PERSONALIZING LEARNING IN A DIGITAL WORLD

FOUR KEY PRIORITIES FOR DIGITAL AND PERSONALIZED LEARNING

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ABOUT THIS REPORT

The emerging national interest in personalized learning led digiLEARN and the Southern Regional Education Board (SREB) to co-host a regional meeting on the topic. This meeting occurred against the backdrop of regional and national high school graduation rates reaching all-time highs in recent years. At the same time, gaps on key measures of academic achievement persist. The purpose was to expose state-level teams to topics and issues related to personalized learning in a digital world. Teams explored ways to develop comprehensive and sustainable efforts to support this work in their home states. They discussed key trends, challenges, opportunities, examples of personalized learning, as well as state policy and funding strategies.

Other partners providing in-kind support through presentations included: Digital Promise, Alliance for Excellent Education, LEAP Innovations, Friday Institute for Education Innovation, Summit Learning, New Hampshire Department of Education, State Education and Technology Directors Association (SETDA), Wando High School (South Carolina), Henry County Schools (Georgia), the Kentucky Community and Technical College System, Rowan-Salisbury Schools (North Carolina) and Metcalfe County Schools (Kentucky).

We would like to thank the following individuals for lending their experiences and insights to make this report possible:

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ABOUT DIGILEARN

The Digital Learning Institute (digiLEARN) is a national non-profit dedicated to accelerating digital learning for all ages, with a goal of increasing personalized learning options for students, expanding opportunities for teachers, and improving the ecosystem for education entrepreneurs. It serves as the front line for teachers, research, and the development of new learning models, tools, and content needed to help every learner succeed.

Former North Carolina Governor Bev Perdue founded digiLEARN in 2014. A longtime champion of using technology to enhance the classroom learning experience for teachers and students of all ages, she serves as the organization’s chair. Former Wyoming Governor Jim Geringer is vice chair.

The core of digiLEARN’s work is to close our nation’s persistent achievement and skills gaps by supporting teachers as they provide personalized learning for all students. The digiLEARN team understands how effective teachers, great tools, deep and rich content, and purposeful cultures work together to create powerful learning environments. Further, rapidly advancing technologies offer increased opportunities to provide both teachers and students with the tools, content and information necessary to reach high levels of success no matter their skill and knowledge level. To maximize that effort, policy makers and education technology entrepreneurs and companies need to be involved in the work with teachers and students.

ABOUT SREB

The Southern Regional Education Board (SREB) partners with states to improve public education at all levels.

SREB is a nonprofit, nonpartisan organization that has 16 member states including Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

Created in 1948 by Southern governors and lawmakers, SREB focuses on improving quality of life by advancing public education. It provides independent data and recommendations to help lawmakers make informed legislative decisions. SREB provides educators with professional development to improve student learning and works with stakeholders to share resources and best practices.
FOUR KEY PRIORITIES FOR DIGITAL AND PERSONALIZED LEARNING

There are nearly 100,000 public schools in the United States.¹ Pick one at random and you are likely to see classrooms with desks arranged in single-file rows and teachers delivering standard lectures at the front of the room. Here, teachers are often bound by predetermined curricula that limits their creativity, which in turn limits experiences and growth opportunities for learners. Students are periodically assessed and forced to proceed through curricula regardless of their mastery of competencies. They are not active participants in their own learning—they are merely passive absorbers of information who are expected to reiterate it on demand.

Against this backdrop are two grim facts. First, less than 40 percent of students are scoring at college- and career-ready levels.² Despite record high school graduation rates, too many students still leave school ill-prepared for their futures. They struggle to compete in the workforce or require remediation once enrolled in college. The majority of students simply aren’t ready.

Second, the U.S. is facing a pervasive skills gap in which six million people are unemployed despite there being six million open jobs.³ Not only do more jobs require postsecondary degrees than ever before but they also require new skillsets. Technical skills are only part of the equation. Today’s employers need people with people skills and are hard-pressed to find them.

<40% OF STUDENTS ARE SCORING AT COLLEGE-AND-CAREER READY LEVELS
That is why it is more important than ever for schools to infuse curricula with critical soft skills, such as collaboration and creativity. Mastering both hard and soft skills will give kids a fighting chance to be successful.

Teachers at schools across the country are challenged to prepare 50 million kids for their futures using an educational model tailored to the past. The one-size-fits-all learning model practiced in the majority of U.S. public schools is not adequately preparing students for college, career, and life success. In this model, schools feel pressure to teach to compliance rather than competency. Standardization policies and rigid accountability measures limit teachers’ focus on the real needs of learners.

