Creating a Shared Understanding of Personalized Learning for Rhode Island

The RI Personalized Learning Initiative, launched in September 2016, is an iterative, open-access effort amongst a number of Rhode Island education entities. We hope families, educators, administrators, state and nonprofit leaders, researchers and the higher education community—and anyone else who believes in the potential of personalized learning—will participate with and support partners across the state in this effort. If you have ideas or projects that you would like to connect with the initiative, please reach out to innovate.info@innovate.ri.gov.
# TABLE OF CONTENTS

## FOREWORD
  Acknowledgements

## BACKGROUND

## WHY RHODE ISLAND?

## WHY PERSONALIZED LEARNING
  Values
  Goals

## DEFINING PERSONALIZED LEARNING
  What Is Personalized Learning?
  What Personalized Learning Is Not

## PERSONALIZED LEARNING COMPONENTS

## WHAT ROLE DO DIFFERENT STAKEHOLDERS PLAY IN PERSONALIZED LEARNING?
  Students
  Families
  Teachers
  School and District Leaders
  Educator Preparation Programs
  State Leaders

## WHERE DO WE GO FROM HERE?
  RI Personalized Learning Initiative: Overall Efforts
  Rhode Island Education Innovation Research Network: Action
  Research
  Districts, Schools, and Classrooms: Direct Innovation

## CONCLUSION
  Appendix A: Definitions of Personalized Learning
  Appendix B: Role of Technology for Personalization
Efforts to personalize education for Rhode Island’s students have been afoot in classrooms and schools across the state for some time. With this work underway and growing, the RI Office of Innovation, through the state’s education innovation cluster, EduvateRI, launched a Statewide Personalized Learning Initiative in the fall of 2016.

The first task of this Initiative was to create a shared understanding and definition of personalized learning (PL) in Rhode Island. During the summer and fall of 2016, the Rhode Island Office of Innovation and the Rhode Island Department of Education connected with over 40 key stakeholder organizations and individuals to provide feedback and recommendations on this definition.

Throughout this feedback process, a number of important themes emerged:

- Personalized learning is more than a pedagogy or a new curriculum, it marks a shift in the way we educate students. It encompasses a number of pedagogical methods and curricular choices as well as school cultures. As such, it is difficult to simplify personalized learning into a single, rigid definition. Still, we know that we need some grounding language to help us move forward. This is why the process of collecting and incorporating feedback for this white paper was particularly valuable and why the document will be useful for Rhode Island as we move forward in this effort.

- System-wide personalized learning is new to all involved in education. As such, educators and students must be supported in the transition to personalized learning through professional development, reliable data collection and showcasing, and school culture shifts—elements that are core to next steps for personalized learning. Further, parents...
and community leaders must also be supported as they engage in personalized learning models.

It is important that this paper is clear, easy to read, and free of jargon so that it is accessible to all audiences. If the description of personalized learning becomes dense and in the weeds, it will be less accessible to families and community members. Yet we know it cannot remain so broad that it is functionally meaningless. To balance simplicity with comprehensiveness, the paper will be accompanied by a website that houses additional, supplemental materials about personalized learning, including examples or case studies from Rhode Island schools engaged in personalized learning.

Personalized learning is an iterative effort and we cannot be so hubristic to think we have all the answers already. We have just begun the work of building a personalized educational system in Rhode Island and do not yet have every component figured out. Thus, it will be important to periodically revisit our shared understanding of personalized learning. It is also deeply important that we conduct ongoing, actionable research to determine and assess best practices as we engage in personalized learning.

Personalized learning is exciting and empowering—and offers an opportunity to help the amazing educators in our state even better engage with their students and strategically target their work toward students’ twenty-first century learning. Personalized should not be considered a cure for a broken school system, a “silver bullet,” or as a method to undercut the great work of our current educators and administrators.

Personalized learning can include a number of learning strategies, such as project-based and problem-based learning, blended learning, and applied or experiential learning. Each of the learning strategies are valued equally in personalized learning. Personalized learning is not defined by the use of technology. Technology is a tool to enable personalized learning, as it enables many other elements of twenty-first century learning, but should not be considered the crux or catalyst of personalized learning. There are many components of personalized learning that exist apart from technology, including inclusive and connected school culture, competency-based learning, community engagement, and experiential education.
Personalized learning has the power to increase educational equity and decrease opportunity and achievement gaps. To realize this potential, we need to keep a clear and keen focus on culturally relevant curricular materials and pedagogies, student agency and voice, and the needs of our diverse learners, including our students with disabilities and our English language learners.

This feedback has been invaluable in helping to frame and refine this paper, as well as to identify the further areas of needed discussion and research. We look forward to continued conversation and work to move Rhode Island toward a more personalized, student-centered educational system.

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Every day, students across Rhode Island arrive at school with their own unique strengths, experiences, and learning needs, which evolve throughout the school experience. Some students begin Kindergarten reading complete sentences while others are just learning the alphabet. Some may pick up algebra in a snap while others struggle with basic computation. Differences also exist in students’ interests and learning preferences. Some students prefer reading while others might opt for building and creating.

