

# Introduction

Every child begins life curious and eager to learn. As James Zull says, learning “is just what the brain does.”<sup>1</sup> Young children are energized by learning and have a seemingly endless desire to ask the questions they design so that they can learn about and make sense of the world around them. Being hardwired for learning coupled with being nurtured by their parents can set students up for success as they enter school. Nearly all children go to school excited to learn, believing they are smart and capable of learning.

As educators, we know that somewhere along their journey in our education system, we fail to engage many of our students, and we lose them. Sometimes we lose them physically when they drop out and disappear. More often, we lose them emotionally and intellectually when they stop paying attention or begin to believe their efforts don’t matter. Many classrooms are populated with students who seem unmotivated or disengaged. According to the Right Question Institute, children begin asking questions around the age of two, and they reach their questioning peak at age four. Each year after that, students ask fewer and fewer questions.<sup>2</sup> Traditional schools—based on a factory model created at the turn of the twentieth century—often discourage curiosity and questioning; they tend to encourage students to be passive and compliant. Many students become adept at parroting back information they have learned because that is the primary skill they need to be successful, to get good grades, to be at the top of the class. Students rarely integrate knowledge or content into their own understanding of the world, nor are they encouraged to do so in the classroom. We teach students that what we value in schools is success, not failure. As educators, we have become accustomed

to student failure, and we justify that failure as a necessary evil of our education system, a system that overvalues testing and performance and often loses sight of actual learning. Too often, we find ourselves trying to help students succeed in a system in which we don't fully believe.

Educators trying to meet the needs of each student realize the importance of stepping away from the traditional education system and its shortcomings and moving toward personalized learning. Businesses and corporations, students' future employers, also realize the need to move beyond an education system focused on compliance and conformity and toward a system in which students are actively engaged in their own learning. Collaboration and the ability to listen are prized skills in the workplace. Employers seek out people who can take initiative, think critically, and follow tasks through to completion. As *New York Times* columnist Tom Friedman wrote summarizing the results of the 2013 Program for International Student Assessment (PISA), "the most successful students are those who feel real 'ownership' of their education. In all the best performing school systems . . . 'students feel they personally can make a difference in their own outcomes and that education will make a difference for their future.'"<sup>3</sup> Personalized learning provides an avenue to increase agency among all learners in our schools and ensure that instruction meets the needs of each student.

Knowing that the education system must change if we want students to ultimately be prepared for and successful in our economy is both an opportunity and a responsibility for education leaders. This book is designed to support school and district leaders who know that educators must do more than re-create schools that approach learning as one-size-fits-all or learning based solely on summative assessments. This book is for leaders who want to build schools that personalize learning to meet the needs of each student, who want to keep students engaged and excited about learning itself, and who strive to change the experience for teachers and students in their schools immediately.

Personalized learning is not a new idea. As we dig into what personalized learning means, however, you will see that we are at a point where we can realize the potential of personalized learning at scale due to the influx of digital resources and tools, deeper understanding of how the brain works, connectedness to resources all over the globe, access to data, and systems that support teachers in meeting the needs of students in real time each day.

While many educators are ready to dive into personalized and digital learning, we also live with the realities of a large and complex education system. Changing an entrenched system can be difficult. Creating change takes energy and attention and a willingness to fail and begin again. Initiating change means opening the doors to your offices, your classrooms, your schools, and inviting people to join in the process with you. Launching into this work in your schools can be daunting and, at many times, overwhelming. But just as our students come to us ready to learn, we believe all of our educators come to work ready to help students learn and be successful. We have the opportunity to work with district and school leaders every day at the Friday Institute at North Carolina State University, and we are constantly reminded that people who choose to dedicate their lives to education care about students and learning. Sometimes in the mix of assessments, schedules, bad press, and demanding parents, we forget that educators enter this profession because they have a deep desire to help students reach their individual potential.

Teachers in schools who are effectively implementing personalized and digital learning tell us again and again that the first year of the transition to personalized learning makes them feel like a first-year teacher all over again. The transition can destabilize even the most seasoned teacher, and teachers, as well as their leaders, need to be prepared for that possibility. Teachers who have implemented changes toward personalized and digital learning in their schools also *all* add, “I could never go back.” Personalized and digital learning empowers both students *and* teachers.

School leaders like you play *the* critical role in creating the environment for change, in creating schools and school cultures where administrators can tap into the commitment and understanding of teachers and the desire of students to learn and succeed. You are not alone in carrying out this change, but you have the opportunity—and the responsibility—to lead the way by building ownership among all stakeholders and providing a culture in your schools and classrooms that allows teachers and students to try new things, fail sometimes, and learn how to personalize effectively.

