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Organizing to Accelerate Education Innovation at the State Level

VERSION 1.0

Organizing to Accelerate Education Innovation at the State Level

Authored by
Dr. Lisa Duty

In collaboration with
Emily Feenstra (Imaginable Futures),
Maria Martinez (Imaginable Futures)
and Gabriela Gambi (CIEB)

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About the Author

Dr. Lisa Duty is the founder of **Innovation Partners America**, an education consultancy that enables states and organizations to create new outcomes through collaboration and the incubation of new ideas. Duty is an expert in personalized and blended learning and has counseled dozens of state education agencies, gubernatorial offices, entrepreneurs, foundations, professional service providers and school districts regarding education innovation.

Duty brings twenty years experience in education strategy, policy, advocacy and design to her work—including that as a Founding Partner at The Learning Accelerator where she supported state leaders in reimagining their roles, missions, and the ways education systems can be rebuilt for innovation and high performance.

In recent years Duty has served as a consultant to MasteryTrack, a nonprofit dedicated to advancing mastery-based learning at scale through education technology, and as an advisor contributing to the founding of Imagine Worldwide, a nonprofit dedicated to enabling children in developing countries to teach themselves early literacy through open source and scalable software.

Duty previously served as Senior Director of Innovation at KnowledgeWorks, a consultant for school transformation at the Ohio Department of Education, and as an adjunct faculty member at The Ohio State University's (OSU) College of Education and Human Ecology. Duty holds a Ph.D. in Global Education from OSU with cognates in Democratization and Secondary School Transformation.

CONTACT & SOCIAL MEDIA
https://www.innovationpartnersamerica.org
lisa@innovationpartnersamerica.org
Phone: 1.614.806.0607
Twitter **@lisaduty1**
LinkedIn **in/lisaduty/**

Preface

Organizing to Accelerate Education Innovation at the State Level was originally conceived in an era of more optimism and rising interest in leveraging innovation to build new systems and structures to catalyze learning for all students. Despite the debilitating COVID-19 pandemic, that optimism — and interest — remains, and is of both tangible and immediate importance, one year after the production and completion of this study.

Brazil has registered nearly 100,000 deaths from COVID-19, while the number of cases approaches 3 million[I]. The disease spreads faster in low-income and remote areas, such as indigenous communities, where access to healthcare is precarious.

Meanwhile, Brazil's schools have been shuttered. Crisis-induced remote learning has emerged to provide some level of continuity in education, and over time aims to help stabilize communities, even as it confirms the systemic inequities that have long existed among Brazil's schools and hence its children and families. The inequities are not only made more apparent by COVID-19, but are brought to light in new protests against deep and pervasive racial injustice.

The marginalization of children of color results from centuries of unjust policies and practices, and on a practical level is witnessed now as these children suffer disproportionately from ongoing social isolation, reduced or no longer existent social services, and all types of stress emanating from COVID-19's impact on their families' personal circumstances. Meeting the needs of these and other vulnerable children including students with disabilities and those living in remote and low income areas is the number one priority.

Where there are systems struggling to provide access to schooling and/or basic services to students with a range of needs, officials are working tirelessly to catch up. Leading Secretariats of Education — State Education Agencies (SEAs) such as that of São Paulo[II] — are supporting the design and implementation

of strategic plans for education continuity (including critical multi-modal activities using mobile devices, television and radio technologies, print and more) and supporting families with nutrition and health services out-of-school. SEAs have an opportunity to support schools and stakeholders along a continuum from initial response to recovery and reinvention.

Why We Must Shift to Personalized, Mastery-Based, Student-Centered Learning Models

The time is right to shift away from the traditional model of education to one that is personalized, mastery-based[III] and student-centered. This is not because it is "innovative" in the buzz-worthy sense, but because it responds to the challenges of the pandemic and the needs of our children.

Personalized, mastery-based, student-centered learning recognizes student variability, including that students are in different places socially and emotionally, and in different places in their learning (they always were, yet it is now more pronounced). Teachers have less control over students' time and attention, and there is an urgent need to create conditions that mitigate the need for remediation while motivating learning and shaping student agency.

The future portends that schools may need to pivot repeatedly among in-person, remote learning and combinations of both. As SEAs move away from a crisis response to planning for the future, what will we have learned from all of this? If we believe equitable schools and learning environments[IV] are one of the foundations of more equitable societies, what will we choose to do? Will we choose to reinvent school and the educational experiences that all students need and deserve? Or will we cling to inequitable[V] pre-pandemic systems and structures that we already know and resurrect them either wholly online or between physical and remote classrooms?

Below we briefly revisit three commitments post onset of the pandemic, for consideration by Brazilian Secretariats and their many collaborators. We do so in the hope that the individuals

reading this report can both learn from and enhance our collective understanding of how our education systems can evolve, and how committed people can change children's worlds for the better.

Three Commitments

Commitment 1. Understand Your Why

We assert that a purpose for education (why are we educating children?) is a north star that guides the development of innovation and hence new systems and structures. The times demand that we revisit all that we think we know about our "why." What is your system designed to do? Not designed to do? Why is it designed this way?

Look into the current crisis, how do we recognize that we have informed students, educators, families and communities that can give voice to purpose? As everyone is trying to build a response to COVID-19, and learning may or may not be happening much, are there bigger problems than access to technology which may not be as readily apparent? Is the purpose of a new education system defined by economic and/or human needs? Defined by a defense and strengthening of democracy? Racial justice? Design systems that respond to your why.

Commitment 2. Create a Culture of Innovation

How can SEAs promote change and growth in a new direction, instead of encouraging "perfection" of the old system that is simply moved online?

Even as SEAs move from crisis to recovery, seeding a culture of innovation provides opportunity to solve pressing problems and move toward reinvention in the longer term. The time to innovate has already arrived, whether or not constituents currently support you in doing so. Consider that a culture of innovation pre-pandemic now provides a wellspring of valuable resources like growth mindsets, the ability to fail forward and a willingness to act urgently without expectation of perfection but in the name of rapid progress. As we employ rapid prototyping to get evidence of what

works, how and for whom, we can ask: Should this information change how the system is being governed, funded, or incentivized? Create, grow and sustain a culture of innovation as you move toward a reinvention of schooling that matches your purpose— your "why?"

States that will succeed understand they cannot use the same thinking, tools and approaches that helped create and sustain disparities among schools and communities to unleash their greatness. States and collaborators need a new relationship to schools, students, parents and communities; and they must cultivate interest in redesigning learning and actively support change efforts with our cultures. We cannot mandate greatness or seek it through compliance.

Commitment 3. Focus on Creating Equity

In 2019, Hiefield and Vander Ark noted that as some schools work to reimagine learning, others will "cling to past practices," and new inequities will emerge: "Innovation, by its very nature of pushing the envelope[VI] to provide richer learning environments, leads to inequity." Real and continuous innovation is an imperative in a pandemic and post-pandemic world.

Within that imperative, it's critical to understand that education has historically been designed by white leaders for white students. We must recognize that our systems have been complicit in perpetuating systemic racism[VII] that has ranged from discriminatory discipline to inequitable funding and staffing to curriculum tracking and segregation.

The needs of students of color, those from low-income homes and children with disabilities have not informed the design of schools or systems. Starting now, we must acknowledge that if power is only concentrated in the hands of SEAs, local educators and communities may struggle to work flexibly to solve the problems that afflict those students who are suffering the most. Without proximity to the lives of these children and absent the dismantling and redesign of systems that reproduce inequality, marginalization will continue. Some of the best solutions may or may not be centralized, but all can be shared. Ask yourself:

Who is designing your system? For whom?

We know this: Crisis-induced remote learning reveals that moving same-aged students with highly variable social and emotional needs through a one-size-fits-all approach to learning with the teacher at the center does not work for all children. The degree to which it did not work pre-pandemic has been obscured by the effort of physically gathering students with a teacher in a classroom to receive time-bound instruction, despite different needs, life contexts and motivations for learning. Students' grades, where one can earn credit to "move on" without ever mastering standards or critical skills, conceal it most of all.

In order to design for all— to cultivate mastery, differentiate instruction and personalize learning for students' individual needs and interests, teachers need to know their students' strengths and weaknesses and how to modify lessons and experiences accordingly. Individualized instruction, formative assessment and feedback[VIII], self-regulated and intrinsically-motivated learning in which students have some control over and responsibility for setting and committing to relevant learning goals, pathways and pace are research-proven to have large positive effects on learning in the U.S. As teachers learn how to put each student at the center of their practice, they must develop students' own agency— the responsibility mentioned above—which is no small matter. While these effective instructional elements can be instituted without technology to some students, the good news is that technology can support their implementation, scale and sustainability with all students.

Our traditional education systems largely undermine student agency—the very thing we need children to bring to their learning as we work remotely—the very same thing we need them to bring to developing and inhabiting their own hopes and dreams.

This is a once in a lifetime opportunity to create a future in which all children are ready to rise and achieve their full potential. It's time for each of us to choose change that matters.

AUGUST 2020

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Origins: About this Report

This report was compiled between July 5 and August 2 of 2019 with all due speed prior to a meeting of CONSED in Brasilia, Brazil. It was originally intended to help launch and support conversations with this internal audience — and was not created with publication in mind. Upon delivery of the report, however, its commissioners believed its wider circulation would benefit all Brazilian innovators. As such, key informants were subsequently asked for consent to publish. All agreed the benefits of moving the report from an internal, 1.0 draft document to a draft document widely shared was of important value to the sector. We are grateful for each collaboration.

Introduction

In the last decade, an increasing number of U.S. state education agencies (SEAs) have launched initiatives aimed at cultivating more innovative instructional methods and models that leverage education technology (edtech)*. Structurally, state education systems organize themselves in various ways to catalyze, fund, implement and oversee these complex initiatives, and require that SEAs themselves — as well as their related ecosystems — evolve over time. Just as our public schools were not designed for innovation, neither were the rule oriented, regulatory-minded, compliance-based state agencies that govern our systems.

In many states, a single governmental institution or office there within, or, a core partnership of state actors, has been established to focus and lead efforts aimed at radically redefining[1] approaches to teaching and learning, reshaping instructional delivery, and rethinking the use of critical resources like staff, time and technology to deliver more effective learning experiences tailored to a diversity of students. Edtech is increasingly recognized (and simultaneously interrogated)** as a key mechanism for changing the way adults and systems work for kids, and accelerating progress toward their achievement. These state-level actors have stepped up to cultivate, organize or fund opportunities — helping schools shift from a focus on acquiring or "using edtech" in the classroom (mostly layering technology on top of the old model of school and supported with narrow teacher technology training) to immersing communities of educators in why and how[2] technology can support entire instructional models with the potential to meet the needs of the fourth industrial revolution[3].

These "offices of innovation" called by many names may be essential to the implementation of innovation initiatives as they progress from less to more mature, with their forms shifting over time.

* See Appendix - Blended Learning: An Illustration.

** Stakeholders at all levels are becoming more critical "consumers" of technology, ensuring that technology isn't being used for technology's sake – but rather to improve learning.

Key questions[4] related to the development of offices of innovation:

- What is the goal of an education system built for the future?
- How should an education system structure itself to meet new challenges and what roles could an office of innovation play?
- How should such an office be organized and staffed?
- What funding mechanisms exist for these offices, and what are their advantages and disadvantages?
- How have such organizations evolved over time, and what implications might there be for the future?
- How do we know when offices of innovation are achieving their purpose?

In the following pages, three U.S. states' innovation initiatives and their respective organizational forms are presented as fuel for thinking about offices of innovation with the potential to have transformational and accelerating effects on student learning in Brazil. The report concludes with counsel not for technically "structuring" or "staffing" offices per se, but with three commitments and three recommendations for consideration by Brazilian Secretariats as they chart their next paths to innovation and excellence.

Case Study: Rhode Island

A New Era

Rhode Island (RI) Education Commissioner Deborah Gist began her six-year tenure leading the Rhode Island Department of Education (RIDE) in 2009. While Gist was known for many initiatives, her unwavering commitment to using technology to advance teaching and learning to base instruction on the needs of every individual student was among her best known. Driven by an understanding that students would need to be prepared for the fast-changing world of the 21st century and remarkable changes in how people would work, Gist envisioned[5] students pursuing flexible, student-centered, proficiency-based (mastery-based) learning pathways. The pathways were less about acquiring knowledge and more about the application of knowledge, the development of skills like communication and creative thinking — with students themselves making decisions about their own learning and next steps on their pathway. Technology was a tool that could bring such pathways to life.