Yet our industrial-age model of schooling does not support individual needs and is becoming increasingly less productive as our economy and society change. Most classes are 20-30 students large, grouped by age with a single teacher, regardless of students’ academic level. This is true even in schools that providing some level of student choice or curriculum pathways. Students generally move together, working on the same learning activities in the same time, and progress to the next learning activity based on the curriculum schedule, not on evidence that they’ve mastered specific learning objectives. Students who are struggling to learn a particular concept must move on with the class, even if they aren’t ready. And students who already grasp a concept must wait for the rest of the group before they can begin to discover new ones.

Educators have long recognized the varying and constantly evolving needs of individual students, and have worked to find ways to meet these needs within the constraints of our existing school models. But working to differentiate instruction can often be complicated and challenging—even for experienced teachers: Too often educators aren’t given the right tools, like technology supports. And too often efforts to customize students’ learning experiences run against the grain of the traditional schooling model.
designed for efficiency and sameness. Out of necessity, sticking to the schedule often wins out over allowing every child to become proficient or even achieve mastery.

Together, we need to rethink our educational model so that it better supports the diversity of our student population and the unique needs of each student. In doing so, we can better ensure that all students are receiving the education they deserve and need in order to thrive in college, career, and life. This paper begins to outline what this new paradigm of education—called Personalized Learning—could look like in Rhode Island. It outlines the goals of Rhode Island’s statewide Personalized Learning Initiative and details what we mean (and don’t mean) by the term.

The paper draws on examples of innovative work already being undertaken in the state—covering a variety of personalized learning approaches ranging from deeper learning, social-emotional skill-building, and school choice to career pathways, more culturally relevant curricula and pedagogy, and blended learning. And it builds on them to offer an initial blueprint for how stakeholders at every level—including students, parents, educators, administrators, and state leaders—can support our state as the first in the nation to shift our educational system toward increased personalization for students.

While the potential for personalized learning is exciting, we caution against hailing it as a silver bullet. Personalized learning is a major effort to bring more engagement, rigor, agency, and individualization to students’ experience; it is not the next reform or a simple fix. There are also many unanswered questions about how personalized learning models are best designed and implemented. Our hope is to ignite a statewide conversation around personalized learning, support a series of pilots experimenting with different aspects of personalized learning, evaluate the efficacy of those pilots, and inspire more educators and administrators to discover new answers to these questions as we work toward an even stronger education system for our students.
WHY RHODE ISLAND?

Rhode Island is an optimal place to develop and pilot approaches for supporting personalized learning. Our small size enables collaboration across key stakeholders in ways that are more difficult in larger states. But Rhode Island is the right place for more than just its physical size. Across the state, we have leaders who are supportive of new approaches, including in education, government, nonprofit and industry. In addition, years of active conversation around elements of personalized learning have created the conditions to establish statewide models for personalized learning to support increased student engagement that continues to be grounded in rigorous expectations.

Further, there is already impressive work underway at the state, district, school, and classroom levels that make Rhode Island an ideal location to pilot personalized learning. Below are some examples of this work:

AT THE STATE LEVEL:

- In 2015, the Rhode Island Department of Education released a five-year strategic plan informed by over 11,000 families, educators, students, and community members. One of six priority focus areas of the plan is statewide personalized learning. RIDE is carrying this work forward through initiatives including open education resource adoption through #GoOpen and better understanding social and emotional competencies for high schoolers.
Rhode Island also recently adopted guidelines for student-centered learning in middle and high schools, including a requirement for every student to have an individual learning plan that reflects his or her academic, career and personal goals. The regulations also give students the ability to personalize their diplomas by earning optional Pathway Endorsements.

Rhode Island KIDS COUNT, a child-welfare policy-advocacy organization, has convened a Leadership Table of key stakeholders to share expertise and identify strategies for expanding personalized and student-centered learning statewide. They are making recommendations for how to clarify or amend state regulations to support broader implementation of student-centered learning.

AT THE DISTRICT AND SCHOOL LEVELS:

A number of districts across the state have also become leaders in specific elements of personalized learning, including competency-based approaches (Cumberland), deeper learning and twenty-first century skills (Barrington), blended and digital learning (Bristol-Warren, Central Falls, Johnston, Providence, Woonsocket), curriculum design (West Warwick), applied learning (Chariho), project-based learning (East Providence), and more.

The Enhanced Leadership Development Network, a group of district leaders convened by the Rhode Island School Superintendent Association and facilitated by the Center for Leadership and Educational Equity, have focused their discussions in 2016 on advancing personalized learning, including writing a vision for personalized learning (see Appendix A) and discussing district policies and partnerships to support educators.
• Highlander Institute, a RI-based education nonprofit, delivers a nationally recognized professional development program and supports communities of practice for educators and across all public school districts to develop and share learnings from implementing a variety of blended personalized models.

• Rhode Island Mayoral Academies, through its affiliated organization New England Basecamp, supports public schools across Rhode Island and New England in schools’ implementation of the Summit model of personalized learning.