#### WHAT IS PERSONALIZED AND DIGITAL LEARNING?

In this book, and in our work, we adhere to the definition of personalized learning developed for the National Educational Technology Plan:

Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) may all vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated.<sup>4</sup>

We are not simply talking about creating reading groups based on Lexile levels or allowing students to choose their own topic for a prescribed project. Personalized learning is complex because it encompasses using a number of inputs (multiple data points about students beyond academic test scores), creating multiple opportunities for learning, addressing social and emotional learning, and helping students reflect on their own learning (metacognition).

When we look closely at personalized learning, we begin by examining the role of the teacher. It is important to understand and remember that personalized learning does not diminish the role of the teacher in the classroom or turn the teacher into a bystander. Personalized learning moves away from a teacher-directed classroom and toward a student-centered, collaborative classroom where teachers remain active and engaged in the learning process. Making this change seems simple enough, but in practice, it's tremendously difficult. Teachers have been taught to control their classrooms, control their students' behavior, and control the pace of learning. Teachers are rewarded for this control. To shift away from lock-step learning means that each stakeholder—educators, students, parents—has enough trust to let go of the control and enough understanding of personalization to be certain that what ensues will not be chaos and anarchy.

In reality, instead of chaos, the Four Cs of collaboration, critical thinking, communication, and creativity can take center stage, supported by effective instructional strategies designed to scaffold student learning. Personalized learning is not accidental and chaotic, and it is not putting each student in front of a computer to work independently. It is thoughtfully planned, carefully articulated, and consistently measured. It challenges educators and students to truly understand their strengths, needs, and differences. Personalized learning challenges all stakeholders to be involved, committed, and passionate about what they're doing each and every day.

## HOW DO DIGITAL RESOURCES AND TOOLS RELATE TO PERSONALIZED LEARNING?

Teachers have long understood the value of personalized learning for reaching and engaging every student, but in the past, few educators were able to implement personalized learning in schools in effective ways. Digital learning is *the* game-changer in making personalized learning a reality. In the past decade, major progress in the development of digital content, tools, data dashboards, and gamification has dramatically changed what is possible in personalizing education. Digital content has become available in a multitude of different formats, encompassing varied learning approaches. Instead of asking students to continually try to learn material in the same way again and again when they do not understand, teachers now have the ability to provide several different strategies, resources, activities, and practice that meet learning differences, draw upon students' strengths, and address students' interests. Not all students have to be working on the same material at the same pace because of the myriad options digital resources offer both students and teachers. Personalized learning at scale must include digital learning. There is no reason to separate the two.

Keeping up with and incorporating the latest technologies in their work can be intimidating for many teachers. Technology changes quickly, and it sometimes feels impossible to stay current, much less ahead of the curve. Students and other teachers can be important resources for educators when learning new technologies. In a personalized classroom, the teachers don't need to be "the experts." Students can learn from a variety of sources, *just as teachers can*. Teachers can learn about new technologies most effectively by jumping in and integrating digital tools and resources slowly into their practice. In a personalized classroom, students and teachers often learn together. According to Sarah Brown Wessling, 2010 National Teacher of the Year, when it comes to personalized learning, "We model learning. I need to be the lead learner."<sup>5</sup>

Personalized and digital learning creates a different classroom dynamic, but it does not lessen the importance of the teacher. If anything, the implementation of personalized and digital learning allows teachers to spend more time using their pedagogical expertise. Learning should not solely depend on teacher-directed content delivered in one way for all. Rather, teachers can now

have students engaged in different work and can spend more time facilitating learning in small groups, in one-on-one conferences, through project-based learning or student content creation.

### WHAT DOES PERSONALIZED AND DIGITAL LEARNING LOOK LIKE IN ACTION?

The question of what personalized and digital learning looks like in action has more than one answer. That answer will look different depending on the school, the grade level, and the approach adopted by the teacher and the school or district. Figure I.1, developed as part of the work in creating the NC Digital Learning Plan in 2015, succinctly demonstrates critical differences between our traditional education system and one that is personalized and utilizes the opportunities presented through digital learning.<sup>6</sup>

In this book, we explore some examples of what personalized learning can look like in action by highlighting what innovative schools and districts around the country are doing to bring personalized learning to scale through a variety of methods and models including one-to-one iPad initiatives, blended learning, personal pathways, competency-based learning, and project-based learning.

