are greatly needed.

In the design thinking process, the first stage, empathy, was initially one that I thought would be a fluffy stage with little use. I thought that between our accountability data, teachers’ daily proximity to students, and some good old-fashioned root cause analysis, we already knew what students were experiencing and could triangulate great solutions. At best, I thought that empathy work would confirm what we already know. What our empathy work revealed, however, was that we only really knew and understood the tip of the iceberg. We underestimated the stress and disconnection that that students felt on a daily basis. We underestimated students’ innate desire to learn and to be held to higher expectations. We overestimated the need for some of the solutions that we had already cooked up. Most importantly, I realized that despite my natural framing that “we” misestimated the outcomes, I was directly implicated by the inaccurate predictions as well. As these results came from the pilot, I began wondering if misdiagnosis was occurring with
student-related problems, what might I be missing by not authentically empathizing with teachers, principals, and district leaders that I am tasked with supporting? What are the data not telling me that I could glean from directly engaging with people from the groups I am trying to serve? What solutions have I already developed that are missing the mark because of the missing direct feedback and empathy with those I seek to serve?

Through the residency journey, I have recognized that a critical implication of the work for me is that if I seek to be an effective and efficient education systems leader, I must take the time to engage in authentic empathy and solutions development with those who I am leading. With the new lens of authentic empathy, I can be far more successful in my efforts to serve students and families.

2. Effective change leadership requires creating structures that support a sense of agency and efficacy among organization staff.

Throughout my residency I repeatedly ran into the concepts of agency and efficacy and their important role in engaging people around solving problems. I learned that if people take part in identifying problems and building solutions and they believe that they can be part of the solution, then they are far more likely to engage and be successful in problem identification, solutions development, and execution. As a leader, this means that leading change should not be about convincing people that they have a problem and that my solution can solve it. Instead, it should be about building structures that enable people to proactively recognize their own problems, be a part of building solutions, and to have the authority, responsibility, and resources to implement solutions.

While this finding seems rather trivial and obvious, the reality is that as a practitioner and system leader I naturally identify problems for people, create solutions for
them, and then end up having to convince them that the solutions are correct and ought to be implemented. As a result, there is a recurring buy-in challenge as people lack ownership of the problems and the solutions and do not put in the effort needed to make the solutions successful. Instead of focusing efforts on improving the solution, I end up utilizing the traditional method of spending most of my time attempting to convince people that the problem is the right problem and that my solution is the right solution. I believe I can be a more effective leader if I can create structures and systems that leverage the power of self-agency and self-efficacy in tackling critical challenges faced by school systems. My role as a leader, then, should be to leverage the collective brainpower of the organization by facilitating staff in identifying challenges and supporting their development of solutions. As the challenges facing education systems continue to grow in complexity, the traditional model of a single leader determining and solving problems is no longer tenable. As such, as an education systems leader, I will need to pivot the focus of my leadership away from the traditional method and towards a new model of building systems that clear the pathway for solutions and leverage the collective brain power of the individuals in the system to identify and solve the system’s most pressing challenges.

3. Leaders have a responsibility to provide stable, progressive systems leadership.

The public often criticizes the education sector for its extremely high levels of turnover, especially among superintendents and executive leadership, and the public has a point. Leadership, especially in larger systems, seems to change like the weather, with superintendents turning over on average every three years and in some places even more frequently. Sometimes the transitions are due to self-inflicted wounds and scandals or from changing board and community politics, but often times the transitions are mutually agreed
to as superintendents jump from district to district in an attempt to move up in some way. As superintendents transition, often their executive teams do as well and with them goes any accumulated institutional knowledge, leaving the career staff, teachers, and students to repeatedly rebuild. Add to that the common desire of leaders to personally brand and stamp their own initiatives and vision onto a district and remove existing ones, and we find that districts seem to routinely reinvent their facades with limited effect on classrooms and instruction in schools.