Additionally, educators, nonprofit leaders and policymakers are coming together to share lessons learned and coordinate efforts across these initiatives at convenings like the RI EdTech Meetup, the Future Ready Summit, EduvateRI community of practice, and the annual Blended and Personalized Learning Conference.

While many of the individual pieces are in place, we need a common vision, clear blueprint, and broad and sustained engagement in order to fully recognize the potential of personalized learning for today’s students. Partners from across all parts of the education ecosystem must work together if we are to accelerate the adoption of personalized learning in Rhode Island. We believe we have a broad and aligned commitment and our hope is to develop and test the first statewide model for supporting personalized learning. In a sense, Rhode Island is a perfect “lab state” where educators and administrators are supported to develop, pilot, and grow new models for personalized learning, that can be shared across the country.

Finally, it is important to note that this paper is not an argument to mandate personalized learning. Personalized learning cannot and will not be successfully implemented unless districts, schools, teachers, and students want it to be. Mandating that districts adopt a specific approach to personalized learning—especially before they are ready—would be a mistake.
The world is changing—new career pathways are being developed as traditional ones are being replaced. Many of the jobs that our students will take when they graduate don’t even exist today. With these shifts come necessary alterations to our educational system, as we seek to ensure that all our students are prepared for college and the careers of the future. As a state, we ground our efforts in personalized learning around the following values and goals (as outlined in our Department of Education’s strategic plan featured as the PL resource on page 8):

**VALUES**

**Equity**
Rhode Islanders value equitable distribution of resources and opportunities based on the individual needs of every student to support a positive learning experience for all.

**Diversity**
Rhode Islanders value the role of culture and embrace the use of multiple knowledge bases preparing students, staff, and educators to become culturally competent and aware on a local, national, and global scale.

**Preparedness**
Rhode Islanders value a system that prepares every student for the cognitive, interpersonal, and personal demands of postsecondary education, career, and citizenship.

**Support**
Rhode Islanders value a culture of shared responsibility between educators, families, businesses, postsecondary institutions and the community partnering together to support all students.

**Autonomy**
Rhode Islanders value earned autonomy, empowering educators to make
timely decisions in response to developing student needs. Those who work most closely with students should have greater influence on the decisions that support students’ achievement.

**Personalization**
Rhode Islanders value individualized approaches to learning that provide every student with the opportunities for success.

**Safety**
Rhode Islanders value safe, healthy, and nurturing learning environments.

**GOALS**
Through a shift to personalized learning and broader education innovation, Rhode Island seeks to develop students and graduates who are ready for college, career, and life because they:

- Possess the social and emotional skills necessary to persevere through challenging circumstances, to work in partnership with others, and to develop a growth mindset;
- Possess ability to connect learned concepts and lessons across disciplines and the curiosity, creative-thinking, and problem-solving skills to seek out themes and connected contexts to reach solutions;
- Possess a deep content mastery across all core disciplines and student-chosen pathway disciplines;
- Are empowered to take ownership and be self-directed over their mastery of these essential academic content, think critically and solve complex problems, work collaboratively, communicate effectively, have an academic mindset, and be self-directed.
Defining Personalized Learning

What is Personalized Learning?

Personalized learning is a student-centered learning approach where learning experiences are tailored to meet the unique needs and ensure strong growth of each individual student on a real-time basis. Specific approaches of personalized learning are varied. For the purposes of the Statewide Personalized Learning Initiative, we use the following definition of personalized learning established by the US Department of Education and provide additional context throughout the rest of this paper:

Personalized learning is a student experience in which the pace of learning and the instructional approach are optimized for the needs of each learner. Standards-aligned 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.

In this definition, the pace of learning, sequence of learning objectives, instructional approach, and instructional content are all variable based on the needs of each student.
Pace of Learning

Pace of learning refers to the amount of time students are permitted to tackle a given learning objective before they “move on” to subsequent objectives or explore the current topics at a deeper level.

Learning Objectives

Learning objectives are specific learning goals a student is working towards, which are aligned to established learning standards.

Instructional Approach

Instructional approach refers to the learning activities, experiences, instructional groupings and resources used to support student mastery of learning objectives.

Throughout the learning process, educators and students take collective responsibility. Together, they work to customize learning experiences for each student based on ongoing measures of their needs, interests, and previous academic performance. With this real-time feedback and continuous monitoring of progress, teachers and students together ensure that students are on a trajectory to master both rigorous college-and career-ready standards and their own goals and aspirations.

This definition encompasses the major tenets of personalized learning but it is important to note that there are a variety of other definitions of personalized learning that all generally describe the same approach. Appendix A of this document provides a list of common definitions of personalized learning, how they differ, and how they overlap.

What Personalized Learning is Not

While defining personalized learning is key to the success of this new approach, it is also important to be in agreement about what personalized learning is not. There are many approaches that are often conflated with personalized learning. This is especially important as there are many educational approaches that are often conflated with personalized learning, including blended learning and other technology-centric models of learning.
For the purposes of the RI Personalized Learning Initiative:

**Personalized learning ≠ providing every student with a laptop or other device.** In a personalized learning model, access to technology is critical. It allows students and families to view learning progress in real time across disciplines and courses or other learning experiences. And it ensures more equitable access to high quality curricular materials. However, personalized learning models can be implemented in schools that do not have a device for every student, and simply giving students devices doesn’t ensure the regular feedback and customization required for personalized learning.