Gist was facing a problem: The old "factory-model classroom" that treated all students the same aimed to prepare students for standardized jobs in an industrial economy that no longer existed. Students were grouped in grades based on chronological age and curriculum and textbooks were written to be age appropriate despite different development rates among learners. Students and teachers sometimes had little meaningful interaction and students received fewer opportunities to develop their strengths and talents or receive

Gist believed that digital learning in all of its forms provides unlimited and customizable educational resources for every classroom and would allow schools to design flexible instruction that would enable students and teachers to work closely together at a pace that was right for each student.

additional support when needed as learning moved at a single pace on a standardized schedule. This one-size-fits-all approach to education would not prepare students for work in the future where skills like self-direction, adaptability and creativity would figure prominently in new roles.

Gist believed that digital learning in all of its forms provides unlimited and customizable educational resources for every classroom and would allow schools to design flexible instruction that would enable students and teachers[6] to work closely together at a pace that was right for each student. RIDE embraced technology-powered personalized learning because no other approach could focus on the needs of individual students and mobilize pedagogical and curricular resources to meet each student where they were, and move them forward.

With this in mind, on February 11, 2012, Commissioner Gist held a conference, titled "Innovation Powered by Technology[7]."* This first-of-its-kind event was crafted to appeal to 300 educators and leaders, ignited a fire of curiosity, and featured the launch of a single grant prize (under $500k) for any school willing to compete in taking up the challenge of reinventing itself with education technology.

Largely viewed as sparking a new era in RI education, Gist and her team envisioned the event would educate the entire community about opportunities in digital learning. From the onset, they knew they wanted to reach and inspire not just teachers but superintendents, principals, technology leaders, school-committee members and more by showing them how digital learning can engage students in school, improve instruction and transform education.

Removing obstacles to attendance, RIDE held the conference on a Saturday, and made the event free through the use of philanthropic funding. The grant prize of $470,000 (85 percent of funds coming from the U.S. federal government's Enhancing Education Through Technology program and 15 percent from foundations) created excitement and interest. The application which required strong community buy-in and thoughtful, collaborative planning put many schools on the road to redesign in addition to creating its first proof point illustrating what was possible when leveraging technology.

* All conference information attributed to original Christensen Institute case study Convening Rhode Island Around Digital Learning.

With the support of several national experts on digital learning, RIDE opened up a space for dialogue and dreaming about what school could be that would influence educators for many years to come.

Across this new era, Gist also worked with the State Board of Education to support wireless infrastructure, broadband access and devices. The "enablers" of personalized, blended learning would spread quickly:

WIRELESS INFRASTRUCTURE

The state passed a Technology Infrastructure Bond to provide funding for wireless access, to every classroom in the state. The bond funded the necessary switches, wiring and network controllers to bring wireless access to every school and every classroom.

BROADBAND ACCESS

The Rhode Island Telecommunications Access Fund (RITEAF) is a legislative commitment to ensure that Internet access is available and affordable for all private and public K-12 schools and libraries. The RITEAF program supplements the federal E- Rate program, designed to support the investments in the infrastructure and number of devices competing for bandwidth to the Internet.

DEVICES

To help districts secure the lowest prices on whatever device they chose, the state negotiated a master price agreement to make the procurement process easier. They negotiated a "bundled solution" that included the purchase of a device, professional development for teachers and tech support as the districts rolled out their initiatives.

With enablers and energy from the conference in play, RIDE took a long view about how systems would need to change. The whole purpose of education would need to be re-examined in light of the digital age[8], in order to understand the real value technology could create. In an age of robotics and machine learning, future graduates would need to be prepared for radical societal and workplace changes if they were to have any shot at thriving personally or professionally. The times demand agility, adaptability, and resilience — and an unprecedented expectation for self-direction and life-long learning. RIDE was among the first to realize that the one-size-fits-all model of traditional education would no longer serve the needs of students or the state's economy.

Developing a Plan for State Support

Innovation, by definition, is new territory for school leaders. Likewise, determining how best to support innovation requires SEAs to depart from their traditional roles and ways of doing business. To some extent, the spread of innovation among schools will be augmented, or limited, by an SEA's ability to "practice what it preaches." When it was time for RIDE to write their new strategic plan for education, it took an innovative approach to a traditional task. Rather than create the plan itself and collect a minimum of feedback from stakeholders, it turned the planning process on its head.

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This was an important move as authentic community engagement is critical to the success of innovation initiatives. Some would say that these initiatives move at the speed of trust. Initiatives which do not articulate the "Why" of change and frame their work in and with the people who are essential to its conduct and whom are its respective beneficiaries, are prone to false starts and failures.

RIDE's goal was to facilitate an inspirational and aspirational far-reaching statewide conversation about

public education in Rhode Island. Through outreach and engagement, they would expand the boundaries of their current work and vision to accommodate new perspectives and emerging opportunities. Rhode Island wanted a process that produced Rhode Island's plan, not the Rhode Island Department of Education's plan.

This resulted in RIDE making the following four public, binding commitments[9] as the very first gesture of the planning process:

Engagement: Every interested Rhode Islander will have the opportunity to contribute his or her opinion and to participate in the process.

Empowerment: A community team will develop the plan; the people most affected by public education will be closest to the decision-making process.

Respect: The process and plan will incorporate the opinions, expectations, and beliefs of participating Rhode Islanders. Although not every perspective may be included in the final plan, no perspective will be ignored.

Transparency: Every part of this process will be publicly available and easily accessible.

Tom Vander Ark[10] noted that RIDE became the first state in the country to *empower its citizens* to develop a strategic plan for public education through a *design-based process* — a process[11] for "creative problem solving that is human-centered and encourages organizations to focus on the people they're creating for, leading to better products and services" by forming and engaging an "Ambassador Design Team" that became the most important entity in the development of Rhode Island's Plan. The Ambassadors were recruited through a high-profile competition. As part of RIDE's statewide recruitment efforts, they sought applicants who were representative of their community and of the entire Rhode Island community, listeners to thousands of voices and many perspectives, ambassadors who could help others understand the planning process, designers who would produce many plan drafts, each an improvement on the prior, and who could be policy-making partners to the state.

The Ambassador Design Team was given near-full leeway to write the plan from a blank page upon maintaining a full commitment to the following principles:

Curiosity: a genuine and constant interest in the work we are doing and the environment in which we are doing it. We will be continual learners, open to new ideas.

Empathy: a genuine commitment to understanding the experiences of the people most affected by education. We will listen to others' perspectives and ideas.

Optimism: a deep-seated belief that public education can improve and that our work will be part of the solution. We are doing something meaningful and worthwhile.

Speed: success will come by working faster than we ever have before and faster than we think possible. We will work quickly yet attentively, with quick turn-arounds, to keep the process moving.

By framing the work with these principles, and returning to them with each and every activity, the principles manifest themselves in all corners of the state. The principles RIDE created reflected what RIDE was encouraging among its schools and districts in their movement to personalized learning.

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In turning over authority and control for planning to 26 design ambassadors, and playing a *supporting* role to that team, RIDE modeled risk-taking and the shift in ownership inherent in new classrooms and models of learning where teachers frame environments and experiences and students are placed in the driver's seat. RIDE's process engaged nearly 15,000 Rhode Islanders, produced five plan prototypes which they published as they moved through the process — allowing imperfections to show — and more importantly, garnering greater trust, engagement and feedback across the state while getting the plan "right."

By 2015 RIDE had released a five year plan that articulated statewide technology infused "personalized learning" (the state's preferred term) and "student-centered resource investment" among its six core priorities. The details of the planning process itself were packaged and made available for free to anyone who desired to use them, as part of RIDE's agreement with nonprofit The Learning Accelerator who supported RIDE as a thought partner and funder. The materials are still freely available[12] today.

Building Capacity

The **Highlander Institute**, a first-class RI-based nonprofit, has played a critical role in advancing the state's efforts to redesign learning. Highlander "cultivates and disseminates innovative education solutions that improve educator and system capacity to provide personalized experiences for every learner" and specializes in "personalized learning models that are focused on creating equity through education." One of Highlander's seminal programs, Fuse RI[13], accelerated the statewide uptake of innovation.

With support from Learning Accelerator, Fuse RI launched in 2014 to identify and engage educators in a two-year statewide educator fellowship where teachers were trained to understand the power[14] of personalized learning and deeply supported as they provided technical support to schools and districts. *Fuse RI smartly positioned teachers to play a key role in the transformation of their own work.*

The **Learning Accelerator** and Highlander understood that personalized learning meant *transforming* classroom teaching and learning and that requires transforming approaches to *training and developing educators.* States have a great opportunity to play an active role in making this happen. Teachers need to be engaged[15] as deep learners in their own profession, pushing beyond one-size-fits-all, stand-and-deliver training and professional development. Blended approaches are instrumental to this in many of the same ways as for students, by using technology to focus on mastery of skills with personalized supports and engagement in authentic tasks, while also allowing for choice and collaboration.

To create excitement, the "teachers-teach-teachers" program[16] would nurture innovation by having educators mentor those outside their own school districts and serve in leadership roles on administrative teams to help principals and superintendents plan how to use new models of teaching and learning. Highlander recruited and trained networks of teachers to work directly with districts for the sharing, implementing, evaluating, and scaling technology usage and personalized learning across the state. In order to support these fellows as well as build out resources other states could use to launch similar ventures, Highlander developed district assessments to help fellows identify need areas and action plans and created an open content library of PD and training resources for fellows and districts. Fellows became experts in diagnosing district strengths and needs in regard to financial, technological and professional development.

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At the time Fuse RI was developed, this caliber of professional development was largely nonexistent and the market for personalized learning was immature. Learning Accelerator and Highlander aimed to create a high quality, open-source approach to mobilizing teachers to catalyze change in Rhode Island, which would in turn form a scalable approach that could be replicated in other states.

Fuse RI tackled many issues of its day:

- it shun a one-size-fits-all delivery format, made things free and accessible;
- was built to engage with districts at various stages of implementation, and,
- connected districts with high quality resources — and to each other.

After running five cohorts of the program, Highlander announced[17] in July that it would sunset the Fellowship in its current form. Starting in August, they will begin meeting with various stakeholders to talk about the day's most pressing challenges as they seek to redesign Fuse RI for the future. Fuse 1.0 had trained 105 Fellows and partnered with 39 of the 66 LEAs in the state — every district that wanted its free service received world-class support.

Perhaps most impressive is that the Fuse network became "its own infrastructure for moving ideas, research and practices around the state; a system of roads and bridges allowing ideas to travel from school to school, classroom to classroom and most importantly, teacher to teacher." Fuse RI remains one of Rhode Island's most extraordinary assets.

Creating an Office of Innovation

Education innovation initiatives will morph over time, and the organizations birthing and/or leading them will also pass through a life-cycle in the course of their existence. At different stages[18] in a state's development, new roles and responsibilities, different staffing and budgeting requirements as well as necessary autonomies and canvasses are needed, causing the way the state organizes for innovation to adapt over time. In 2016, with the election of a new Governor, Gina Raimondo, the time had come to formally organize a structure to meet new and future innovation challenges: thus the Rhode Island Office of Innovation (RIOO) was born. Gist, who departed as Raimondo arrived, had laid the groundwork for such an office through her efforts to galvanize interest in innovation, the state's strategic plan for education, her support of enablers like wireless infrastructure, broadband access and devices and with/through her partnerships with Highlander and many more.

When Raimondo took office she noted "Rhode Island was hit harder than most states by the decline in American manufacturing. As we lost thousands of jobs, we didn't do enough to position our state for growth in fast-growing, advanced industries; and put off decisions that would make Rhode Island competitive in the 21st century." As part of Raimondo's larger plans, the RIOO would inspire and accelerate innovations in areas such as state government and infrastructure, with education a key focus owing to its importance to the economy. RIOO was founded with a broad mandate, however, so that it would be an office whose work could cut across government silos. For instance, new learning models require infrastructure and connectivity. RIOO could do things like get fiber laid while the state was doing new road work. At its inception, RIOO was also positioned to serve as an internal consultant to other government offices and state partnerships.