GCPS, under the leadership of Mr. Wilbanks, is a rare example of how stability can positively impact a public education system. For over twenty years, Mr. Wilbanks has been at the helm of GCPS and has maintained a steady hand and constant pressure towards the goals of GCPS. Even with his long tenure, however, Mr. Wilbanks still references the fact that he is still executing on many strategic pieces that were in place before he was superintendent. Instead of a singular focus on quick, short-term wins that often plagues less stable systems, Mr. Wilbanks’ stable leadership has enabled the implementation of improvements to have a much longer time horizon with a clear eye towards long-term success. As a result, Mr. Wilbanks is able to make an investment in the long-term benefits of exploration whereas the instability in other districts forces them into a vicious cycle of surface level, short-term changes with few long-term successes.

One of the most important personal implications of my time in GCPS is that if I know that stable leadership is imperative, I must similarly commit to doing my part in creating and adding stability. This means that when I am in a position of leadership my role is not to scrap everything the person prior put in place or to clean the slate of leaders, but to build upon the foundation of what is currently working to ensure less movement and
more progress. As a system leader, I must focus on improving instruction so that it prepares students for the future without falling victim to quickly fading trends or shiny interventions that have little impact on student performance on current or future metrics. Finally, as a system leader, I will need to maintain a stability of vision so that everyone in the system knows the direction in which they are working. In short, to be a successful systems leader, I must be committed to the continuity of great ideas from leaders before me, to building onto the ideas in ways that ensure future readiness, and maintaining a stable pressure and focus on reaching the vision of the system.
Implications for Site

In addition to the personal implications, my strategic project and residency yielded significant implications for GCPS. Below, I explore some of the most critical implications.

1. GCPS’s continued investment in exploration is crucial to its long-term success.

Adaptation theorists appropriately warn that “maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity” (March, 1991, p. 71). For GCPS, there is no question that it has been long well-served by a strong execution system that has generated progress utilizing continuous quality improvement, but it is time for GCPS to invest further in exploration. As March elaborates, “effective selection among forms, routines, or practices is essential to survival, but so also is the generation of new alternative practices, particularly in a changing environment” (March, 1991, p. 72). In GCPS’ case, the system is in the middle of a rapidly changing environment. Not only is the pace of technological change rapidly changing what will be required of students in GCPS, but even the type of students that GCPS is serving is continuing to shift dramatically. As such, GCPS is in a critical moment in its history where it needs to explore in order to continue to succeed at a high level. In order to remain ahead of the curve, GCPS’s investment in exploration should include: (1) fully dedicated staff and resources with a mission of exploring what are the next high leverage pivots for GCPS, (2) appropriate shielding of a separate exploration unit, and (3) piloting of a formal linkage system between the exploration and execution units.

While the pilot revealed promising results for a potential exploration system, it also revealed the integral role of staff and resources in achieving success. As such, GCPS should invest additional resources into further examining the potential for a full-fledged
exploration unit. In terms of staffing, GCPS has gone as far as it can with only part time exploration staff, whether in the design thinking pilot or through CIET, and should consider funding dedicated staff members that focus solely on exploration. In order to be successful, exploration cannot be a stipend position that is tangential to primary roles; it needs to have its own fully dedicated resources. Furthermore, the staff will need access to enough resources to be able to fully incubate ideas, provide access to teacher and staff learning experiences, and support ongoing coaching. Like with any endeavor, adequate investment in exploration will be critical if GCPS seeks to become truly ambidextrous and future ready.

In addition to appropriate resourcing, GCPS will need to explicitly shield the budding exploration unit from the systems and demands of the execution unit. GCPS should select a high-level executive or executive team that is capable of toggling between exploration and execution work to oversee the exploration unit. The executive or executive team will need to agree upon and establish goals and metrics for the exploration unit that reflect the goals of exploration and incentivize innovative thinking, trying new things, and learning. Furthermore, the executive or team must shield the exploration unit from the execution system’s expectation of rapid results and must allow the development of an iterative learning process within the exploration unit. When the exploration unit needs resources or a space in which to operate a pilot or incubate an idea, the executive needs to be willing and able to provide the resources needed. Finally, the exploration unit must be shielded from the demand for rapid scaling and growth of promising ideas. It is more important for exploratory ideas to gain appropriate evidence and refinement than it is for fledgling ideas to be quickly taken up by the system.
Finally, GCPS should place significant effort behind developing and piloting a formal linkage system for ideas to move from the exploration arm into the execution system. More specifically, GCPS needs to determine a system, structure, and process for what ideas are considered for mainstream use and how ideas move from the exploration unit over to the linkage system for transfer into the main system. The Innovation Transfer Team should include staff members who are in roles that are best situated to help identify and solve for barriers to idea uptake in the broader system. Furthermore, GCPS will need to create some low-risk pilots of attempting to move ideas from the exploration unit into the core business infrastructure via the linkage system in order to test and improve upon the functionality of the linkage model.