### HOW IS LEADERSHIP FOR PERSONALIZED AND DIGITAL LEARNING DIFFERENT FROM LEADERSHIP IN GENERAL?

Leadership is considered second only to classroom instruction as an influence on student learning.<sup>7</sup> So, too, leadership is critical for an effective transition to personalized and digital learning. A school leader leads by developing the culture of the school through a coherent vision, modeling the type of teaching and learning, and supporting both teachers and students. Moving to personalized and digital learning often means a significant change in how teaching and learning happen. Principals need to establish a school culture that encourages and supports teachers taking risks, a culture that eliminates the fear of making a mistake, so that educators can grow and improve their own instructional strategies and designs. Supporting teachers in this manner models the opportunity for students to also take risks in creating and exploring with their own learning.

In his book *The Principal: Three Keys to Maximizing Impact*, Michael Fullan discusses the idea of the principal as a change agent, systems player, and lead

**Figure I.1** Comparison of traditional instructional and digital-age learning models

<b>Traditional instructional model</b>	<b>Digital-age learning model</b>
One-size-fits-all instruction and instructional resources.	<b>Personalized learning</b> and flexible resources optimized for each student.
Advancement based primarily on time spent in class.	Advancement based on demonstrated <b>mastery</b> of the content and <b>competency</b> in applying what has been learned.
Fixed places and times for learning within school buildings.	<b>Anywhere and anytime learning</b> , inside and outside of schools, 24/7, with most learning blending face-to-face and on-line activities.
Teacher-centered instruction, with teachers as expert disseminators of content to classes of students.	<b>Student-centered instruction</b> , combining large group, small group and individualized learning, with teachers serving as facilitators and coaches.
Printed, static text, often out-of-date, as the dominant content medium for educational resources.	<b>Digital content</b> providing interactive, flexible and easily updated educational resources.
End-of-course standardized assessments of learning, primarily for accountability.	<b>Assessments integrated into learning activities</b> to provide ongoing information about students' achievement that can be used to improve teaching and learning.
Academics addressed in isolation, with schooling separated from informal learning experiences outside of school.	Project-based and community-based learning activities <b>connecting to students' lives outside of school</b> .

learner.<sup>8</sup> These roles are central to the transition to personalized and digital learning. Often, educators and parents are entering unfamiliar territory with the use of technology as an integral part of teaching and learning. The ability to garner ownership among these and other stakeholders, guide and coach teachers while setting expectations, and communicate with parents will make or break change efforts in a school. Our experience validates the importance of these tenets of effective leadership. However, personalized and digital learning also demands that principals are able to achieve the following goals:

- *Model.* Although principals have always had the opportunity to model in some way, in making the transition from teacher-centered to student-centered learning, they need to model their own use of digital learning tools to personalize their work with individual teachers, in using data, and in building professional learning networks (PLNs) with others inside and outside the school community.
- *Adapt to the pace of change.* The pace of change in education has been slow. It is almost cliché to discuss how education and schools have looked the same for the past one hundred years or more. However, the near constant arrival of new technologies and digital learning has dramatically altered this situation, and the pace of change is now greatly accelerated. Schools need to change; it is no longer possible for them to remain stagnant. Principals moving toward personalized and digital learning must develop new strategies and be prepared for the sometimes fast and furious pace of change in a system designed to maintain the status quo.
- *Articulate a shared vision.* How can principals lead a vision for personalized and digital learning when rich examples are nascent themselves? Schools and districts that are making tremendous progress may not be nearby and may or may not match the context of your school. Principals must guide their stakeholders in thinking about what they want teaching and learning to be for their students and arrange for them to see, either in person or virtually, examples of their vision.

You can easily see, then, how personalized and digital learning is increasing expectations for school leaders. Because working with school leaders is our passion, we wrote this book to provide needed guidance for principals, aspiring principals, and others who are looking to put the power of technology to work for student-centered learning.

#### HOW DO WE DEVELOP A FRAMEWORK FOR LEADERS?

Based on our work at the Friday Institute teaching and coaching school leaders and their teams in making the transition to personalized and digital learning, we have identified eight essential lessons that we believe are critical for success:

1. Create a vision focused on teaching and learning.

2. Engage stakeholders as part of the team from the beginning, but don't stop there!
3. Employ change management and distributed leadership.
4. Build a culture of trust in which it is acceptable to fail.
5. Develop professional learning that is personalized and job-embedded.
6. Empower students with the Four Cs.
7. Create systems and structures that are sustainable and adaptable.
8. Build human capacity with teams.