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Raimondo was motivated to remove obstacles to innovation that would support and better position the Rhode Island education system, and the state, for success. The Governor was also motivated by a market opportunity[19] with edtech that was expected to reach $93.76 billion in 2020 up from $43.27 billion in 2015 that stood to benefit Rhode Island's economy. **EduvateRI**, which partners RIOO with Commerce RI, Highlander and RIDE, would become the state's edtech innovation cluster[20]. Highlander and EduvateRI would provide edtech companies with access to schools and engagement with educators and administrators in a way that few other clusters could beat.

Designed to bring a diverse set of stakeholders together to network, surface, and solve persistent problems in education, EduvateRI is a testbed shared with edtech companies. Highlander is the executive agent[21] for EduvateRI while RIOO manages day-to-day operations, bridging state supports and local efforts. RIOO, which does not function as an education regulatory body, was well positioned to host this work. Raimondo's clear support for education innovation, as indicated in part by her appointment of the former Director of the Office of Educational Technology for the U.S. Department of Education as the State's Chief Innovation Officer, Richard Culatta, provided a stellar, one-of-a-kind asset that could jumpstart its edtech cluster efforts.

A report[22] from neighboring Massachusetts' edtech cluster had estimated 25,000 people were employed in edtech in their state, home to 430 active edtech companies. Highlander had an EdTechRI program that had already engaged 90 edtech companies from across the country, and Rhode Island was a leader nationally in the growing sophistication of its blended learning.

A feasibility study supported by an Industry Cluster Grant from Commerce RI outlined the economic benefits expected from a cluster developed in RIOO as the edtech ecosystem matures:

- Increase in active edtech startup companies operating from a Rhode Island base.
- Increase in companies visiting and possibly establishing a basecamp for their edtech pursuits.

- Increase in research and development partnership opportunities with the state's colleges and universities. These partnerships often translate into new employment opportunities at the host institutions.
- Opportunities for Rhode Island faculty and administrative innovators to launch and/or advise startup companies. This will benefit the overall education innovation focus of the state by creating a more welcoming climate for tackling educational challenges.
- As Rhode Island's educational system continues to adopt a focus on innovation it will support enhanced student outcomes and ROI. The direct benefit will be a more prepared workforce which can impact all other economic clusters in the state. Indirectly, this action will send a strong signal of the seriousness of the state in supporting new economy opportunities.

Seeking as much flexibility and runway for the office as possible, Raimondo staffed RIOO, and by extension, the cluster, with the actual hiring done by the Rhode Island College (RIC) Foundation — the private fundraising organization of the state-run college. While good-government groups and critics questioned[23] the arrangement as a way to avoid traditional oversight, others saw it as a savvy move to make working with RIOO least cumbersome and most attractive to potential

Seeking to model the change they want to see in schools, RIOO uses non-traditional strategies to advance goals, engages local implementation partners at every stage of the process, and it assesses and iterates on projects every six months bringing urgency to problem solving. RIOO was designed to be able to introduce new innovations within the system more quickly and efficiently—less constrained in its ability to "break rules" and better able to adapt to change more fluidly.

partners and funders. Such an organization could avoid spending rules that can impede innovation, salary caps that may deter top talent and lengthy procurement processes that chase off talented partners.

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Specifically, RIOO has leveraged public funding with philanthropic and corporate dollars and attracted best-in-class expert organizations providing tools and resources to schools to help develop and advance innovative learning models. It has served as a clear and visible champion for education innovation and co-led the charge to catalogue the state's work in personalized and blended learning (launching a new Statewide Personalized Learning Initiative). In partnership with RIDE, Highlander and other organizations, the office crafted a white paper, creating shared definitions and an understanding of what personalized learning means (and does not mean) in Rhode Island.

In a few short years, RIOO has made great strides related to personalized learning, open textbooks, teacher preparation, new "lighthouse" schools and more. Despite a great start to the edtech cluster (EduvateRI), however, challenges to its progress have included costs and intensive management requirements. In the future, the cluster may benefit from more support from Rhode Island commerce.

Nevertheless, the work of personalized learning in Rhode Island continues on all fronts. With a rich history of pioneering innovation and a multitude of collaborating partners, only time will tell how the next wave of excellence will take hold in this leading-edge state.

At-a-Glance

GOAL

The goal of the Rhode Island education system as defined in the state's strategic plan is to prepare Rhode Island graduates: ***a graduate is one who is well prepared for postsecondary education, work, and life. He or she can think critically and collaboratively and can act as a creative, self-motivated, culturally competent learner and citizen.***

Understanding this goal is key to understanding the state's evolving education ecosystem and its functions. The state does not imagine the solution to preparing such graduates as hinging on better test scores; it is pursuing means to allow learners different ways to demonstrate their mastery of learning across contexts calling for 21st century skills and self-direction in light of the future of work. As such, traditional models of schooling, and compliance-based leadership do not suit its goal.

FORM

RIOO is a governmental body that is not part of the SEA and is not a regulatory body. RIOO's Director reports to the Senior Chief of Staff of the Office of the Governor. RIOO bridges state supports and local efforts and is a main point of contact for collaboration in statewide education innovation efforts. It is unique in that it advances new models of learning with an entrepreneurial approach to their development and funding.

ROLES AND/OR RESPONSIBILITIES

RIOO plays many roles, but the following are considered most critical.

Acting as a neutral convener

RIOO has autonomy and a nimbleness that comes from being a non-regulatory agency — and given its connection to the Governor's Office it comes with clout and a bully pulpit too. It has the ability to bring people together for experiences and important conversations as a trusted neutral convener[24] who creates safe spaces for making mistakes, engaging in trial and error, sharing doubts and challenges, resolving disagreements and building new possibilities together.

Identifying the root causes of problems

RIOO takes a leading role in working through the obstacles that may prevent partnership teams from reaching innovative solutions that solve underlying problems. Ignoring influential factors when trying to develop a solution can set the partnership up for a potentially negative result, or exacerbate an already problematic situation. Their related role as a neutral convener supports this task.

Playing a hands-on role as a short-term collaborator.

RIOO is very hands-on in helping plan for and launch research and development (experimental pilots), but it is *not* a long-term partner. RIOO always works with local partners that are positioned to carry the work forward in a sustainable way. RIOO ensures the innovation can survive the handoff[25] from the innovation team (of which RIOO is a part) to an execution team. The future owner of the work is embedded in the project from the start.

TALENT/STAFFING

RIOO is formally staffed by four full time individuals including the Office Director and five part-time fellows and consultants. The Office is lean given its charge.

RIOO benefits from a relationship to Brown University and the Rhode Island School of Design from which it attracts many fellows with growing expertise and passion in areas like human centered design. RIOO views local colleges and universities as a great source of talent.

However, RIOO's formal staffing is only part of the story. An underlying assumption among the most advanced states is that education transformation will require a range of competencies, resources, and influence that can only be obtained from a broad coalition of actors — working both inside and outside of the state apparatus.

The necessary design, technical, change management and business skills don't usually exist within a single organization, especially within a government body. While attracting the best and brightest, RIOO "borrows" the talent of other organizations like Highlander which has strong school design, networking and innovation prowess. There is understanding that the state cannot rely on *traditional* organizational arrangements to implement *new innovative* learning models.

RIOO submits that expertise in human centered design and lean startup rank as important skills in an office like theirs, and the ability to craft and communicate a bold vision, yet be completely egoless, is critical. The work must be about the people doing it on the ground, and they need to be promoted. This garners better solutions and also more sustainable innovative learning models.

$ FUNDING

In states in general, iNACOL (now called Aurora Institute) notes, innovation funding[26] is important for capacity-building activities such as professional development, design and technical assistance, professional learning communities or networks, research and statewide information dissemination. While states can and do begin planning and working to transform K-12 education without a formal funding strategy, resources are important. RI launched their new era in education innovation with less than 500k USD and a free conference — but more complex initiatives require more sustainable funding.

Originally, RIOO was to raise external funds for its mission and act as an internal consultant to other government offices, receiving funds in exchange for its services. Currently, however, RIOO receives some direct project funding, monies from the Governor's Discretionary fund, some funds from the Department of Administration and external grant funds to pay for its full time salaried positions, consultants, office space and more. Braiding together these different and impermanent resources is the epitome of being entrepreneurial or thinking outside of the box. If RIOO fails to provide value to the state, it essentially would "go out of business." While this approach to resourcing RIOO's mission works fine for now, it concedes that if it wants to grow or remain in action long term, the way the office is funded would have to change.

Additionally, the fiscal agent for RIOO is the Foundation of the Rhode Island college, but RIOO isn't sure this will always be the case. While RIOO enjoys more flexibility with less oversight than its government office peers, it concedes that the arrangement only works insofar as it is comprised of ethical people. The barriers to attracting and receiving external funding are few when using a private foundation — which can be good or bad.

CULTURE OF INNOVATION

RIOO's culture of innovation relies on its *Three Tenants of the Rhode Island Office of Innovation:*

Local implementation partners

For any new effort to be sustainable, it has to have support and leadership from its users. Local partners in our projects ensure sustainability, local buy-in, and strong connection back to the needs of the user, always.

Non-traditional approaches

Paraphrasing Einstein: we can't do the same thing over-and-over and expect better results. To best meet the needs of RI residents, we employ new approaches to solve entrenched problems, from public-private partnerships to design challenges, to hack-a-thons.

MVP within six months

When piloting new solutions, time is the enemy, hurting momentum and morale. When scoping projects, we make sure to rapid prototype and create Minimum Viable Products in order to show the value of the work immediately, not in five years.

EVALUATION

In terms of evaluating its work, RIOO suggests it doesn't have the perfect answer. RIOO does articulate outcomes for each project, and while working with a sense of urgency (progress must be shown every six months) they pivot as needed. RIOO alters strategy when new information conflicts with or expands their beliefs so that a pivot[27], or a strategic reorientation, is needed. With innovation, there is awareness that their strategies include untested beliefs that could prove to be inaccurate and thus not all possible outcomes are knowable from the start.

At the same time, however, RIOO submits that working on better data systems and structures is a goal. RIOO and others are trying to create a data strategy working group across Rhode Island government offices.

LINKS FOR EXPLORATION

- **Convening Rhode Island around digital learning** A close look at the initial Innovation Powered by Technology conference.
- **Developing Rhode Island's PK-12 education strategic planning process** Open-source materials provided by RIDE as part of their agreement with Learning Accelerator to help other states with strategic planning. Anyone can use these materials and make them their own.
- **2020 Vision for Education** Rhode Island's strategic plan for PK-12 and adult education, 2015-2020
- **Fuse RI**
- **Fuse RI Frameworks**
- **Fuse RI Tools and District Readiness Survey**
- **Fuse RI Curriculum Board/Resource Playlists**

Case Study: Ohio

Learning Unbound

Ohio's leap into blended learning began in 2011 with a convening focused on ways that digital learning could improve student performance and lower education costs in the state. Led by the well-respected, Ohio-based, national nonprofit **KnowledgeWorks**, the *Learning Unbound Summit* gathered 100 key state-level policy makers and influencers together in the state's capital to think about making the shift from paper to electronic[28] to boost student achievement and school effectiveness. The Summit brought in half a dozen national experts and luminaries to share what they were learning about tiny pockets of radical school innovation dotting the U.S. KnowledgeWorks, who was on the forefront of creating new school models in the previous decade, saw the growing potential of digital and was influenced to bring the movement to Ohio given multiple factors:

1. Emergent research

Online learning's emerging potential to transform education by delivering more personalized learning approaches to all students was being captured and shared by researchers. The groundbreaking 2011 report *The Rise of K–12 Blended Learning*[29] by Horn and Staker of the Innosight Institute (now **the Christensen Institute**) featured a small collective of models using novel applications of technology, time and staff. Horn and Staker noted that while online learning was originally a distance-learning phenomenon, new growth was occurring in blended-learning* environments, in which students learn online in an adult-supervised environment at least part of the time. Online learning may have started by serving students in small, rural and urban schools that were unable to offer courses in certain subjects or by serving students who needed a way to conveniently recover credits to graduate, but by 2011 innovators were introducing blended learning into the mainstream for all students. Horn and Staker developed a taxonomy of blended learning models that gave everyone a common language and vision for what was taking root.