**Personalized learning ≠ learning in isolation.** Adaptive learning software, which automatically assigns learning activities to students based on their responses to assessments, might be a part of personalized learning. However, personalized learning doesn’t mean students sit in front of a computer all day. Instead there should be opportunities for collaborative engagements with teachers and other students.

**Personalized learning ≠ blended learning.** Blended learning means using a combination of face to face and online learning opportunities as appropriate. While many elements of personalized learning may also be blended, simply providing a student with online and face to face learning opportunities does not ensure that those learning opportunities are tailored to their needs, interests, and strengths.

**Personalized learning ≠ memorize and forget.** One goal of personalized learning is student mastery of rigorous standards. This requires more than one-off or quick assessments of narrow sets of learning objectives. While formative assessments are a key part of personalized learning, students also need to practice, apply, and use their knowledge and skills in real-world applications that measure learning over time and in integrated ways.

See Appendix B for more on the role of technology in personalized learning.
As stated above, there is no single instructional model, curriculum, approach, or platform to support personalized learning. That said, all personalized learning generally follows the same broad cycle:

1. Engaging a student in a learning activity
2. Measuring their performance
3. Interpreting student data
4. Adapting the learning experience based on the data

This cycle may happen multiple times a day for any given student, depending on the scope of the learning experience.

Within this broad cycle, there are elements of successful personalized learning that tend to be present across implementations. The following list is informed by frameworks developed by many local and national partners and based on successful implementations of personalized learning across the US.
DIFFERENTIATED LEARNING ACTIVITIES

Learning activities and other interventions are selected based on student needs. For example, students might be provided with options for a variety of ways to learn a new concept based on their interests or their reading level.

Example:
During a seventh-grade math unit, students are asked to demonstrate that they understand ratios. To do so, students can opt to solve a problem set on ratios, play an online game like Ratio Rumble, or change the batch size of cookie recipes.

LEARNER PROFILES

Optimizing the learning experience for mastery and success for each student requires starting with an understanding of the needs, strengths, and interests of each student. These needs, goals and interests are not static, so learner profiles or Individual Learning Plans (ILPs), need to be regularly revisited and updated. Learning profiles can target closing learning gaps, support students to explore learning objectives at a deeper level or at an accelerated path, and help students plan for post-secondary school or career.

Example:
Fourth-grade students take a formative assessment and complete an interest survey and goal setting game with other students at the beginning of the school year. This information is stored in a personalized learning management system to inform both teacher and student choices about learning and is updated periodically as student interests grow and change.

MASTERY-BASED PROGRESSION

In a personalized-learning model, students move onto the next objective or delve more deeply into the current objective when they can demonstrate mastery, not based on the amount of time they have spent on a particular learning activity. If they haven’t demonstrated mastery, they are provided with other supports and activities to develop competency before moving on.

Example:
An English teacher completes a lesson on analyzing symbols using the book Holes. While students write a literary analysis, the teacher notices that five students did not master the objective. Those five students receive additional and immediate instruction analyzing symbols using alternative texts until they can demonstrate mastery. Others who have shown that they understand the concept will work on another objective and/or go deeper on the concept to better understand how symbols can be used across text types or in connection with other literary devices.
ONGOING FORMATIVE ASSESSMENT

Personalized learning depends on having near real time data on student performance. This requires ongoing formative assessment of students’ progress to inform students and teachers when making choices about next steps, and to give frequent, immediate feedback to students. Formative assessments may be short written assessments, reviews of student work in progress, based on conferences or even peer-student observations.

Example:
As students complete a lesson on the battle of Antietam during the Civil War, they complete a five-question quiz to check for understanding. Based on these data, the teacher and student can develop a learning plan for the next day’s activities, potentially through automated content recommendations online. These could include opportunities for additional practice for those who haven’t yet mastered the objective.

FLEXIBLE LEARNING ENVIRONMENT

In personalized learning models there is flexibility of groupings, time, and locations that also include learning outside the school walls. Students may have the opportunity to work independently, in small groups, in one-on-one tutoring, and larger groups throughout a single day.

Example:
Students in a high school economics class receive the challenge to create a company that functions given a certain budget. Students’ time is split between independent work time to master learning objectives around financial modeling which they complete in a lab station in the room, small group time when the teacher is supporting students who as they master the learning objective and group work time to progress in their projects. After school hours, the group can continue to work collaboratively online using a shared doc or meet in person with local business owners to get their opinions on the business plan.
STUDENT CHOICE AND AGENCY

Students in personalized learning models exercise control over their learning experience. For example, they may be given an opportunity to select how they want to demonstrate mastery or choose to explore a topic at a deeper level. Teachers construct environments where students are given agency over some aspects of their learning depending on their readiness to self-guide their learning, and support students to practice habits of success so they can increasingly monitor their own progress.