Luckily, forward-thinking schools and school districts are transforming their classrooms into collaborative, creative spaces. In these innovative schools, teachers become “guides on the side” who help students drive their own learning. Students set goals, track their progress, and know what they must do to succeed. They collaborate with other students to think critically and solve problems. They feel more connected to their work because it matches their interests and needs. Technology elevates learning experiences and provides parents and teachers with invaluable insights about student performance. Technology is not a solution in and of itself. Instead, digital tools aid teachers in developing curriculum, selecting content, administering assessments, and, perhaps most importantly, gaining real-time data. This helps teachers monitor students’ growth and improve instruction to continuously improve learning.

To bring education into the digital age, district and state leaders should focus on four key priorities:

1. Defining personalized learning from the student’s perspective.

2. Developing the capacities of teachers to implement digital and personalized learning practices in their classrooms.

3. Creating high-quality digital content and innovative state assessment models that provide real-time feedback about students’ learning.

4. Improving access to education through the strategic expansion of technology infrastructure and high-speed broadband access.
The shift to student-centered learning can be both daunting, in part, because a lot of people misunderstand what personalized learning is in practice and why it matters. To help clear up the confusion, some schools have opened their classrooms to show the public what personalized learning looks like from the student’s perspective.

Rowan-Salisbury Schools (RSS) in North Carolina, for example, plans to host community exhibition nights to showcase its students’ high-quality STEM projects. Lynn Moody, Superintendent of RSS, says the exhibition nights help people, especially policymakers, understand what kids are really doing. “They see first-hand that our kids aren’t just playing games,” says Moody. “They are extremely bright and can help us solve major real-world problems right now.” Personalized learning isn’t only about preparing kids for the future. It is also about giving them the ability and capacity to innovate, create, and do meaningful work right now. This engages them more deeply in learning.

RSS makes a practice of involving the community in its work. They also run the STEM Mobile Exploration Lab Bus, which brings STEM education to elementary and middle schools around the county. The Lab Bus features iPads, science probeware, digital microscopes, and other hands-on tools that give students in even the most remote areas unique and immersive STEM experiences, that they otherwise might not have.

Chas Coker, Assistant Principal of Wando High School in South Carolina, echoes the benefits of involving the community. “We’ve received pushback from parents,” he says, “mostly because of misinformation. But once parents see personalized learning in action, they love it.” This is also why organizations like LEAP Innovations, a non-profit committed to transforming the ways kids learn, is working to demystify personalized learning.

The LEAP Learning Framework not only helps to define personalized learning, it also provides educators with the resources and strategies to put it into practice. According to the Framework, the four core aspects of personalized learning environments are:

- Learner-focused
- Learner-demonstrated
- Learner-led
- Learner-connected

In a learner-focused environment, teachers tailor instruction to the needs, interests, strengths, and learning styles of each student. They may assess students to gauge academic levels, design activities to help kids clarify their goals, or discuss students’ cultural backgrounds to learn more about them. By engaging in these activities, teachers can develop contextualized curricula that ensure relevant and meaningful experiences for students. Teachers align learning with the things that resonate with students and helps them develop a deeper understanding of themselves.

In learner-demonstrated environments, students begin at levels that match their academic histories and progress at their own paces. Teachers develop rigorous curricula that challenge students to think creatively and approach problems from different perspectives.
They empower learners to consider alternative solutions and to accept failure. Students have a number of ways to demonstrate mastery, whether through final assessments or portfolio projects. In either case, students demonstrate evidence of learning based on what they have actually learned rather than the amount of time they spend in the classroom.

In a learner-led environment, learners take ownership of their own learning. “We help kids by letting them tune into their interests,” says Brooke Zehmer, Principal of Landis Elementary School. At Landis, students work with their teachers to design learning activities around their interests, identify learning goals, and monitor and assess their own progress. This sets them on a trajectory of success. According to Coker, the environment at Wando High School is very similar. He says, “Our students can tell you where they are with their mastery of competencies. They know exactly what they are doing today and how they will succeed.”

In a learner-connected environment, learning is truly anytime, anywhere. The Framework calls this learning that “transcends location in relevant and valued ways, connected to families, educators, communities, and networks.” With powerful technology at our fingertips, “we can now extend the school day outside of school,” says Moody. It is an opportunity to level the playing field and engage more parents in their children’s education.

This is what personalized learning looks like in practice. School districts, states, and the private sector have the opportunity to work together to help teachers and schools implement learning strategies that work.