* "Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace." – *The Rise of Blended Learning*[30]

2. Tight budgets

Horn and Staker noted "bleak budgets coupled with looming teacher shortages amidst an increasing demand for results are accelerating the growth of online learning into blended environments." In this moment of opportunity, KnowledgeWorks was completing its comprehensive review of public education spending in Ohio, looking for ways both to accelerate student achievement at a time when the public education system had fewer dollars to spend because of the lingering economic crisis. KnowledgeWorks would promote the expansion of the use of digital/blended learning as a way to help the state's public education system do more with less. Without knowing much about blended learning's future, it hypothesized learning could become more engaging, more personal and more productive — if not less expensive (in the end, it would *not* prove less expensive).

3. Identification of smart policies

National nonprofit the Foundation for Excellence in Education released its **Digital Learning Now!** report as part of the coming out of its Digital Learning Council chaired by former Governors Bob Wise, a democrat, and Jeb Bush, a republican. The bipartisan-backed report offered 10 recommendations for high-quality digital learning and soon grew to evaluate each state's policies and readiness for the new digital revolution. Written specifically for governors and state-level policy makers, the report made it clear and easy for interested parties like KnowledgeWorks to make the case for how to prepare for digital learning.

In sum, a number of factors made the timing right for Ohio to make the leap into digital and blended learning—which it did. The Summit was important as a testing ground to see if those making and influencing policy could be interested in the new digital revolution, and if so, to include them in the making of the revolution from day one.

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Insisting on stakeholder buy-in and being willing to work for it meant looking at digital/blended learning's potential through a practical lens, where the hopes and aspirations of new models could only be explored through the very-real lens of the then-restrictive and painful Ohio budget.

The Ohio Digital Learning Campaign (ODLC)

The result of the Summit was the birth of the *Ohio Digital Learning Campaign* (ODLC) led by KnowledgeWorks and broadly owned by stakeholders of all types across the state. The goal of the campaign was three-fold and best summed up as a need for "policy, proof points and PR"[31] (public relations).

Policy: Clear away obstacles and create state policy to set the table for the growth of new models of learning.

Proof Points: Attain state funding to create new models of digital/blended learning as proof they would make learning more engaging, personal and more productive.

PR: Engage myriad nonprofit, private and governmental leadership in creating interest and enthusiasm for the potential of digital and blended learning.

The campaign found a strong supporter and productive collaboration with newly elected Governor John Kasich's Director of 21st Century Education, Robert Sommers (Sommers was housed in the Governor's Office and not associated with the SEA).

"We want Ohio to be the best[32] state in America for using digital technology in the pursuit of educational excellence and efficiency," Sommers said. ***"We envision a barrier-free environment for schools to innovate and a great place for leading-edge content and system developers to operate on behalf of students. We also envision Ohio as a supportive place for great teachers to create new learning options for their students, whether those students are in a classroom with the teacher or in a virtual classroom."***

_Robert Sommers

Through this and dozens of KnowledgeWorks-led collaborations, conversations, public and private events, as well as advocacy through lobbying, **three key pieces of K-12 legislation emerged** laying the groundwork for expansive education innovation.

HOUSE BILL 153

House Bill 153 passed in 2011, expanding the use of digital learning for primary and secondary school (K-12) students. Governor Kasich signed the bill whose provisions included:

- **Ensuring** Ohio students have access to online courses at any point in their educational careers.
- **Providing** students with the ability to fulfill state curriculum requirements through online courses to supplement courses taken in a traditional classroom setting, at any time during the calendar year, without a limit on the number of credits received online.
- **Allowing** students to customize their education through individual online courses — allowing them to access course-level options in addition to the already established full-time e-schools.

These changes were important as historically, policies arbitrarily limited or controlled access to digital/blended learning.

H.B. 153 also established the *Ohio Digital Learning Task Force* — comprised of representatives from districts, charter schools, the Ohio Department of Education (ODE), higher education, the Governor's Office and the state legislature — which was charged with developing a strategy for the expansion of digital learning that enables students to customize their education, produces cost savings, and meets the needs of Ohio's economy. This legislation was significant in that the government would now share the mandate for growing digital/blended learning with KnowledgeWorks and the government could further the movement's legitimacy with its bully-pulpit and authority.

SENATE BILL 316

In 2012, the Ohio passed Senate Bill 316 which implemented the recommendations of Ohio's Digital Learning Task Force. While the task force's deliberations were cut short by the Governor's new incoming State Superintendent of Education, Dick Ross, and the Governor's Director of 21st Century Education Sommers left office, the law permitted school districts to convert existing schools to a blended learning model and required the state board to ensure districts included standards for the operation of blended learning including revised teacher ratios, the provision of digital learning tools, student ability to progress upon demonstration of mastery, exemption from minimum school day/year requirements, and adequate provisions for staff.

BIENNIAL BUDGET: STRAIGHT A INNOVATION FUND

In 2013, with the introduction of the biennial budget for the 2014-2015 fiscal year, Ohio's inaugural $250 million dollar Straight A Innovation Fund was enacted to statewide and national acclaim. The Fund, managed by ODE, would incentivize district risk-taking and pay for start-up costs associated with building new models of learning and more.

The Ohio Digital Learning Campaign met its goals. It resulted in enabling policy, proof point building potential (with massive dedicated resources) and positive PR. The campaign helped create institutional commitment from the governor's office to the statehouse to the schoolhouse to give digital and blended learning every possible opportunity to succeed.

The Ohio Straight A Fund (OSAF)

The Ohio Straight A Fund program aimed to reward creative ideas and programs that significantly boosted student achievement, dramatically reduced spending or targeted an impressive share of resources into the classroom (its core parameters). OSAF allowed for ideas to come from educators themselves — including those leveraging digital and blended learning — and did not dictate or limit districts as to what they could do if in keeping with the OSAF parameters.

According to ODE[33], OSAF grants had to be used for projects that aimed to achieve significant advancement in one or more of the following goals:

1. Student achievement;

2. Spending reduction in the five-year financial forecast; or

3. Utilization of a greater share of resources in the classroom.

The grants[34] were open to all types of school districts, individual school buildings, educational service centers, education consortia, institutions of higher education and private entities partnering with one or more of the entities mentioned above. Individual applicants could apply for grants up to $1 million dollars and consortiums could apply for grants up to $15 million dollars.

Developing and implementing a project that would advance those goals required that each application for the competitive funds included the following components:

A description of the project, including a description of how the project will have substantial value and lasting impact;

An explanation of how the project will be self-sustaining. If the project will result in increased ongoing spending, the applicant must show how the spending will be offset by verifiable, credible, permanent spending reductions; and

A description of quantifiable results of the project that can be benchmarked.

Given the nod to local control, many districts eagerly applied, and many used the fund to begin their transition to digital or blended learning. For some this meant purchasing ipads or laptops, while others created digital content and some hired technical assistance support.

Intangibly, OSAF helped to create an even wider-spread context and excitement for innovation than ever before. Ohio stands out with OSAF for honoring the notion that every classroom, every school, and every district is a distinct context with specific needs and a unique culture. Planning and implementing initiatives at the local level was widely viewed as the best way to support innovations at the time, particularly as digital and blended learning models were not yet proven.

The importance of OSAF in Ohio's journey of innovation cannot be understated. Hundreds of districts and schools competed and won monetary awards. As noted by Chuong and Mead at **Bellwether Education Partners** in A Policy Playbook for Personalized Learning[35], education is an inherently conservative enterprise. Making changes is seen as riskier than maintaining the status quo even when the status quo isn't serving students. SEAs can play a critical role in overcoming this inertia, however, by providing attractive incentives to try something new. In addition, the costs of designing and implementing new innovative learning models can pose a barrier to their launch and/or to their quality. Establishing new learning models requires investment in technology infrastructure, devices, software, professional development and more. Despite Ohio's movement being born with an eye on the fiscal crisis, the state knew that new models would be resource-intensive on the front end.

Making changes is seen as riskier than maintaining the status quo even when the status quo isn't serving students.

As is often the case with expenditures in innovation, over time questions started to arise about OSAF's impact. The expenditure was massive, and the OSAF had been conceived with a minimum of reporting required by districts. The state rightly wasn't asking to see changes in test scores, for instance, in the grant interim.

Others, however, lamented the lack of networking and sharing of *work in progress* via the state by districts receiving funds.

Some thought OSAF should have evolved from year to year, for example, noting the Fund's emphasis should have changed to be squarely on innovation and its ability to increase student achievement without the focus on financial sustainability (so as to get to more breakthrough ideas), or, perhaps evolved to provide grants to new applicants to scale innovations incubated in earlier rounds and found by innovating districts to have potential.

Regardless, after a second budget round of $30 million dollars that would serve winning grantees in fiscal years 2016-2017, OSAF would be eliminated from the state budget. In June 2017 the Senate eliminated[36] OSAF as a matter of prioritization, as the funds could be 'utilized better elsewhere.'

Instituting an Office of Innovation (OI)

In early 2016, ODE created the Office of Innovation (OI) located within the SEA itself and seeded it with a mix of projects ranging from STEM schools to joining a national innovation network to a new Competency Based Education* Pilot[37] (CBE Pilot) emanating from legislation. When its first Director arrived in the spring, he joined three existing staff moved into OI before him, in an office whose life span would last about three years.

OI's projects were not selected as a group or by any specific criteria, but rather were deemed as "innovative" and simply didn't fit well into other existing offices. OI was founded as a "catch-all," — namely a place to gather special projects important to the State Superintendent and Governor's Office and needing a wider runway/more autonomy than the overall SEA structure might provide.

From the start, OI operated on the fringes outside of other ODE departments and initiatives. It's worth noting that a major technology-reliant initiative called **Future Ready Schools** was located outside of OI, perhaps owing to the fact that it was not a "Governor's" or legislated initiative. Over time the office was shaped by its Director as a place to

* Inclusive of mastery-based education.

incubate innovation; to experiment, to network and to learn. His vision was that OI would learn and grow from projects, and that the scope of pilots, such as the CBE Pilot, would grow beyond OI.

OI really got its legs under the leadership of an *Interim* ODE State Superintendent, who was appointed after Ross's exit. The OI would spend another part of its existence under a different State Superintendent, Paolo DeMaria (current). Innovation projects came under new pressure to fit the goals of the agency which were being revamped in the form of a new state strategic plan for education.

Consider OI's CBE Pilot. The Pilot[38] was designed to:

- Promote innovative learning that has meaning to students, cuts across multiple curriculum areas, and extends outside of the classroom;
- Advance students to higher-level work once they demonstrate mastery of competencies, rather than advancing based upon seat time in the classroom;
- Give supports to struggling students before they advance, and prevent further failure down the road;
- Keep all students on pace to graduate and ensure those below level make rapid progress with differentiated supports;
- Graduate students with deeper learning opportunities as well as college and career ready skills; and
- Inform future development of statewide competency education policies and programs.

Over time the office was shaped by its Director as a place to incubate innovation; to experiment, to network and to learn.

The CBE Pilot appropriated $2.5 million for 10 schools and provided that funding would be awarded in an amount up to $200,000 per academic year for selected applicants. OI's role was to administer the project and relationships inherent to the work.

The CBE Pilot did what it set out to do, as did OI's other catch-all projects—it pursued learning with respect to local control. While many would have preferred a commonly framed experiment with CBE, the districts were only beholden to learn as much as they could during the process of achieving their individual goals.

OI noted that there weren't agreed upon definitions or mutual understanding or framing for its work. Everything was open to interpretation at the local level, by design. If OI didn't want to be prescriptive, it would have to account for variability — simply evaluate without restricting the kinds of innovation districts wanted to engage in. As ODE became more engrossed in strategic planning under the new State Superintendent, OI knew that it needed more time to make sense of things and lay the groundwork to perhaps later advocate for a particular approach to CBE. At the conclusion of the CBE Pilot, they had just started to learn the kinds of questions to ask of the work. OI would give way to a new structure in 2019.