In short, GCPS’s continued piloting and investment in exploration is crucial to its long-term success. An exploration system could provide much needed bandwidth and systems for new ideas to emerge that enable GCPS to continue to invent its own future as opposed to waiting for the future to be defined for it. Furthermore, ambidexterity would enable GCPS to tackle one of its most critical challenges: how to simultaneously keep the future and the present front and center for staff members. For GCPS to continue being successful, it must recognize that while its present exploitation work has led to success, in the long-run “an emphasis on exploitation also compromises competitive position” (March, 1991, p. 85). As such, GCPS should commit to further investing in exploration to ensure its successful ambidexterity in the service of future readiness.

2. GCPS should develop mechanisms that broaden its solutions sourcing and help yield the highest quality solutions for its challenges.
Mr. Wilbanks has a common saying where he somewhat jovially pushes his staff to look beyond GCPS for ideas by saying: “you know, I’ve heard there are people who do school outside of Gwinnett County and that some of them are even pretty good at it.” The strategic project not only confirms the need to heed Mr. Wilbanks’ advice, but also revealed that in a system as large as GCPS, an idea from a classroom teacher can sometimes feel just as far away as an idea from outside of the county. In order to be successful, GCPS needs to broaden its solutions sourcing to include mechanisms that bring ideas forward from deep within its structures and from beyond the district.

For GCPS, enabling ideas from deep within to surface requires the district to develop mechanisms by which it can leverage the collective wisdom and ideas of its nearly 12,000 teachers to identify and solve its most pressing challenges. Early evidence of the potential success of such action was seen in the design thinking pilot, which revealed that, when given the opportunity, teachers can be important problem identification and solving partners and naturally align their ideas to district goals. In addition, the pilot showed that teachers can be the source of high quality new ideas and innovations. The internal sourcing of ideas could take many forms in GCPS ranging from formal innovation and problem solving competitions and problem hackathons to technology platforms and regularly occurring open invitation design sessions on specified topics that enable employees to elevate and improve upon the most promising ideas of their colleagues. While establishing and maintaining internal idea sourcing systems may feel daunting and unnecessarily burdensome, the probability of finding an excellent solution through a system that sources ideas from thousands of employees is significantly more likely than one that relies on a select group of individuals who happen to be district or school level leaders.
At the same time, GCPS needs to establish systems that ensure that it frequently and regularly looks beyond Gwinnett County for solutions and that solutions are appropriately taken up by GCPS. While GCPS is relatively high performing, its changing demographics, increasing size, and the rapid pace of technological change are putting pressures on the system that will require it to pivot and attempt new methods to ensure the continued success of students. Despite GCPS’ success, per Mr. Wilbanks’ saying, there are many great lessons and ideas to be learned from other schools, districts, and even the private sector that could enhance educational outcomes for students in GCPS in new ways. Such a system for external idea sourcing could include formal mechanisms for learnings from external conferences to be shared across the system, for partnerships between GCPS staff at all levels and their counterparts in other systems, and for routine cross-sector collaborations with organizations from across the globe.

At the same time, GCPS must also critically examine how it engages with solutions once sourced. While the natural inclination of any system, especially one like GCPS, is to pull new ideas into the existing system and structures and make them part of the existing system, in some cases promising ideas cannot be successful without changes to the existing system. The process of Gwinnettification may, in some cases, peel away the exact pieces that caused a solution to work in a different context. For example, attempting to give a corporate structure and feel to design thinking work would significantly hamper its success in spurring creative problem solving. As such, GCPS should examine new solutions with an eye towards which ones can be adopted into the existing structures without losing their effectiveness and which ones require the organization to change and reinvent itself in ways that make it even more successful.
3. GCPS should embrace its roots of calculated risk taking in order to continue its forward progress.