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LYNN MOODY, SUPERINTENDENT
ROWAN-SALISBURY SCHOOLS
DEVELOPING THE CAPACITIES OF TEACHERS

Digital devices with high-speed broadband connections are critical tools for today’s learners. A 2016 digiLEARN survey of 1,327 teachers revealed that 85 percent “believe digital tools that provide immediate, ongoing information about student understanding will increase learning.” Unfortunately, most teachers feel they lack the skills and knowledge to use digital tools well and adopt personalized learning practices in their classrooms. In recognition of this need, digiLEARN’s Digital Scholars Initiative focuses on bringing high-quality professional development opportunities to teachers as they lead their schools into a new paradigm of learning. Just as we need to personalize learning for students, we also need to personalize professional development for teachers. The Initiative focuses on building capacity so that Digital Scholars can:

1. Learn how to lead other educators.
2. Use their classrooms as learning labs for other teachers to observe and adopt new instructional practices.
3. Collaborate with entrepreneurs to help their schools better innovate and create new learning models.

We need to create environments that enable teachers to fail without fear. Many of the greatest ideas come from the bottom-up, from people who are doing the work. Teachers have the benefit of working daily with students, learning their needs and interests, and developing creative approaches to augment learning. When it comes to personalized learning, “there is no silver bullet,” says Aaryn Schmuhl, Assistant Superintendent for Learning and Leadership at Henry County Schools. “It is not about finding the best model and simply replicating it.” Instead, districts need to give teachers the autonomy to try new things, learn, and adjust their approaches. Schmuhl adds that we should “honor the professionalism of administrators and teachers to implement [these approaches].”

Lynn Moody describes many of the Rowan-Salisbury Schools teachers as cutting-edge risk-takers. “Our teachers lead us; we don’t lead them,” says Moody, who warns that districts risk losing teachers if they hold them back. Coker agrees. “We need to acknowledge the paradigm shift and invite teachers to the table.” Both acknowledge the value added to their efforts by investing in teachers. Teachers get to work together, build their skills, and influence the future of learning.

As part of the Digital Scholars program, teachers are placed in leadership roles, while remaining practicing teachers. They learn to lead other teachers, to work with business leaders and entrepreneurs to develop innovative education solutions, and collaborate with each other to test, observe, and assess new instruction practices.
DEVELOPING THE CAPACITIES OF TEACHERS

Even the most enthusiastic teachers will struggle to implement personalized learning without support. So, what does effective professional development for teachers look like? The Friday Institute for Educational Innovation at NC State University developed the District Teams for Digital Learning program around three core components—team-focused, job-embedded, and cohort-based.  

Just as quickly as technology evolves, schools are expected to adopt it. So professional development must equip teachers with the skills and resources they need to explore and test new ideas and techniques. For this reason, the NC State program does not focus on technology training, but instead on advancing good teaching and learning practices. Effective programs help teachers bridge the gap between theory and practice and apply what they have learned on the job. Cohorts of teachers across districts then come together to examine what worked, what did not work, and to devise alternative solutions. Together, they develop best practices and formulate strategies that each team can bring back to its district.

Teachers learn the most by talking to and observing each other. They gain new insights to bring back to their classrooms. They can share this knowledge with district administrators, state leaders, and edtech companies who use the data to transform learning. “It has been invaluable to talk to other teachers,” says Coker. “Education has been isolated among districts for too long.”

“IT HAS BEEN INVALUABLE TO TALK TO OTHER TEACHERS.”
Chas Coker, Assistant Principal
Wando High School
Investing in teachers to drive personalized learning puts districts on a trajectory of success. To continue this momentum, district, state, and business leaders must leverage teachers’ insights to develop high-quality digital content with innovative embedded assessment models that generate real-time student analytics.

Digital content differs significantly from traditional instructional content. Not only is it more easily accessible, it is also flexible, easily-updated, and interactive. Students with connected digital devices, like Chromebooks or iPads, have infinite learning resources at their fingertips. Perhaps more critically, by combining digital content with embedded assessments, teachers gain access to detailed student data and analytics. Equipped with these insights, teachers can identify and immediately address learning problems as well as opportunities for acceleration. In other words, data can help teachers better target instruction based on each student’s needs and progress. In some cases, this may mean refocusing instruction on problem areas to help a student catch up. In other cases, it may mean accelerating instruction to keep learning relevant and rigorous for high-achieving learners.

Current state assessment models rely heavily on high-stakes testing—meaning that states use testing to make important decisions about students and educators alike. For example, the results of high-stakes tests may determine if students can advance to the next grade level or graduate from high school. They may contribute to tenure and pay-related decisions for teachers. They may trigger penalties for schools that do not meet state standards. High-stakes testing is problematic for a number of reasons, but especially because it does not provide teachers with real-time data to improve student learning.

The New Hampshire Department of Education became the nation’s first state to introduce an innovative assessment pilot program. The goal of the NH Performance Assessment of Competency Education (PACE) initiative is to replace standardized tests with assessments that are developed by teachers and personalized to students. PACE is guided by the belief that schools “should provide students with real opportunities to learn the knowledge, skills, and work-study practices necessary for all students to graduate from high school college-and-career ready.”