The CBE Pilot did what it set out to do, as did OI's other catch-all projects—it pursued learning with respect to local control.

It's important to note that OI did not have a budget of its own, but rather salaries alone. Among the original staff of four, one left to work for the lieutenant governor, and one retired. As ODE's strategic planning was coming in to play, OI was not permitted to re-fill positions in anticipation of a wholesale ODE restructuring. All the funds associated with OI were associated with pilots like the CBE Pilot, so when pilots ended, so did OI's funding.

OI's lessons learned include that R & D is hard to do in a traditional state agency; it needs a permissive environment. As for carrying forward innovations into implementation via the SEA, innovations must have leadership's understanding and buy-in. For example, OI couldn't press for assessment literacy despite what it was learning about its importance to personalized and competency based learning in its work. Without leadership's support, the innovation had nowhere to go.

Collapse and Rebirth: The Office of Approaches to Teaching and Professional Learning (OATPL)

In conjunction with a new five-year strategic plan, Each Child, Our Future[39], ODE began restructuring[40] its operations. ODE is now structured into four centers: The Center for Student Supports, Center for Continuous Improvement, Center for Performance and Impact and the Center for Teaching, Leading and Learning. The Office of Approaches to Teaching and Professional Learning (OATPL) resides within the latter and includes instructional strategies and supports, educator effectiveness, educator licensure, professional conduct, career technical education, career connections, curriculum and literacy. OATPL was made from parts of a former literacy and curriculum unit, OI and the Office of Integrated Technology.

The deciding factor influencing OATPL's creation and all ODE restructuring was to organize to implement the new plan. Each Child, Our Future offers a vision[41] for what Ohio's high school graduates should look like, an "overarching goal" to help students reach career success, and signals some key shifts in thinking such as treating choices to get job training and attend college as equally worthy choices. Reading

OI's lessons learned include that R & D is hard to do in a traditional state agency; it needs a permissive environment. As for carrying forward innovations into implementation via the SEA, innovations must have leadership's understanding and buy-in.

and math along with other classes like social studies and science are central to the plan as is reasoning (problem-solving, design thinking, creativity, information analytics) and social-emotional growth (mindset, perseverance, self-awareness, team work, collaboration). The plan seeks to meet the needs of the whole child in preparing students for success in the classroom and navigating the changing future of work.

This priority was supported by new Ohio Governor Mike DeWine in signing his first state budget bill July 17 (House Bill 166) which allocated a $675 million pot of funds for all public schools over the next two fiscal years to be awarded on a per-pupil basis according to the percentage of low-income children residing in a district, to improve student wellness by addressing non-academic needs[42].

When looking under the hood, the move to OATPL is also smartly attributed, in part, to thinking that believes any learning model needs to address issues such as human capital, technology, and student progress together, and that SEA staff will need to work more effectively across offices. In the end, OI was a silo, and it was not positioned to move its department peers. The opportunities for collaboration are now numerous. In this way, the new direction seems promising.

A major challenge reported at this moment in the change process, however, is striking a balance between identifying and supporting new innovative practices and embracing OATPL's more conventional responsibility to promote evidence based practices on the part of the SEA. This requires an alignment across the whole of the agency that hasn't existed in the past.

OATLP is at the very beginning of a process of making sense of this new and valuable opportunity.

A FINAL NOTE ON COST-SAVINGS AND PRODUCTIVITY

One of the earliest hopes[43] for blended learning was that it would help schools and districts save money. Alas, there is no recipe for producing savings. In fact, cost-cutting and more likely, adding expenses, is linked to unique factors in individual schools and districts.

Ohio's movement to digital and blended learning was born at a time when the public education system had fewer dollars to spend because of the lingering economic crisis. In this infancy stage, many policy makers were intrigued by the notion of using technology to produce cost-savings. Very early on within the Ohio Digital Learning Campaign, it became clear that cost-savings could easily be associated with replacing teachers with technology — which was not only a bad idea but had stunted movements elsewhere. The Campaign became very vocal in asserting that technology would never replace a great teacher, but could support teachers in doing what was most important: reaching individual students. The Campaign's angle was promoting productivity.

Districts moving to new models of learning have to absorb new costs associated with infrastructure, devices, professional-development and more. While some things like online textbooks are more clearly money-savers and can be valuable, they largely turn print into digital. A caution here is that a worksheet on paper is still just a worksheet if online. Free open education resources (OER) in the form of curricula, assessments, apps, lessons, etc. hold infinite possibilities when recombinated in new blended instructional models, but even OER is free like a puppy is free. It takes time, an expense, to put OER in to action. The fact is, Ohio learned that cost isn't what one should look at in relation to OER, or anything else, but rather quality. Instead of aiming to save money, Ohio districts found success when they aimed to bring more and different high quality, customizable resources to the table for kids.

Further, while technology in the hands of effective teachers in new models allows for more personalized teacher and student interaction and time spent working with kids on more rich and meaningful (for instance) project-based learning, it doesn't happen overnight. As the Christensen Institute notes, blended models are thought to increase productivity by freeing up teachers' time[44] to do more important work with students — but the first year or two requires teachers to spend time learning how to use new technologies, implement new classroom procedures, and grapple with technology that may not yet be good enough at augmenting teachers' capabilities. The good news is the amount of time invested up front diminishes over time.

Ohio learned that the potential for educational benefit to students was the key concern in the election of any technology.

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At-a-Glance

GOAL

The goal of the education system is expressed in Ohio's strategic plan, *Each Child, Our Future*: The plan states that Ohio will increase annually the percentage of its high school graduates who, one year after graduation, are:

- Enrolled and succeeding in a post-high school learning experience, including an adult career-technical education program, an apprenticeship and/or a two-year or four-year college program;
- Serving in a military branch;
- Earning a living wage; or
- Engaged in a meaningful, self-sustaining vocation.

FORM

Until this year, ODE had an Office of Innovation (OI) that operated on the fringes of other departments in the SEA. By 2019 OI was collapsed with an office focused on literacy and another on technology to create an office called the Office of Approaches to Teaching and Professional Learning (OATPL). OATPL, part of ODE which is an education regulatory agency, is in the early stages of aligning its work to the state's new strategic plan for education.

ROLES AND/OR RESPONSIBILITIES

OI was shaped over time by its Director as a place to incubate innovation; to experiment, to network and to learn. His vision was that OI would learn and grow from projects, and that the scope of pilots, such as the CBE Pilot, would grow beyond OI.

Several of (the new) OATPL's responsibilities[45], are enumerated below:

- Ensure implementation of Ohio's Strategic Plan for Education
- Oversee, develop, support, and implement internal and external professional development regarding instructional strategies and approaches to teaching, which includes but is not limited to: STEM, competency-based, project-based, blended learning, formative assessment and more
- Collaborate with other offices to provide or oversee aligned professional development and resources that support educators
- Coordinate with other ODE offices and external organizations on topics of blended learning, Innovative Learning Network (ILN), STEM/STEAM, competency-based education, personalized learning, etc.

TALENT/STAFFING

OI had four staff that dwindled to two; OATPL has a staff of eight coming from the former office areas of innovation, technology and literacy/curriculum.

New "competencies" are related to the implications from organizational restructuring and include:

- Looking for connections not just to the field but focused internally within ODE
- Being egoless - it's critical in moving to the greater good, and having a bigger impact by combining efforts internally
- Figuring out not just what OATPL wants to do, but really thinking about what's needed

FUNDING

OI did not have a budget of its own; at the time of this report, it is unknown if OATPL will have a budget of its own (or just have salaried positions).

CULTURE OF INNOVATION

OI's culture of innovation essentially resided between its office and its partners in the field. OATPL, as it is new, is still working on establishing its operations.

EVALUATION

OI's work was ostensibly tied to districts themselves given the nature of pilots and voluntary networks. OATPL's success will ultimately be tied to the success of the new strategic plan for education, but just how exactly, is not yet known.

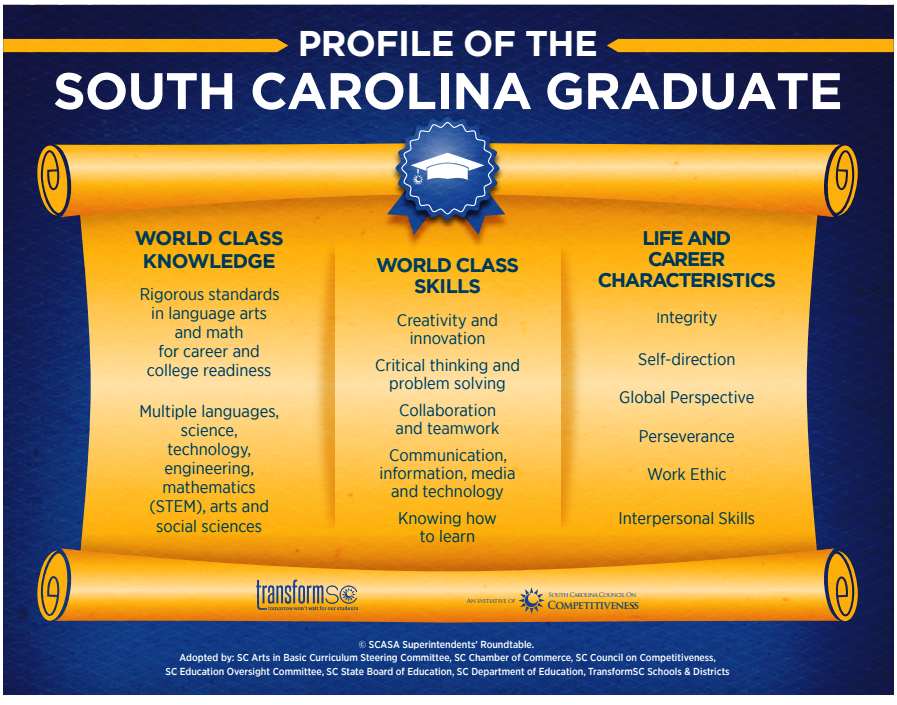
LINKS FOR EXPLORATION

- Straight A Fund Home Page/Archive
- 2015 Straight A Fund Annual Report
- Ohio Competency-Based Education Pilot
- Ohio's Strategic Plan for Education

Case Study: South Carolina

A New Vision: Profile of the South Carolina Graduate

Despite one of the highest poverty rates in America and an overall school system that has suffered in terms of national rankings, South Carolina is determined to work its way to the forefront[46] of twenty-first century business and industry and ensuring that its urban and rural children have equitable access to opportunity. Indeed, South Carolina's journey of innovation is one to watch. Education plays a critical role in this upward climb, and in recent years has rallied the South Carolina Association of School Administrators (SCASA), the South Carolina Council on Competitiveness, the South Carolina General Assembly and more to come together to adopt a new, common, future-facing vision — the Profile of the South Carolina Graduate ("Profile") — for all South Carolina children.

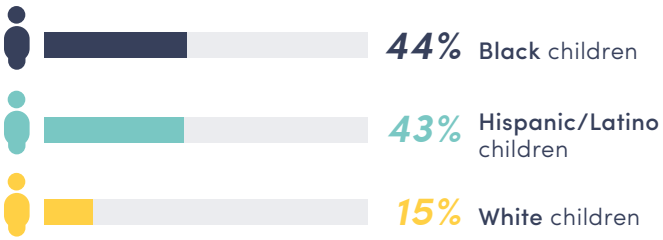


The Profile outlines the world-class knowledge, skills and life and career characteristics necessary for children and the state to be successful in the global marketplace. Its purpose is to help close the gap between the business and education worlds. Over the years, culture, qualifications and expectations in the business sector have changed rapidly while the educational system has been slower to change — until now.

The Profile's roots can be traced to local district superintendents' conversations as far back as 2011. Through the course of regular statewide meetings, superintendents began to discuss the need to develop a new vision for the kind of graduates the state needs.

South Carolina today, as then, is often said to be comprised of two states: one which is middle and upper middle class with well-paying jobs and education that greatly benefits individuals, and the other South Carolina that lives in poverty, some with no running water, no transportation, no ability to buy medicine or too little food for the table. A systemic decline in well-paying, low-skill jobs accompanied by an increase in low-wage service sector employment has left many families unable to meet basic needs. Especially troubling is the percentage[47] of Black children (43%) and Hispanic/Latino children (45%) in poverty — about three times the percent of white children (15%). The rate of children in poverty is more than twice the state average (27%) in some rural counties (such as Allendale County - 56%).