We have developed a framework that incorporates these lessons for easy reference. As figure I.2 illustrates, a vision of personalized learning is the center of this effort. We go into each lesson in depth in the following chapters and summarize key actions for executing each.

This framework is not linear, but circular. Implementing personalized and digital learning is not a step-by-step process, but is iterative and cumulative. Notice that creating a vision is placed at the middle. This placement reflects our experience that without vision, and a commitment to promoting it and tying all efforts back to this vision periodically and at all phases, leaders will stumble in doing this work. Also notice that the word *technology* does not appear in this framework. This omission reflects our belief that when it comes to personalized learning, technology needs should be driven by the vision for teaching and learning and not the other way around. This transition is never about the technology itself, but about how we utilize technology to improve the data, assessments, curricula, and instruction.

In the same way that learning cannot be one-size fits-all, a leader and a school's approach to personalized and digital learning will look and roll out differently from school to school. Schools and districts will vary in how they approach or lead their personalized and digital learning efforts. These differences are part of the challenge and also the opportunity of talking about and implementing personalized education. We have included some specific and unique examples of schools that are leaders in personalized learning to help you imagine the scope of what is possible:

- *Summit Public Schools*. Starting in California and expanding to other states, Summit has moved aggressively toward personalized learning with an emphasis on using digital learning, data dashboards, and consistent

**Figure 1.2** A framework for leading personalized and digital learning



feedback from students and teachers. These schools address content knowledge and cognitive skills specifically, as well as expeditions and habits of success and use individual playlists (personalized digital assignment charts) for students, who also explore areas of interest through eight week-long expeditions.

- *Teach to One*. Previously, the New Classrooms' model that originated as the School of One in New York City, Teach to One focuses on daily playlists for each student. These playlists are created based on where

the students are on the learning standards, as well as the learning approaches and strategies that are most effective based on data that is gathered and student learning preferences.

- *Mooreville Graded School District.* Mooreville has been engaged in a digital conversion since 2007. While a device for each student is part of the implementation, Mooreville leaders are intentional about keeping the focus on personalizing teaching and learning, as well as the critical role of professional learning for teachers. Mooreville teachers use data, both academic and more holistic, to understand the needs of the students and to ensure that the curriculum and instruction supports the students in meeting their potential. Mooreville's graduation and achievement rates are some of the highest in North Carolina, despite higher-need students and low cost per pupil.
- *Baltimore County Public Schools.* BCPS has been leading the charge with personalized and digital learning while always maintaining a focus on instruction and employing innovative digital content, even creating their own interactive textbooks to help prepare students for college science and other areas. BCPS utilized a pilot approach to transition to expanding personalized and digital learning across the large district based on interest and capacity of individual schools.

In addition, we have included insights from nine exemplary leaders who have helped shape our thinking. These leaders are representative of the talented and innovative educators we work with each day. They have taken the lead in personalizing learning in their schools, with demonstrable records of improving student outcomes. (Reflective of their talent, since we interviewed them for this book project, several have moved on to new challenges.) These leaders and their actions exemplify the Leadership Essentials we feature in this book. They are all dynamic and creative leaders who are deep thinkers. We believe that their ideas, strategies, and lessons learned will help you ask and answer critical questions and support you on your own journeys as you learn about and lead your own transitions into personalized and digital learning.

The principals who share their stories in this book represent schools with different grade levels, geographic locations, and demographics. Their schools include those in very rural areas of Alabama and eastern North Carolina; more suburban schools in Iowa and Oregon; and urban schools in Charlotte, North

Carolina, and Cleveland, Ohio. Some have higher socioeconomic status (SES), whereas some have very high free and reduced lunch populations. Their schools are primarily public schools, with representation from charter and private schools. These principals are energized and eager to share their stories with you. We invite you to connect with them and learn more about what they do.