One of the greatest challenges of being a part of a successful organization is that success can be accompanied by a paralyzing fear of failure. No individual within a successful organization wants to be responsible for a hiccup along an otherwise long trajectory of high performance. As a result, individuals and systems begin to engage in risk avoidance rather than risk mitigation. The challenge is that risk avoidance stifles execution units and causes them to reduce variability in ways that trend towards the mean rather than upward toward higher performance.

An old saying that is sometimes referenced by Mr. Wilbanks is that nothing ever worth doing is without risk. While system leaders and staff conceptually understand the saying, many have forgotten that most of the now routine, traditional structures in GCPS were once both highly innovative and highly risky. For example, a foundational piece of the modern day GCPS, the AKS with its standardization and assessments that are used to hold schools and teachers accountable for performance did not come to GCPS as an applauded knight in shining armor. Instead the AKS caused significant portions of GCPS to turn over and was the source of great anger among large groups of employees and parents. What staff forget, however, is that, at the time, the AKS and standardized testing were cutting edge, had not been thoroughly tested nationally, and came with significant risk. In the design thinking pilot and my exploration conversations, fear of failure and fear of risk from new ideas was a common theme. Interestingly, few people ever brought up the risks associated with continuing the status quo.
While the implication of this capstone is not that GCPS should throw caution to the wind, it is that GCPS should return to its roots of calculated risk taking with the goal of supporting student achievement. Although this work will occur in a properly constructed and run exploration unit, it also must be embedded in the daily improvement processes of the execution unit. When something is not working or could be working even better, structures should be put in place to push staff to attempt new solutions instead of retreating to the safety of common, acceptable practices that may not lead to the desired outcomes. While staff say they currently support such improvements, the cultural and organizational structures place too high a cost to unsuccessful, calculated risk taking.
Implications for Sector

Finally, my strategic project brought to light some significant implications for the public education sector.

1. Public education systems should deliberately select and implement organizational adaptation strategies that match their particular context.

The rapidly changing technological environment poses great opportunity and risk to public education systems. If they are to remain relevant and continue to serve student needs, public education systems will need to deliberately select and implement organizational adaptation strategies that enable true exploration. Although public education systems across America often have five to ten year strategic plans, such plans are both underutilized and inadequately address the question of how the system will adapt to meet the changing requirements of future readiness. It is no longer good enough for school districts to aspire to support student future readiness without considering how they will have to evolve to support such readiness. Instead, they must deliberately build and implement the adaptation strategies that will enable them to reach their aspiration. As public education systems prepare themselves for the future, they must recognize that preparation and the learning that readiness requires do not happen easily or automatically. It will take resources, commitment, and a willingness to do the internal research and development work needed to build solutions. While this capstone argues that organizational ambidexterity with some modifications is the most promising model of adaptation for GCPS, as discussed in the Review of Knowledge for Action, different public education systems will need to embrace different models of organizational adaptation that meet their particular contextual realities.
In order to develop and implement an organizational adaptation strategy, system leaders should first recognize that such strategies are not short-term or quick fixes. Within the long-term context, leaders should follow the core learnings from the Cohen and Mehta 2017 analysis and the findings of this capstone around the importance of agency and efficacy in building the desire to solve problems. Leaders should begin the work by assessing whether educators in their system recognize that there exists a future readiness challenge. Furthermore, they should engage educators and other key constituents in the adaptation strategy development process to ensure a nuanced understanding of the challenges, build a compelling solution with those who will be impacted by them, ensure the alignment of the adaptation model to the values of stakeholders, and to garner popular support for the idea. As the strategy is being developed, leaders should set aside appropriate resources that enable the creation of an infrastructure that enables the successful implementation of the strategy. Finally, system leaders must provide the stability of vision, support, and resources needed to ensure that the long-term work of organizational adaptation can be carried out. In short, in order to meet the future readiness needs of students and remain relevant in the rapidly changing modern world, public education systems must select and implement organizational adaptation strategies that meet the particular contextual realities in which they exist.

2. The present success and future readiness of public education systems require stability of leadership and long-term strategy.