Percentage of Black, Hispanic/Latino, and White kids in poverty for 2014 in South Carolina



Children in poverty

27%
State **average**

56%
Rural county (Allendale)

The problem to be solved: South Carolina was clearly competing for job creation in a global economy where 85% of jobs[48] require education beyond high school and a workforce with 21st century knowledge and skills. The state's system was outdated and couldn't produce the results the students deserved and their future employers needed. Superintendents were dissatisfied with the status quo and set out to create the conditions so that every student could graduate fit for an excellent job or ready for post-secondary training or education. Each leader subsequently had conversations with their local communities about the knowledge, skills and dispositions that would help propel graduates into well-paying, high-skill jobs and a life of opportunity. *These conversations helped build widespread support for innovation as districts would not be able to create higher caliber graduates using old factory-like models of schooling.*

The factory model of education featured kids sitting patiently in rows while the teachers at the front of the room doled out knowledge with students having very little ownership of their learning. For over one hundred years schools had grouped students by age, offered common instruction, and moved kids from grade-to-grade with some kids learning, and others not. The model would not prepare students for a future where they would need to be able to apply knowledge critically, to communicate and create, and learn to self-direct and own their learning. There will be little hand-holding in the future economy with the exponential pace of technology and related change. In some counties, this means overcoming severe, abject poverty, such as in South Carolina's so-called "Corridor of Shame" which is part of the larger "plantation belt" where black children were deliberately denied an education across generations in order to keep them in servitude to whites. Superintendents knew that these students living in poverty with its many impacts would have the largest needs and require a wholly new set of personalized supports.

The state's system was outdated and couldn't produce the results the students deserved and their future employers needed.

Several superintendents, working with the Superintendent's Division of the South Carolina Association of School Administrators (SCASA), presented their ideas before the State Board of Education in November 2011. Thereafter the State Board of Education, having established an interest in innovation itself, created an Innovation Steering Committee comprising public/private sector leaders to develop a plan to catalyze, identify, evaluate and spread effective innovation in South Carolina's K-12 public schools. The cross-sector committee traversing telecommunications, insurance, philanthropy, banking, aviation and more included Gerrita Postlewait, Chair of the State Board of Education, and other notables such as current State Superintendent Molly Spearman, then President of SCASA.

Private sector business leaders[49] knew it needed to work with the education system to get the numbers and kinds of graduates it needed. Overcoming years of disconnection, the two started to work together, building trust and creating a new dynamic. They shared the belief that graduates would need much more than basic knowledge to claim a space in the global marketplace, and business gave its backing to educators to truly innovate the way they approached schooling.

The committee conducted research into what other states were doing to transform their K-12 systems and began examining several successful school models producing results, especially for children of color and poverty, as well as the research analyzing the design components of various models. "TransformSC," a formal coalition of education and business leaders soon came to life under the umbrella of the South Carolina Council on Competitiveness — providing political cover and significant political will to those interested in transforming

The Profile is a model for galvanizing community values and establishing clear, desired outcomes for innovation, so everyone knows what they're "aiming at" as opposed to "innovating for innovation's sake." The 'Why" of innovation is clear.

their schools. Its co-chairs and makeup drew from both conservatives and progressives. TransformSC intentionally embraced a wide range of ideological backgrounds as to meet such an ambitious goal, they knew they would have to bring everybody to the table. Transform SC formalized the Profile in 2012 which represents a clear, strong end-goal that serves to align the efforts of the state (South Carolina's Board of Education voted to formally adopt[50] the Profile of the Graduate in 2015). It is remarkable in that it allows people from across all sectors to speak a common language, around a common goal, towards unifying expectations of its students' future.

The Profile is a model for galvanizing community values and establishing clear, desired outcomes for innovation, so everyone knows what they're "aiming at" as opposed to "innovating for innovation's sake." The 'Why" of innovation is clear. Innovation must be connected to the overall capabilities of the state's students as graduates from South Carolina schools, and to the economic prosperity of its economy. Hence, the Profile is the foundation for the mission of the South Carolina Department of Education (SCDE), which is that all South Carolina students graduate prepared for success in college, careers, and citizenship, and drives all agency activity, from the design of its integrated accountability system, to revision of the state's diploma pathways, to the streamlining of teacher certification processes.

A Framework for Action

When State Superintendent Molly Spearman was elected to her first term in 2014, she had just spent a decade as president of SCASA – the original authors of the Profile. Spearman would place the Profile at the center of the SEA's efforts upon addressing a key question: How could they make the Profile *actionable* — what could SCDE do to ensure the Profile would be more than just a poster?

Significant inquiry had already taken place with TranformSC, and South Carolina had a few notable district innovators that also lent credibility to the notion that personalized learning would serve the state well. They hypothesized that to get past poverty, students needed to be engaged, they needed individualized instruction and support,

The framework which focuses on fostering student ownership of learning, restructuring learning around evidence of competence, developing learner profiles and learning pathways and adopting flexible learning environments, allows each student's educational experience to be tailored to meet his or her unique strengths, needs and interests.

and they needed to connect to their interests in order to keep kids in school and motivated. By 2016, Spearman had tapped a single person in the SEA's Office of School Transformation which was then organized to support low performing schools and school choice to advance what they knew about personalized learning. The individual, with a wealth of school-based experience in the field of technology, began researching and drafting a framework for personalized learning, and taking it to the field for input and iteration. This work resulted in the South Carolina Framework for Personalized Learning[51] ("Framework").

Personalized and Competency-Based Learning* was selected as a key lever of change by SCDE because it focuses on supports for *all* students as they seek to achieve the knowledge, skills, and characteristics identified in the Profile. The framework which focuses on fostering student ownership of learning, restructuring learning around evidence of competence, developing learner profiles and learning pathways and adopting flexible learning environments, allows each student's educational experience to be tailored to meet his or her unique strengths, needs and interests.

South Carolina scaled a single, powerful framework which identifies the key elements of personalized learning. This is important because it creates a common understanding and language around personalized learning. By making it broad, they've allowed for districts to decide how best to implement/approach/bring to life each of the elements of the Framework based on what makes the most sense for them.

* Mastery-based learning.

Creating the Office of Personalized Learning (OPL)

The energy surrounding the Profile and Framework was palpable and the bottom-up interest in personalized learning was growing rapidly. The movement to personalize learning for all students was made manifest in 2017 when the SCDE opened its first-ever Office of Personalized Learning (OPL) as part of the Division of Innovation and Effectiveness. OPL hired its first Director, and just a few months later officially published its framework, capturing the attention of the state and nation.

Earlier efforts in the SEA were less comprehensive and not robust enough to challenge inequitable access to means of school transformation via personalized learning. While the new OPL was created to support Spearman's vision for leveraging personalized learning as a major strategy to realize the Profile, the deciding factor influencing OPL's creation was that the state needed a vehicle for driving significant resources and support for personalized learning to interested schools and districts. Recall the personalized learning work began in an office that was largely concerned with improving only the lowest performing schools. With a new OPL, SCDE could drive support to ALL schools in the state.

There was a good deal of debate about whether, where or how to locate an OPL in SCDE due to fears it could easily become a siloed office despite personalized learning touching everything from curriculum to technology to assessment and more. There was early recognition that OPL would need to be deliberate about building bridges and collaboration throughout the SEA — just like the schools they aimed to transform.

In the beginning, the state's goal was to have a school focused on personalized learning in every district in the state. Partly informed by the Framework, the goal changed. OPL's definition for personalized learning puts the focus on the relationships and pedagogy needed to ensure a truly student centered approach to teaching and learning. SCDE now wants ALL districts engaged in student centered practices, and believes personalized learning is the way to achieve that goal.

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The SCDE is committed to personalized learning in ways other SEAs just aren't; the commitment from the top is real, so they coordinate and work through issues and opportunities across department functions.

Investing in Organizational Capacity to Innovate

In a state that typically ranks between the third and ninth poorest in the U.S. (depending on the survey), SCDE reallocated existing resources to make it happen. In a perennially resource-constrained environment, where and how an organization spends scarce resources demonstrates its commitment to innovation[52]. If you continue to spend money in the same way, nothing will change. The explicit decision to invest in organizational capacity to innovate signals its importance and models the behavior to the field.

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To pay for this work, SCDE identified existing programs in its operating budget that could be aligned with and leveraged to support personalized learning. The department repurposed[53] approximately $1 million in recurring funds from its operating budget to launch OPL.

This is a state that understands it cannot use the same tools, approaches, thinking and funding that have helped sustain such disparities to unleash its greatness.

The reason for this approach is multifaceted. First, the SCDOE did not have a new or existing allocation for personalized learning innovation; second, by closely examining existing funds, full time positions, etc. within the SEA they understood that it was entirely possible to reallocate funds to OPL. Funding the OPL in this manner encouraged the entire agency to see that the work of personalized learning is connected to EVERY office in the agency, and supported a belief that their work would need to be more collaborative across offices. Creation of OPL did not require any special request or legislative mandate and it was fiscally responsible. SCDE modeled what they are asking districts and schools to do: examine existing resources in light of goals and re-prioritize how resources are spent.

The creation of the OPL is all the more impressive when you consider most people's reaction to poor test scores in reading, for instance. Most leaders wouldn't look to innovation as part of the solution, they would simply double down on whatever they were already doing.

Consider the 2018 South Carolina Post and Courier article[54] referencing the "Nation's Report Card" — fourth-grade reading scores were way down. The state's national rankings, which were already low had gotten worse. South Carolina fourth-graders placed 47th in the nation on the reading section of the 2017 National Assessment of Educational Progress[55], down from 39th in 2015 when the test was last given.

This is a state that understands it cannot use the same tools, approaches, thinking and funding that have helped sustain such disparities to unleash its greatness. This is a lesson for all. In this light, the SCDE approach to innovation is fierce.

Structuring a "Get-To" Office

A key assumption undergirding the theory of OPL's structure was that if it could position itself as the "get-to" office (meaning, you get to do this, you get to do that) as opposed to a "have to" office (you have to do this, you have to do that), that even within a regulatory agency, a permissive and enabling environment would pay off in district interest and engagement. OPL was structured to promote districts "opting in" to the work, without ever requiring participation. Districts come to OPL with a growth mindset, and they've been so successful that they've had to expand their offerings. Overall, there is a belief that learning designed to foster personalized, 21st-century competencies cannot take hold through the use of 20th-century, compliance-driven change processes.

OPL's PersonalizeSC Network now has over 100 school teams in 55 districts and charter schools and over 100 coaches in its instructional coaching network (there are only 81 districts total in South Carolina). Its human capital strategy aims to provide districts with high-quality supports for building the effectiveness of educators leveraging personalized learning. Given OPL's limited capacity, it set out to accomplish this aim in ways that are more **scalable, personalized and economical**.

Overall, there is a belief that learning designed to foster personalized, 21st-century competencies cannot take hold through the use of 20th-century, compliance-driven change processes.

SCALABLE

OPL's work immediately began with thinking through a significant challenge: how could they best support districts in doing the work of innovation when they didn't have the capacity to work directly with each teacher? The Framework allows OPL to scale its strategy broadly, but as to building educator capacity, they know that you don't have to do everything yourself. OPL brings ideas, resources and assistance into the state from across the nation.

OPL engaged the field and started asking - where do you need support? From here they built a scalable model for professional learning, making decisions about where to focus. Two exceptional nonprofits — KnowledgeWorks and reDesign — support various aspects of the work.

The South Carolina Personalized Learning Network provides a multi-tiered system of support, including:

Inquiry Labs: Inquiry Labs are an opportunity for educators to see personalized learning practices in the classroom and dive deep into a particular focus area.
Audience: *Any South Carolina educator*

Instructional Coaching Network: Participants will gain the knowledge and skills to coach teachers, principals, and district leadership on implementing personalized learning practices.
Audience: *School and district instructional coaches, leaders, teacher leaders*

Launch Cohort: Participants will learn strategies for launching personalized learning in your school/district and will develop an implementation plan.
Audience: *School and district leadership teams*

Making the Profile of the SC Graduate Actionable Cohort: Participants will be introduced to the Profile of the SC Graduate (PSCG) competencies and learning continua, as well as, explore strategies for implementation in your school/district.
Audience: *Schools/district leadership teams*

PERSONALIZED

OPL knew that not every school or district would need the same thing. They created the tiered system in order to provide 'just right'[56] opportunities to those in the same place on their innovation journey, and give them the chance to learn and grow together. Every district has access to high-quality professional development that meets their unique needs, and by extension, the unique needs of learners in their communities.