- **Michael Armstrong** (Facebook: Michael Armstrong) is a first-generation college goer who became the principal of Bugg Creative Arts Magnet School in Raleigh, North Carolina, an elementary school where 90 percent of students qualify for free or reduced lunch. In his three years at Bugg, Michael implemented a one-to-one personalized learning environment making use of iPads, personal electronic portfolios, and student-led conferences that resulted in greater student engagement, less absenteeism, and more involved parents. He is currently a doctoral student and working as a professional learning consultant.
- **John Bernia** (Twitter: @MrBernia) was the principal of Carleton Middle School in Sterling Heights, Michigan, a Title One school with a growing population of English language learners. John utilized creative approaches to professional learning to transform his school with personalized and digital learning. He was named a Digital Principal of the Year by the National Association of Secondary School Principals (NASSP) in 2015. He is currently the chief academic officer of Warren Consolidated Schools.
- **Erin Frew** (Twitter: @erin\_frew) is the former principal of New Tech West High School in Cleveland, Ohio, where she implemented cross-curricular project-based learning with the support of one-to-one computing. With a focus on empowering students, she helped raise the school's performance index 9.9 points, taking her school from the "Continuous Improvement" category to "Effective" in one year. Erin was appointed to a district leadership position in the summer of 2016.
- **Alison Hramiec** ([www.bacademy.org](http://www.bacademy.org)) is the head of Boston Day and Evening Academy in Roxbury, Massachusetts, a student-centered, competency-based charter school serving any Boston Public School student who has dropped out, is overage, or is seeking a more flexible environment in which to earn a high school diploma. Alison led the redesign of the school's competency-based program, in which students

are placed in courses based on their academic needs, track their own learning, and move on after meeting agreed-upon benchmarks.

- **Suzanne Lacey** (Twitter: TCBOE) is superintendent of Talladega County Schools in Alabama, a high-need, economically distressed district. Suzanne implemented a comprehensive approach to integrate digital learning through a districtwide focus on project-based learning, which offers students a choice in the way they learn and demonstrate mastery. All high schools are now in a one-to-one environment, but the focus remains on personalized learning and building capacity among her teachers and administrators. Under her leadership, the graduation rate increased from 68 percent in 2008 to 94 percent in 2015.
- **Tim Lauer** (Twitter: @timlauer) is the former principal of Meriwether Lewis Elementary School in Portland, Oregon, where he focused on finding the strengths among his teachers to build momentum and capacity while modeling personalized and digital learning. He challenged teachers to utilize their one-to-one environment in grades two through five (Chromebooks) to interact with students on and about their work and to use the dashboard to inform teaching and learning. Tim emphasized distributed leadership and using social media and other avenues to share the effective teaching and learning in his school among teachers and with parents and the community. He is currently a district leader in Washington state.
- **Derek McCoy** (Twitter: @mccoyderek) is the principal of West Rowan Middle School in Mount Ulla, North Carolina. He focuses heavily on student-centered learning, modeling the use of digital learning, and literacy across the curriculum. Derek addresses the importance of teacher mindset and learner agency head-on and strives to make spaces throughout the building and the digital environment collaborative. West Rowan is the second school that Derek has led through the transition to personalized and digital learning. Derek was named a Digital Principal of the Year by the NASSP in 2013.
- **Troy Moore** (Twitter: @MarinerscsK8) is the former principal of Hawk Ridge Elementary School in Charlotte, North Carolina, one of several Personalized Learning (PL) schools in the Charlotte-Mecklenburg schools. Troy launched personalized learning at Hawk Ridge by working

directly with his teachers, and other stakeholders create personalized learning pathways. District results indicate students in the PL schools have shown greater growth in math and higher engagement. Currently, Troy heads the Mariners Christian School in Costa Mesa, California.

- **Amy Rickard** (Twitter: @AMGESPrincipal) has been the principal of Morris Grove Elementary School in Chapel Hill, North Carolina, since it opened in 2007. Amy focuses heavily on creating culture based on collaboration and growth mindset, as well as the thoughtful integration of digital learning and cross-classroom opportunities to meet the needs of students.

### HOW CAN THIS BOOK GUIDE YOU AND YOUR WORK?

As an education leader, you have the ability to bring personal and digital learning to your school and to create a seismic paradigm shift. You also have the ability to influence other educators and stakeholders to engage in this process with you. You understand that the time for this shift is *now*. Every day we wait, every year we make only incremental progress, means that another fifty-five million students are not getting the education that they truly deserve.

In each chapter of this book, you will find

- advice and examples from principals who led the transition from traditional to personalized and digital learning in their own voices
- research-based explanations
- a list of “Try It Tomorrow” activities that you can try with your teachers or stakeholders

Beginning or continuing this transition to personalized and digital learning and even choosing to read this book take courage. It is often easier to stay the course you and your school are currently on. If you are in a more traditional school or top-down district, it may be easier to follow the dictates of the district leaders. If you have solid test scores, it may be simpler to keep parents happy and allow students to keep going. You are choosing a challenging path, but you should know that resources are available to help support you. Visit our website, [LeadingPersonalizedandDigitalLearning.com](http://LeadingPersonalizedandDigitalLearning.com), to discover more ways to connect with people doing this dynamic work. Change is difficult, but many principals, coaches, and teachers remind us that the benefits of personalized learning are well worth the struggle.