Example:
A Kindergarten class is engaged in an interdisciplinary project on transportation. Each student is able to choose their favorite mode of transportation and use that as the subject in their nonfiction writing practice, art projects, and basic physics lessons.

AUTHENTIC/APPLIED LEARNING

Personalized learning allows for students to deeply engage with the content they are learning, both to achieve mastery and also to understand how the content connects to different areas of their existing knowledge and how to apply it in different contexts. This allows for critical thinking, problem-solving, application of knowledge in various contexts.

Example:
A high school drama class is studying the play Copenhagen; through work in the students’ physics classes, they are able to more deeply understand the play’s implications and through time learning in a lab or makerspace they are able to model atomic experimentation. They can then create a modern version of the play, given the most recent findings in atomic experimentation and invite members of the science and humanities communities to view their production and offer critique.

TECHNOLOGY ENABLED

Teachers work hard to differentiate teaching for each of their individual students, but the limitations of a teacher’s time mean they cannot simultaneously be all-
knowing of every student’s evolving competencies and interests. New technologies provide teachers with the ability to quickly see the progress of each student curate digital resources, and formative assessments that let them recognize student progress and differentiate follow up, and provide a framework to move students through curriculum.

Example:
A teacher logs into the dashboard of a personalized learning management system to quickly see how every student is performing. Based on their progress, she creates several playlists—collections of online resources for students to choose from—for a lesson on gravity. The teacher includes videos on rollercoasters and an exploration of gravity in the solar system as well as a link to a simulation recommended by the learning management system (LMS) based on the resources the teacher selected. The teacher also creates an online assessment on gravity. As the students participate in the activities, the teacher can monitor their progress and modify the playlists and in-class activities appropriately.

TEACHER FACILITATED

While technology enables personalization to be iterative and on-demand, it cannot be a substitute for great teaching and the deep relationships teachers build with their students. In personalized learning, the role of the teacher is indispensable to select high quality content; design students’ pathways through the material; adapt and remediate based on students’ progress; and support students to develop habits of success and a joyful, rigorous, and safe classroom environment. It allows for educators to move to a coach, mentor, and facilitator of students’ learning journeys.

Example:
A classroom teacher assigns video lectures and reading materials as homework for the next day’s lessons. This gives the teacher time to work with students in small groups and facilitate student-owned learning during face-to-face classroom time. If the videos are accompanied by a short online check-for-understanding assessment, then the teacher can even target and assign small groups based on levels of understanding and interest.

The Learning Accelerator offers a set of strategies to implement personalization across four major themes: Differentiation, Student Choice and Agency, Flexible Resource Allocation, and Support for Self-Directed Learning. Their work also includes examples of these strategies through case studies and videos.
WHAT ROLE DO DIFFERENT STAKEHOLDERS PLAY IN PERSONALIZED LEARNING?

Personalized learning changes the roles of students, families, teachers, school and district leaders, and the institutions that support them like state governments and teacher preparation programs. In Rhode Island, supporting personalized learning pilots and best-practice sharing across the state will not happen overnight and will require intentional actions and behavior changes from all stakeholders. The following are some of the changes necessary for personalized learning to thrive.

STUDENTS

In personalized learning, students take on an active role in designing, monitoring, and ensuring success of their learning experience. In this environment, engaged students:

- Are active participants in defining their strengths, needs, and interests.
- Are co-designers of their learning plans.
- Take ownership over monitoring their progression through learning activities, identifying when to ask for help, and when they’re ready to demonstrate mastery.
- Make choices about what content to learn when, or what type of learning experience they want to engage in to practice a skill or demonstrate mastery.
- Communicate with teachers about their learner plan and how to strengthen it.
- Build long-term self-regulation skills to keep themselves on-track for learning because of their increased autonomy.

FAMILIES

In a personalized learning model, families have an enhanced role and involvement in students’ experience. Families see children as individuals
with unique needs, interests, goals, strengths and weaknesses. In this type of environment, engaged families:

- Are involved in determining students’ needs, goals, and interests, and in developing a student’s personalized learning plan.
- Receive real-time updates on students’ progress and evolving strengths and areas of growth, interests, and needs, and their corresponding evolving learning plan.
- Have the resources and support to monitor their students’ progress in-person and/or virtually, in ways that work best for their schedule and preferences.

**TEACHERS**

Teachers recognize that a one-size-fits-all instructional model is inequitable and not aligned with the educational needs and rights of individual students. Today, teachers have a new ability to leverage technology and new instructional models to tailor learning to each students’ needs. In this type of environment, successful teachers should:

- Put great emphasis on developing meaningful relationships with students in order to maintain an understanding of each students’ interests, needs, and goals required to design personalized instruction.
- Spend more time facilitating learning than attempting to deliver all content themselves.
- Use regular formative assessments to track student progress regularly and provide frequent, immediate feedback and differentiate based on student level.
- Curate high-quality, culturally relevant learning resources to develop curriculum pathways for students, personalized by student level, need, and interest.
- Access new types of professional development that acknowledge their individual needs, and support them to develop new skills.
- Provide opportunities for application of learning and transfer of skills.