The overall approach to the work is blended, combining face to face and online learning — they model what they want to see in classrooms. Teams of educators including administrators, teachers and coach-types are the core unit of focus with all professional development structured around and reflecting the Framework. OPL builds in ample time for thinking about use of the Framework in one's own local context. Even the use of edtech varies, as 1:1 devices are not always an option, so some districts may not start there, and that's okay.

OPL really extends itself to districts in building a relationship and earning trust, who in site visits and conversation, may not even be able to articulate what they need. OLP does this on a district by district basis, just as one would student by student in a classroom.

ECONOMICAL

South Carolina believes access to high-quality professional development is crucial to support personalized learning in the state, and that's why they offer it for free to all districts. Unequivocally, providing professional development for personalized learning is not something most districts could do on their own financially — particularly given the quality of the state offerings. The state, unlike most districts, is in a position to leverage economies of scale, and does so. Additionally, a state task force has made recommendations[57] to improve technology access all-around.

At-a-Glance

GOAL

The goal of the education system is clearly embodied in the Profile of the South Carolina Graduate that is embraced state-wide. The system will produce well-rounded, productive citizens with:

World Class Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

World Class Skills

- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

Life and Career Characteristics

- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills

FORM

OPL is an office located inside the SCDE, a governmental, regulatory body. OPL's Director reports to the Deputy Superintendent of College and Career Readiness, who reports to the State Superintendent. The Office serves as a center for personalized learning innovation, and uses an opt-in, no mandate approach to engaging with districts.

ROLES AND/OR RESPONSIBILITIES

OPL plays many roles, but the following are key to their success[58].

- OPL creates permissive and intensely supported environments where teams of educators can engage in creating new models of learning, forming a vigorous network that can help establish the desired shape of a new state education system.
- OPL creates new capacity to do the work by attracting and permitting transformational actors such as KnowledgeWorks and reDesign to help districts recreate the system.
- OPL prioritizes resource allocation, committing resources to supporting those who have the potential to disrupt outdated education models.

- OPL works with innovator-districts to address policy on a continuous basis, removing obstacles to innovation as new models of learning emerge.
- OPL serves as a model of continuous learning. As OPL provides support in the field, they're intentional and forthright about their own learning as an office and agency.

TALENT/STAFFING

OPL was initially staffed by four individuals (including one Director and one administrative assistant). Due to the number of districts seeking to participate in the personalized learning initiative, the staff quickly doubled to eight employees. The budget including salaries was initially $600K and is now $1.2M.

As OPL has doubled its staff in a short amount of time, half the staff is still brand new. This has brought some of the office's key needs (related to competencies) into focus. OPL says it's important to have staff that understand the role of the state *and* can actually implement personalized learning on the ground. Team players are also essential — none of OPL's work gets done in isolation and you must lean on your teammates. There is too much to know, so be willing to say when you don't know something and find help. Additionally, be humble. Districts ARE the experts, OPL does not exist to tell districts what's happening locally. Finally, the work is very relational, and staff must be authentic. They submit that change is really about people, not technology.

FUNDING

To pay for this work, SCDE identified existing programs in its operating budget that could be aligned with and leveraged to support personalized learning. The department repurposed approximately $1 million in recurring funds from its operating budget to launch OPL.

CULTURE OF INNOVATION

At this juncture, OPL's growing culture of innovation leverages time for learning and thinking about innovation that is built explicitly into the SCDE's schedule. A small but important slice of other SEA offices members' time is occasionally spent with districts making the transition to personalized learning, when for instance, SEA staff may be invited by OPL to join a professional development session. OPL also hosts personalized learning workshops two days per year with SCDE providing an opportunity for all staff to learn, hear the latest updates, and offer a chance to collaborate to advance personalized learning models. Staff trade-off time on their "own work" to do the work of collaboration knowing it is essential to meeting the goals of the Profile. In addition, SCDE administers cross agency collaboration teams that meet monthly. The monthly meetings are not specific to personalized learning, but traverse its many contours.

Across these meetings and day-to-day, OPL leaders are consistently championing innovation with key internal staff and helping create an environment that promotes new approaches. A key example: The process for reporting information on students' chronic absenteeism was made to lessen the burden of data reporting; SCDE systems worked to upload such information automatically. However, schools practicing personalized learning were doing creative things with their schedule, and the system, not built for the unconventional, was reporting high absenteeism in those schools. On the back end, the schools had to correct records which was time consuming. OPL brought the data/systems teams to see personalized learning and to examine the problem — from there they worked together to solve it. Everyone felt validated in doing the right thing for kids, and the one-time obstacle helped spread the word: if you have a roadblock, OPL will help you. It put the onus of change on the data/systems office of SCDE.

EVALUATION

OPL currently looks at a number of indicators to gauge success.

Engagement:

OPL now has multiple district cohorts, and is adding more spaces across the board. Districts are starting to host personalized learning events on their own, intentionally partnering with other districts and building on the concept of networks and sharing the burden of cost.

Real-time feedback:

OPL regularly solicits feedback, via surveys and listening sessions, from participants in the various professional learning opportunities. This allows OPL and external partners to adjust and tailor planning and content to meet the needs of each cohort of participants rather than waiting until the end to evaluate.

Opportunity Analysis:

In partnership with KnowledgeWorks, OPL provides an in-depth Opportunity Analysis to districts to examine the depth and breadth of implementation of personalized learning practices across classrooms and schools in a district. The outcome of the Opportunity Analysis allows districts to make informed decisions for resource allocation, professional development priorities, charting growth and celebration of successes.

LEAP Survey[59]:

Within some of their districts, the LEAP survey is administered and reveals what students report is happening in the classroom vs what teachers say they're doing in the classroom. OPL is looking for their alignment on the positive institution of personalized learning.

Climate Survey:

OPL looks for change in a statewide climate survey that has been administered statewide for 20-something years. The survey given to students and parents reveals the practices happening in schools. OPL hopes to see this data move in a positive direction in the network districts.

4.0's on the state's Teacher Evaluation Rubric:

For a teacher to get a 4 on his/her evaluation, the highest rating, he/she must understand and practice personalized learning.

LINKS FOR EXPLORATION

- Profile of the South Carolina Graduate
- South Carolina Framework for Personalized Learning
- Prototype competencies work*

* While the case doesn't talk about competency work, it's a part of the larger personalized learning picture. Note SCDE competencies are not content specific but are cross cutting and content agnostic. They allow any teacher at any grade level, of any content area to use them to allow students to demonstrate the World Class Knowledge THROUGH the Skill and Characteristics on the Profile. The elements on the profile are highly interconnected and through their research and stakeholder feedback, SCDE decided to examine HOW they manifest themselves in learning. "What does it look like to demonstrate the Profile?" Each of the competencies map back to multiple areas of the Profile (noted in the upper right hand corner of the competency document). The bands are not grade level specific, honoring the concept of developmental growth over time.

The Power of Three:

Commitments and Recommendations

State agency leadership has an opportunity to lay the groundwork and invest in systems level transformation that can produce bold new outcomes for students. The cases of Rhode Island, Ohio and South Carolina, while not offering generalizable truths, offer critical food for thought. Among the many points one might glean, from the importance of leadership, to the necessity of reallocating resources, or knowledge that "offices of innovation" are likely not static creatures — the following are three "commitments" suggested to Secretariats charting their next course.

In organizing to accelerate education innovation at the state level, Understanding Your Why, Creating a Culture of Innovation and Focusing on Creating Equity harbor leapfrog potential. The commitments, taken together, not only unleash great potential themselves, but unlock the power to make subsequent agency or office of innovation activity truly systems-transformative.

Commitments

1

Commitment 1

Understand Your Why

States can help create new student learning outcomes when they collaborate on, communicate and co-own the "Why" of education technology with schools and districts. Technology is not the goal of education; it is a powerful tool that can help us solve some of education's long-standing problems: namely how to reach individual learners and promote each learner's optimum growth. Simply layering technology on top of the traditional factory model of school will add expense but will not fundamentally change the learning experience of students, nor support teachers in delivering their highest value.

For instance, structuring a system to create graduates for a competitive, technologically-driven and global economy where people will change jobs continuously over their lifetime is fundamentally different than one that creates graduates for the well-paying but lower skill jobs of decades past. A new purpose or goal for education demands we revisit all that we think we know.

South Carolina illustrates the shift from a system focused on delivering academic knowledge through teacher-led instruction where students were passive recipients of a singular, one-size-fits-none content, pace and delivery of instruction aiming towards increased test scores (standardized outcomes) to a system that believes every student comes to school with a unique set of skills, abilities, needs and aspirations and thus education must focus on reaching every child in a way that meets her or his personal needs.

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The South Carolina Profile not only establishes agreed-upon goals for students' learning that can ensure their success in the future, it is used to transform the human capital, systems, structures, processes and culture that supports student learning throughout a school or district. With the stakes so high, the challenge of building a successful graduate cannot rest on the addition of technology alone; existing time, focus and resources need to be redeployed to focus on the most critical outcomes we seek.

Understanding the Why of education technology—of innovation itself—ensures South Carolina's OPL — and the SEA overall — doesn't just use technology to replace the tools they already have, i.e. smartboards can't be fancy chalkboards, laptops and tablets can't be fancy paper, software can't be digitized worksheets. *This is critical as the old system and its tools were not designed to help all learners succeed.*

2

Commitment 2

Create a Culture of Innovation

States and their respective "offices of innovation" that are committed to innovation will need to develop new structures, new mindsets and embrace risk in order to grow innovation across its own agencies and in the field. This boils down to the old adage "practice what you preach."

In particular, SEAs which are regulatory bodies must do and behave as it would have others do and behave. Schools and districts are reticent to engage in new activities even when the status quo is clearly not working. In the U.S., fear of backlash or sanctions from the SEA for rule-breaking can prevent innovation, and at the very least drives it underground

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(where no one else can learn from said innovation, nor can the system of rules evolve to support new student outcomes). Fear of backlash and protest from parents and teachers is also a real concern.

States that will succeed in innovation understand they cannot use the same tools, approaches, thinking and funding that have helped sustain disparities among schools and communities to unleash their greatness. They need a new relationship to the field and must cultivate interest in redesigning learning models and support for change efforts — they cannot mandate it or seek it through compliance.

For instance, when Ohio created the Ohio Straight A Fund, dedicating and distributing $280 millions dollars to innovation research and development, the state modeled risk-taking. The SEA allowed for ideas to come from educators themselves and did not dictate or limit districts as to what they could try to do. The state explicitly asked for and supported innovation, modeling within the initiative the cultural change they wanted to sew. Ohio knew not every innovation would pan out; it would risk its capital on the unknowable, and dare districts and partners to dream big.

Just like students learn best when they are encouraged to reach mastery of learning and deeply supported in growing their own agency, so must SEAs — especially offices of innovation — create and model rich, permissive environments to and for districts, and resist the gravitational pull of business as usual (mandates and compliance).

In another example, RIOO articulated the *Three Tenants of the Rhode Island Office of Innovation* which guide their work and insists on local partners and buy-in with a strong connection between the needs of the state and local user; an insistence on using non-traditional approaches to solve entrenched problems, i.e. design challenges and hack-a-thons, and creating rapid prototypes allowing for and *expecting* failure and improvement while bringing urgency to the work.

Just as education can no longer be standardized and something that is done to the learner, schools and districts must be inspired and supported by SEAs in their innovation journeys. Just like students learn best when they are encouraged to reach mastery of learning and deeply supported in growing their own agency, so must SEAs — especially offices of innovation — create and model rich, permissive environments to and for districts, and resist the gravitational pull of business as usual (mandates and compliance).

Innovation isn't just about innovative edtech products and services, it's about significantly changing the way schools and districts think about their roles, limits and opportunities to re-make schooling.