One of the greatest challenges to the present success and future readiness of many public education systems, and especially large systems, in America is the state of constant flux in which most of the systems exist. Constant turnover of executive leadership and
teams causes frequent and repeated changes. Short-term strategy and programs become prioritized at the expense of long-term outcomes. So much is implemented at a surface level that few things are able to build the roots needed to have a real impact. Each leadership change results in the repeated loss of institutional knowledge, which prevents systems from embarking on needed long-term trajectories towards success as they end up being forced to repeatedly reinvent basic systems and structures. These disruptive realities exist in the context of the system’s goal to improve learning, which is a long-term endeavor. In order to be successful, system leaders must focus on developing stable long-term strategies for improving learning, especially when the goal is to meet future readiness requirements. Meaningful improvement in the instructional core cannot be achieved overnight and require stable, consistent, long-term work.

GCPS is a prime example of a system that has benefited from stability of leadership and long-term strategy. While one could imagine potential stagnation in an environment where the average tenure of board members and the Superintendent exceeds 20 years, GCPS has been able to avoid such stagnation because the leadership stability has been in the service of a long-term strategy for success. As a result, the constant push to achieve progress and improve outcomes for students becomes the goal instead of stability for the sake of stability. Furthermore, the focus on long-term vision is what enabled the district to be able to take a long-view of improvement, which is what led GCPS to the realization that it needs to pursue the development of district exploration capacities.

Unfortunately, the instabilities in public education systems implicate nearly every group of stakeholders. For stability in the service of future readiness to be achieved, the public needs to support the election or appointment of board members who exhibit a steady
hand, a willingness to allow for long-term solutions to be appropriately developed, and a consistent balance between providing appropriate policy and financial support for exploration and improvement and holding district administrators accountable for carrying out the work. Board members need to refocus on their primary task of governance and not engage in the day-to-day operations and decision-making. Boards should build a guiding long-term vision that captures the aspirations of the system and create a governing environment that supports the vision. Board members should temper their desire and the political pressure to be seen as achieving rapid change with the reality that rapid change rarely sticks and even more rarely improves systems over the long-term. To that end, school boards should hire superintendents that want to build onto the existing foundations of the system instead of knocking everything down in order to make their own mark on a district.

Meanwhile, superintendents should avoid politically popular, but practically unfeasible, change platforms that are strong on messages and movement, but weak on substance and positive long-term impact. Instead, they should focus on building upon the existing structures, increasing the institutional knowledge that exists within the system, and continuing movement towards a vision that ensures future readiness. Superintendents must temper their ambitions to quickly move on to larger or more popular districts by reminding themselves of their core commitment to the education of the children under their leadership. From district administrators and school building leaders all the way to teachers and other staff, system leaders need to focus everyone on, hold them accountable for, and reward them to maintain a constant and consistent focus on working in alignment with the long-term vision of the school system.
Conclusion

After over two decades of success under Mr. Wilbanks’ leadership, GCPS is at a pivotal moment that could determine its success over the next two decades. In the face of the looming prospect of a significant technological revolution, GCPS should actively invest in further development of a modified ambidexterity model that will enable it to make the appropriate pivot to meet future requirements. While additional research and development is needed to test key aspects of ambidexterity in GCPS, the strategic project yielded promising early evidence to support additional investment and study of the model. Furthermore, the strategic project provided important early data for how an exploration unit could be organized to function in GCPS. With continued investment in ambidexterity, GCPS could serve as a leading national model for how public education systems can organize to effectively execute on present requirements while exploring to become future ready.

GCPS’ journey towards future readiness provides significant lessons for all of us in the American public education sector. If public education is to remain a vibrant and integral part of American democracy, we must support our school systems in actively investigating and embarking upon the work of organizational adaptation with the goal of future readiness. Although a modified ambidexterity model best fits GCPS’ context, it is important for us to remember that each system should examine its own environment and context before making an investment. The process of becoming future ready will look and feel significantly different depending on the culture and values of the specific system and the community within which it operates. At the end of the day, however, future readiness
everywhere is fundamentally about providing students with the tools needed to allow them to have meaningful choice and agency in their lives beyond high school.