The [Next Generation Learning Challenges site](https://example.com) provides multiple case studies of personalized learning, and a framework for personalized learning in school design.
School and District Leaders

School and district leaders implementing personalized learning models must create the environment and structure where teachers are supported in tailoring instruction to individual learners. This is hard, slow work, and requires leaders to think strategically about their evolving roles in facilitating this type of learning. In this type of environment, school and district leaders should:

• Communicate with families and the community around the need to personalize learning, and the process the school or district is undergoing to implement this model.

• Foster a culture that supports personalized learning, including allowing for iteration of ideas, teacher development, and leadership capacity.

• Ensure that appropriate technology tools, technical infrastructure, and schoolwide and classroom routines are in place to reduce the burden on teachers as they personalize learning. This includes vetting and selecting personalized learning systems, devices, and other technology, and ensuring access to high quality content and assessments.

• Provide the onboarding supports teachers need to implement new systems ensure appropriate professional learning opportunities exist for their teachers, and provide opportunities for informal collaboration to share best practices across teachers and buildings.

• Design new staffing models as needed to support a flexible learning environment.

• Align operational choices to their personalized learning instructional model, including modifying school schedule, physical layout, and data sharing procedures.

RIDE provides a set of resources for leaders implementing change management processes.

District leaders can use the “Future Ready” Dashboard to track their progress toward implementing personalized learning, including assessing “digital readiness” and creating a customized strategic plan for their district.

Want to hear from educators and administrators implementing personalized learning models? Check out this video library from the US Department of Education Office of Education Technology about personalized learning and professional development.
EDUCATOR PREPARATION PROGRAMS

Teachers’ evolving role in a personalized learning model demands new training and support. Teacher preparation programs should be at the forefront of providing preservice teachers with experiences to prepare them for success in personalized learning environments. Educator preparation program should:

- Identify field placements for student teachers at schools and districts where they can experience personalized learning environments and practice relevant instructional strategies.
- Identify new competencies that teachers need to support personalized learning, and update curricula to align with these competencies.
- Provide exposure for preservice teachers to a variety of technology tools and systems available to personalize learning.
- Model personalized learning experiences for teachers by designing experiences for preservice and in-service teachers that incorporate choice and individual needs.
STATE LEADERS

To implement the RI personalized learning pilot, the state would need to do the following:

- Highlight examples and case studies of the different models statewide to share best practices and demonstrate multiple models in action.
- Foster the connections within a state-level ecosystem of nonprofit organizations, teacher preparation institutions and schools and districts.
- Clarify for schools how they can deliver personalized models within the existing regulations, including the new secondary school regulations.
- Develop appropriate funding streams to support the technology needed for personalized learning.
- Leverage the state accreditation process to hold teacher prep institutions accountable to including opportunities for preservice teachers to experience teaching in personalized learning environments.
- Develop a shared library of education resources, including culturally relevant content.
- Dedicate human capital resources to personalized learning, largely to ensure that state leaders are versed in personalized learning and to support coordination of statewide initiatives and locally led efforts.
- Track outcomes for a variety of personalized learning models across the state.
This white paper is meant to offer a vision for personalized learning and the role that all stakeholders play in the process of realizing that vision. It is not meant to be an implementation plan, though we know that strong implementation is key to realizing the vision described in this paper. We also know that implementing personalized learning requires time, iteration, and the active engagement of a number of varied stakeholders. To that end, we identify three veins of work that are underway in Rhode Island as we work to move toward a more personalized educational model. The first is for the Rhode Island Personalized Learning Initiative.

**RI PERSONALIZED LEARNING INITIATIVE: OVERALL EFFORTS**

During the 2016–17 school year, the Office of Innovation and members of EduvateRI have already or will:

**SEPTEMBER 2016**

Launch a statewide personalized learning initiative with a coalition of partners fully committed to developing the technology, training, and support needed for schools and districts to pilot and implement personalized learning models.

**SEPTEMBER 2016–JUNE 2017**

Identify personalized learning management tools; provide teachers and districts with use of these tools to conduct pilot implementations as well as professional development support as educators begin to utilize them to support personalization. Reviews of personalized learning management tools are available at [EduvateRI.org/PersonalizedLearningPlatforms](http://EduvateRI.org/PersonalizedLearningPlatforms). Tools can be suggested for review by filling out this [form](http://form).
SEPTEMBER 2016-JUNE 2017

Continue to support educators, schools, and districts engaging in a personalized learning model through sustained coaching, mentorship, peer connections, and professional development. This includes working with schools as they design and prototype their new models of learning and strategize around the change management needed to bring them to life.

JANUARY 2017

Release a white paper with input from stakeholders across the state defining what personalized learning looks like in action so that schools, educators, families, and students can have a starting point for discussing and developing new instructional models that meet students’ unique needs. This paper acts as our initial effort to create a shared understanding of personalized learning.