3

Commitment 3
Focus on Creating Equity

"Innovation, by its very nature of pushing the envelope[60] to provide richer learning environments, leads to inequity." Hiefield and Vander Ark rightly note that as some districts and schools work to reimagine learning, others will "cling to past practices," and new inequities will emerge. States must commit that each child — regardless of circumstances outside their control such as place of birth, ethnicity and socioeconomic status — will receive a high-quality education that prepares them for life and work in the rapidly-changing 21st century. This is all the more important, asserts KnowledgeWorks[61], when you consider that in the U.S. as in many other countries, 'education has historically and largely[62] been designed by white, middle-class leaders for white, middle-class students: the needs of students of color, rural or immigrant children or children with disabilities, have not informed the dominant design of schools or education systems' — until now. New commitments, mindsets, models and digital tools may conspire to reap real change for our most marginalized students.

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The most obvious way that digital tools are thought to address inequities in the above equation is by advancing access to, and making affordable, the enablers of blended learning such as connectivity, devices and software. In fact, many states and districts in the U.S. began their journeys of innovation by focusing on this supply of enablers — but not much else. While enablers are absolutely critical, schools and districts need access to the "how" of seeding and growing new models with the ability to create new learning outcomes, while keeping a commitment to equity at the core of the work.

SEAs, offices of innovation, consider: In order to differentiate instruction and personalize learning for students' needs and interests, teachers need to know their students' strengths and weaknesses and how to modify lessons and experiences accordingly. Individualized instruction, formative assessment and feedback[63], self-regulated and intrinsically-motivated learning in which students have some control over and responsibility for setting and committing to relevant learning goals, pathways and pace are research-proven to have large positive effects on learning in the U.S. As teachers learn how to put each student at the center of their practice, they must equally develop students' own agency — the responsibility mentioned above — which is no small matter. While these effective instructional elements can be instituted without technology to some, the good news is that technology can support their *implementation, scale and sustainability* with all through blended learning.

Even personalized learning can exacerbate inequities — meaning a focus on creating equity is not a sprint, but a marathon.

Even then, with the best intentions of reaching each individual child, know that it's easy for stealthy inequitable practices to find their way back in the classroom/system. The very flexibility[64] of personalized learning gives teachers 'an opportunity to lower or change their expectations from student to student.' Even personalized learning can exacerbate inequities — meaning a focus on creating equity is not a sprint, but a marathon.

Three Recommendations

With three commitments under consideration, among a bevy of potential lessons learned from the case studies, three recommendations or levers of change rise to the top due to their immediate catalytic potential. Offices of innovation or their counterparts should contemplate each through the lens of the three commitments.

States have an immediate and critical role to play in catalyzing *Collaborative and Distributed Leadership, Resource Re/allocation* and *Support for Early Adopters* of new innovative models.

1

Recommendation 1

Collaborative and Distributed Leadership

Acting on innovation entails engaging leadership from local districts, the SEA and everything in between. South Carolina and Rhode Island agencies defined the problems to be solved, developed a clear vision of the student outcomes to be achieved, and planned to support innovative teaching and learning *with and through* hundreds upon hundreds of leaders also with collaborative mindsets — creating multiple roads and bridges to support buy-in, ownership, and a rich, continuous exchange of knowledge and ideas. South Carolina exemplified collaborative and distributed leadership with its creation of the Profile and Rhode Island with its unusual design-based approach to its strategic plan for education. Even for people and organizations not directly involved in the work at first, South Carolina and Rhode Island's thoughtful communications helped build a culture of engagement, transparency and trust that was and is critical for innovation to take hold in schools and across these states.

Real education transformation requires a range of competencies, resources, and influence that can only be obtained from a broad coalition of actors — working both inside and outside of the state

system. No one person or organization "owns" [65] the solution or the capacity to produce the change we all seek in education; rather, we must count on the power of many organizations and people working and "leading together" to transform systems.

2

Recommendation 2

Resource Allocation

States must be deliberate about investing resources in innovation. Like many schools and districts, states that want to use technology to transform learning often don't feel prepared to make initial investments. However, embracing learning innovation means changing how we spend our funds.

South Carolina ranks between the third and ninth poorest state in the U.S., yet the SCDE reallocated existing resources to make personalized learning happen. If they continued to spend money in the same way, doing the same things, they know with certainty nothing will change. The explicit decision to invest in organizational capacity to innovate signals its importance and models the behavior to the field. iNACOL notes SCDE identified *existing programs* in its operating budget that could be aligned with and leveraged to support personalized learning repurposing approximately $1 million dollars. The funds, largely supporting OPL's PersonalizeSC Network, now has over 100 school teams in 55 districts and charter schools and over 100 coaches in its instructional coaching network. Its human capital strategy is providing districts with high-quality supports for building the effectiveness of educators leveraging personalized learning, accomplishing this aim in ways that are scalable, but also personalized, and economical. Committing a percentage of resources to people and places that have the potential to foster disruption is essential to growth.

Committing a percentage of resources to people and places that have the potential to foster disruption is essential to growth.

3

Recommendation 3

Support for Early Adopters

To be transformative, educators need to have the knowledge and skills to take full advantage of technology-rich learning environments. All of the resources in the world will not matter to education innovation if not followed by high quality implementation[66].

Rhode Island first exemplified support for early adopters through the creation of Fuse RI, a two-year statewide educator fellowship (blessed by RIDE) where teachers were trained to understand the power of personalized learning and deeply supported as they provided technical support to schools and districts. The "teachers-teach-teachers" program[67] would nurture innovation by having educators mentor those outside their own school districts and serve in leadership roles on administrative teams to help principals and superintendents plan how to use new models of teaching and learning. Fellows worked directly with districts for the sharing, implementing, evaluating, and scaling technology usage and personalized learning across the state.

Fuse RI 1.0, now sunset, exemplified creating opportunities for scalable third-party technical assistance that is critical to schools and districts, and the program helped establish a new and desirable shape for the ecosystem. Building the capacity of people and organizations is an opportunity to build a movement, starting with the very innovators that are willing to pioneer new solutions.

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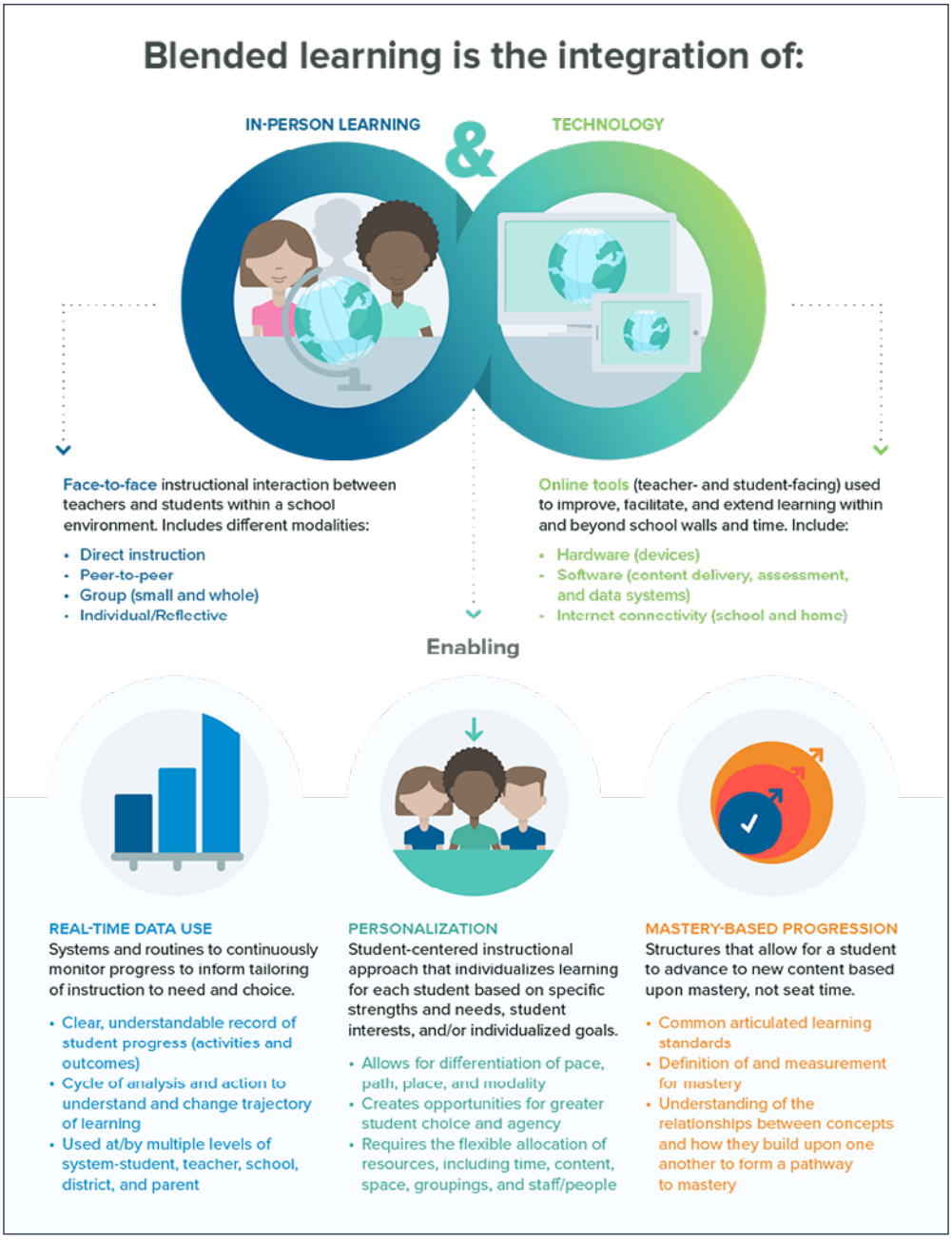
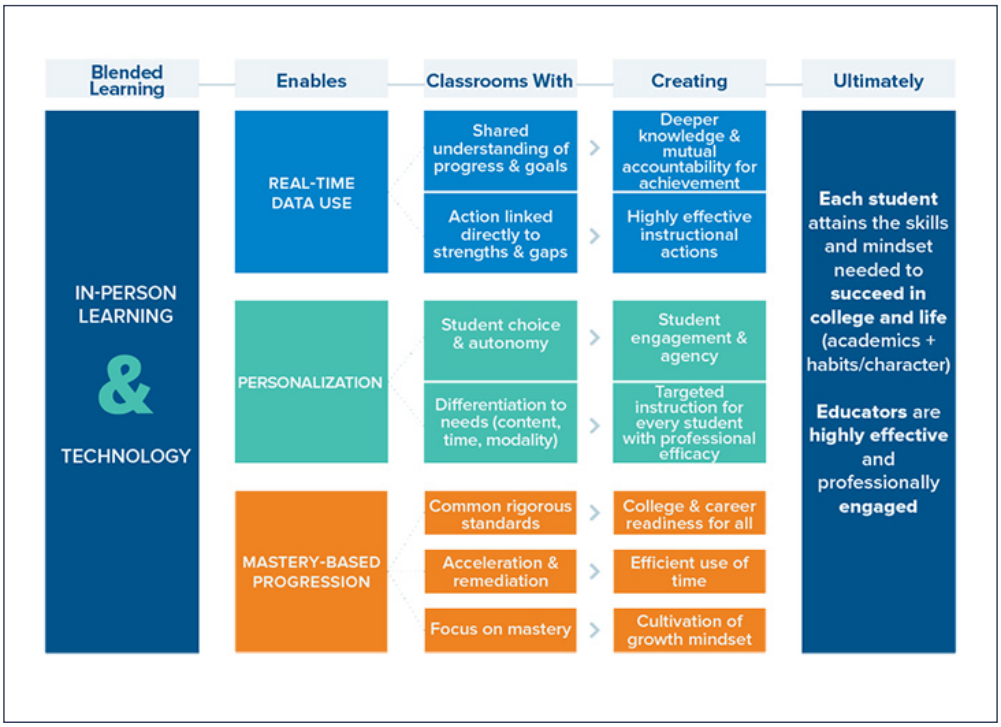
Appendix

Blended Learning: An Illustration

The Learning Accelerator describes blended learning[68] per the framework below.





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