To achieve this, student assessment models should measure knowledge and skills in ways that allow for immediate feedback. Instead of testing for knowledge at the end of lessons, teachers
Current assessment models do not let students be all they can be.

Benny Lile, Superintendent, Metcalfe County Schools

Embed assessments in students’ daily work to generate real-time data about student performance. Teachers can then adjust instruction based on students’ incremental progress.

“We get so fixated on assessments that we don’t give students the opportunity to experience and grow,” suggests Benny Lile, Superintendent of Metcalfe County Schools. “Current assessment models do not let students be all they can be.” Embedded assessments let teachers see where kids are growing and struggling. New assessment models bring a wealth of data to teachers who can, in turn, offer students options and alternatives in learning. In New Hampshire, this means teachers are not rushing to get through the curriculum. Rather they can focus on students’ mastery of skills and competencies and create individualized plans that demonstrate student learning.

Digital content opens the door to a new world of teaching and learning. Teachers get the chance to incorporate high-quality content into their instructional plans that they think is most appropriate to each student. Their decisions will be informed data, metrics, and insights that were impossible before technology made personalized learning more possible.
Last, but certainly not least, technology infrastructure matters. Although technology alone cannot improve learning, it certainly enhances it. Simple devices, like Chromebooks connected to robust broadband, give teachers the power to “extend the school day and allow personalization to take place outside of school,” Moody says excitedly. Parents and students get access to digital devices at home that they otherwise might not have. This is a real chance to level the playing field. “Before technology, personalized learning was tough,” says Lile. “It was borderline impossible, even with the pedagogical knowledge.” Technology and high-speed broadband connectivity changes what teachers and students can do. States must focus on building out infrastructure to make sure that students are connected both inside and outside of school.

According to the State Educational Technology Directors Association (SETDA), technology and high-speed broadband access can truly make education more equitable. As part of its Broadband Imperative, SETDA suggests that learning experiences should mirror our personal lives. Technology has transformed the ways we live, work, and learn. To bring classrooms into the digital age, however, states and districts need to invest in the infrastructure needed to bring high-speed broadband access to all schools and students. High-speed broadband access matters because bandwidth availability ultimately determines what tools and resources teachers and students can use effectively in the classroom. Employing digital devices without a high-speed broadband connection is a recipe for failure.

Former North Carolina Governor Beverly Perdue believed that her state had a constitutional responsibility to provide a free and equitable public education to all. Convinced that technology could help fulfill this promise, Perdue convened a team of cross-sector, bipartisan partners to rethink the education system and develop innovative, sustainable education policies. The work of this team led to the state-funded expansion of technology infrastructure and unlimited bandwidth to 1.5 million students across 3,000 public and private schools. Connectivity is the foundation for this kind of change, particularly in rural and hard-to-serve areas.

One of the best places to begin is with the FCC’s E-rate program, which is designed to connect schools with modern internet access and services. Eligible schools can receive matched contributions from the federal government to build and maintain advanced telecommunications infrastructure. The long-term goal of the program is to reach at least 100 Gbps internet access per 1,000 student and staff users. Policymakers and school leaders need to act now to take advantage of the billions of federal dollars available to bring learning into the digital age.

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Teachers are already doing great things to create personalized learning experiences for students. But they need the support of district and state leaders to take their methods to the next level. By understanding what happens in the classroom, policymakers and the private sector are better positioned to support the needs of teachers across the country.

Districts need to invest in rigorous and meaningful professional development opportunities that give teachers the skills they need to explore new teaching practices without fear of failure. As part of this, teachers look for opportunities to collaborate with each other to share experiences and establish best practices for personalizing learning in a digital world. They look to district, state, and business leaders to provide useful tools, high-quality content, and innovative assessment models that will yield them real-time data and analytics about students’ performance and progress. With this information in hand, teachers continually adjust instruction to meet the needs and interests of students as they master new skills and competencies.

Without the appropriate technology infrastructure in place, schools and teachers will be hard-pressed to make sustainable changes to new teaching and learning strategies. Policymakers and district leaders must lead the charge to bring high-speed broadband access to all kids, in urban and rural areas, both inside and outside of school. District, state, and business leaders must prioritize these efforts to scale personalized learning in a digital world.

The key theme throughout is collaboration—the collective work of educators, administrators, business leaders, edtech entrepreneurs, and policymakers. This level of collaboration is key to creating innovative and sustainable education policies and initiatives. The digiLEARN Strategic Policy Playbook: Driving Innovation in Education for All Students is the first step in guiding state leaders through the process of transforming their own education ecosystems and realizing their own visions for the future of education.
REFERENCES