JANUARY-JUNE 2017

Convene local and national education researchers in partnership with The Collaborative, creating a Rhode Island Education Research Network (RI-ERN) to engage in rapid-cycle research agenda for personalized learning; begin to engage in and share findings from this work.

AUGUST 2017

Reconvene, through Rhode Island’s education innovation cluster, EduvateRI, to reassess and further refine our shared understanding of personalized learning as well as shape the work to be done through the Initiative in 2017–18.

We invite families, educators, administrators, state and nonprofit leaders, and anyone else who believes in the promise of personalized learning to engage in these next steps or propose others. If you have ideas or projects that you would like to connect with the initiative, please reach out to innovate.info@innovate.ri.gov.
Personalized learning holds promise to increase student learning, engagement, and agency by tailoring learning to students’ needs, strengths, and interests. And while there has been some strong research around elements of personalized learning from AIR, RAND, Gates, the US Department of Education, and others that we must build off of when engaging in action research around personalized learning, many questions are still unanswered. We have much to learn collectively about how to implement personalized learning and the best practices for this new model.

With the Rhode Island Education Research Network, we hope to gain further clarity on the specific best practices around elements of personalized learning, including classroom practices, school and system practices, and how to most smoothly shift from the current educational model to a personalized model. These are a few of the key questions we hope we can answer as a community.

What supports do educators need to be successful in personalized learning environments? To help transition to personalized learning? Personalized learning models require teachers to develop new skills or amplify existing ones. In these evolved roles, we don’t yet know what training and ongoing support structures for educators (both teachers and administrators) will work best. Teacher preparation programs, as well as partner nonprofits, schools, districts, and the state may need to develop new models for what this support looks like.
How do different content areas and grade levels most effectively implement personalized learning? How can content mastery be captured across disciplines?

Across content areas, personalized learning models may vary significantly. Helping students understand the causes of WWII may look very different than supporting their completion of a science lab. Further, students may be able to demonstrate mastery one content area through another (think: showing knowledge of algebra through a science lab). What’s more, students’ developmental needs also vary dramatically from elementary through secondary school. These needs will demand very different personalized learning structures. The goal of tailoring instruction to students’ needs remains the same, but the models that work best will likely vary as will the ways that we track mastery across disciplines while maintaining high levels of rigor. We need educators and administrators to lead the way in establishing best practices on what types of efforts and platforms work for different situations. Further, we need to investigate the appropriate levels of scaffolding teachers should provide students of various ages and maturity levels for productive learner-driven inquiry.

How does personalized learning function to close achievement gaps, increase access to culturally relevant learning, and promote equity and inclusion? How do we define success to this end?

Personalized learning allows students to encounter academic material at their level and to proceed at their own pace. Ideally, this allows students to remediate previous gaps in learning and engage with new content when ready. Ideally, it also helps students access content and curricular materials that are relevant to them. Research will need to be able to track if and how this new model of learning is succeeding in these aims.

How does personalized learning function to ignite deeper thinking? How do personalized learning models support non-cognitive learning? How do we define success amongst these efforts in a personalized learning model?

While students progress at their own pace to reach mastery of learning objectives, there is also much to learn about how students in personalized learning models explore topics at a greater depth; develop soft skills like collaboration, problem-solving, critical thinking, and grit; and measure and assess these competencies. Schools and districts implementing these models will pave the way in demonstrating how deeper thinking strategies like project based learning and real-world, out-of-school application can be incorporated into personalized learning models.
How does the role of the teacher change in a personalized learning model? What does human interaction look like given students’ use of technology in a personalized learning model?

We know that personalized learning will necessarily be supported by technology. As we bring technology more deeply into our schools, in varying ways, how are the roles of the teacher potentially shifting and which shifts best support the work of preparing students for success in college and career? What new roles for teachers must be created and how can we balance those with already heavy workloads (e.g., teacher as data collector and analyst, teacher as technology facilitator)? What is the necessary balance or level of face-to-face interaction between teacher and student in a blended, project-based, or student-led model? How do we design learning contexts that increase motivation, engagement, and sense of belonging for teachers and students?

How does a shift toward personalized learning effect and strengthen the school social community?

We know that school is often the central social institution and community base of a town. Shifting toward personalized learning will alter the standard institution of school and thus the social structure it has historically created. District, school and community leaders, as well as families, will need to think about what elements of a school’s social fabric are most important and how a community’s broader connection to student learning can strengthen a town’s sense of community through education. Specifically, we need to think about: What is the role of families and the community in a personalized learning model? What is the role of extracurricular activities as interdisciplinary and project-based schooling takes form? What does shared accountability look like in a personalized learning model? How might we characterize the nature of human relationships in the context of digital tools, texts, learning platforms and inquiry-based practices?

What system shifts need to be considered when moving to a personalized learning model?