Finally, we should take heed of the lessons on stability from GCPS because future readiness is a long-term endeavor that requires sustained focus and resources to be successful. We can only create real progress towards future readiness through the sustained and deliberate organization and implementation of systems that can promote and support it. As such, we must plot a long, strategic path forward and support the work even when it is more convenient in the short-run to return to the status quo. In the final analysis, if American public education systems are to remain a relevant and critical part of our national fabric, we must take seriously the need for future readiness, we must invest in mechanisms to support organizational adaptation, and we must prepare to pivot for the future without losing sight of present requirements.
Bibliography


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Appendix

Appendix A: The McKinsey Performance Trajectory and McKinsey Performance Levels

Explanation: The McKinsey Performance Trajectory prescribes the level and nature of management needed to move a school from poor achievement to excellent achievement. According to the model, a school in the poor category is in need of direct significant intervention (management). As it improves, it should be provided with increasing levels of autonomy until it reaches the great category at which point it must be empowered to unleash greatness.

Source: Internal GCPS Presentation (January 2018)
Appendix B: SAT Trend Data 2008-2016

Top Performing GCPS High Schools: SAT Composite Score Difference from National Average (2008-2016)

Low Performing GCPS High Schools: SAT Composite Score Difference from National Average (2008-2016)

Source: Internal GCPS Documents (2018)
Appendix C: Existing, Pre-Residency GCPS Exploration System Model

Model Explanation: The existing, pre-residency GCPS Exploration System Model followed the Organizational Ambidexterity model. In this model, the term “core business” was used in place of exploit system and the term “transformation” was used in place of exploration. The blue spring, labeled “CIET Focus,” represented how successful transformational ideas from the exploration system would be championed by the Creativity, Innovation, Entrepreneurship, and Transformation (CIET) team, which would support its integration back into the core business work of GCPS. The CIET team had not yet defined a mechanism for the identification of successful exploration ideas, how they would be championed, and what processes would guide the transition of the ideas into the core business.
Appendix D: The Evolution of the Ambidexterity Model

August 3, 2017 Model

September 11, 2017 Model
September 19, 2017 Model

November 14, 2017 Model
Appendix E: Design Thinking Pilot Pictures

Empathy Collection Example:

Design Question Development Post It Notes
Teachers Guild Posters at GCPS Kickoff

A culture of creativity is where everyone believes in their capacity to create change and has the ability to embrace, act on, and share their ideas.

Creative Leadership

Ideation in Progress:
Ideation in Progress Example 2:
Teachers Guild Virtual Session Example:

Build Workshop

- **Warm-Up** – (5-10 min)
  - How will you get people energized and excited?
  - How will you make sure everyone knows who is in the room?

- **Prototyping** – Bringing Your Ideas to Life! – (10 min)
  - How will you introduce prototyping?

- **Practicing Prototyping**! – (10 - 25 min)
  - How will people have an opportunity to practice?

- **Logistics / Closing** – (10 min)
  - Log-in to platform – Start their first ideal.
Appendix F: Ideate Brief to Cabinet

GCPS-Teachers Guild Design Thinking Partnership

Design Question: How might we empower student voice to fundamentally redesign students’ learning experiences?

Our students want to feel known and heard and want their learning to match their goals and interests. Our How Might We question explores how we might bring in student experience, identity, and interests to redesign learning experiences.

We are here:

- EMPATHIZE
- IDEATE
- BUILD
- TEST
- ITERATE
- SHARE

DESIGN THINKING

A Learner-Centered approach to developing ideas

MINDSETS TO GROW
Believe in your capacity to create change.

- EMPATHETIC
- COLLABORATIVE
- OPTIMISTIC
- EXPERIMENTAL
- EQUITABLE
- COURAGEOUS

METHODS TO PRACTICE
Have the ability to embrace, act on, and share ideas.

- EMPATHIZE
- IDEATE
- BUILD
- TEST
- ITERATE
- SHARE
Design Thinking Partnership Goals

1. To develop teacher and organizational design thinking capacity
2. To support and sustain a culture of creative leadership among teachers in GCPS
3. To harness teacher leadership and the creative problem solving capacity of teachers in service of tackling critical challenges aligned with district priorities

Design Thinking Partnership: By the Numbers

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