Personalized learning cannot be something that we move toward in one day or even one year. It must be a deliberate and thoughtful shift with strong change management processes in place throughout, even as those moving toward personalized learning iterate on what works best. What is the “change management” cycle that is most effective for helping schools and systems shift to personalized learning? What does accountability look like during the interim shift period? How does this work within adaptive learning systems? What types of research designs and instruments will best help us measure and track the things we are most interested in?
DISTRICTS, SCHOOLS, AND CLASSROOMS: DIRECT INNOVATION

Along with efforts undertaken at the state level, school-level and district-level work is critical toward the smart implementation of personalized learning. Indeed, many schools and districts in Rhode Island already have components of personalized learning built into their instructional models. Those who do can continue and strengthen these efforts. Those who do not yet have elements of personalized learning can begin to move toward a personalized model by beginning to realign instructional and operational structures around the ultimate goal of tailoring educational experiences to each students’ needs and interests. It is important that schools continue to move along their own personalized learning spectrum over time. This progression offers an example for how schools in Rhode Island may move toward personalized learning, though every school’s approach may look different.

BUILDING A FOUNDATION

- Create a school-based vision for personalized learning
- Build infrastructure (technology, culture, time) to track students’ individual strengths, weaknesses, needs, interests, and goals
- Choose tools (platforms, LMSs, resources) that will support personalized learning

PILOTING

- Select a pilot group (teachers, a grade-level team, or part of a school) to implement personalized learning, including changes to schedule, staffing, and infrastructure
- Create mechanisms for students to have some agency over what, when, how, and where they are learning as well as how they are demonstrating mastery
- Track the successes and failures of the pilot in real-time and iterate as it progresses

ITERATING

- Create a plan for expanding pilot efforts, including support for staff members shifting to a personalized model as well as family engagement and messaging around PL
- Identify additional school or system shifts that must happen to enable broad personalized learning adoption (school culture, infrastructure, schedule, staffing)
Barbara Bray and Kathleen McClaskey’s *Stages of Personalized Learning Environments* (v. 5) describes three stages of personalized learning (teacher-centered, learner-centered, learner-driven) that help characterize elements of an increasingly personalized model of learning.

The Highlander Institute offers a progression for schools incorporating blended learning into their instructional model in their School District 2.0 report.

The New England Secondary School Consortium offers a set of best practices for schools to self-asses and benchmark themselves against. “Personalization and Relevance” is the second dimension of their Teaching and Learning Strand.
CONCLUSION

Personalized learning is not the next educational fad. Nor is it a set of top-down regulations or reforms. It marks a paradigm shift in the way that we teach and ask students to learn—one that realigns our educational model to the diverse and global world of the twenty-first century. And in Rhode Island, especially, our classroom teachers, instructional coaches, and school and district leaders have catalyzed its growth.

The Statewide Personalized Learning Initiative was launched by EduvateRI and the RI Office of Innovation to support these selfsame educators and their colleagues in the iterative work of bringing personalized learning to our schools and districts across Rhode Island. Through this Initiative, we’ll help to pilot new PL models; share what’s working across district borders; engage families, communities, and state leaders in the process of growth; evaluate and help refine our collective efforts; and continue to celebrate the amazing work of our current educators.

We don’t have all the answers yet. Indeed, in education, we never will. But we are excited about the work ahead and the path toward innovation that Rhode Island is on.
APPENDIX A: DEFINITIONS OF PERSONALIZED LEARNING

There are a variety of definitions of personalized learning currently in use. This appendix provides the most commonly used definitions as well as comments highlighting the similarities or differences among the definitions. As seen below, key phrases are seen throughout most definitions.

Legend
- Competency-based progression
- Student needs
- Standards-aligned
- Student interests
- Socially embedded
- Formative assessments
- Flexible learning environments

U.S. Department of Education - Personalized Learning Definition:

Personalized learning is a student experience where the pace of learning and the instructional approach are optimized for the needs of each student. Standards-aligned learning objectives, instructional approaches, and instructional content (and its sequencing) may all vary based on learner needs and interests. Learning activities are meaningful and relevant to learners, driven by their interests and past performance and are often self-initiated or self-selected.

KnowledgeWorks - Personalized Learning Components:¹

- Instruction is aligned to rigorous college- and career-ready standards and the social and emotional skills students need to be successful in college and career.
- Instruction is customized, allowing each student to design learning experiences aligned to his or her interests.
- The pace of instruction is varied based on individual student needs, allowing students to accelerate or take additional time based on their level of mastery.
- Educators use data from formative assessments and student...
• feedback in real-time to differentiate instruction and provide robust supports and interventions so that every student remains on track to graduation.

LEAP Innovations - Learning Framework:

“The fundamental elements of personalized learning” are:

• Learner Focused: Empower learners to understand their needs, strengths, interests, and approaches to learning.
• Learner Demonstrated: Enable learners to progress at their own pace based on demonstrated competencies.
• Learner Led: Entrust learners to take ownership of their learning.
• Learner Connected: Anytime, Anywhere, and Socially Embedded: Learning transcends location in relevant and valued ways, connected to families, communities, and caring networks.”

Nellie Mae Education Foundation—Student-Centered Learning Components:

“Student-centered learning comprises four parts, of which personalization is one:

• Learning is Personalized: Personalized learning recognizes that students engage in different ways and in different places. Students benefit from individually-paced, targeted learning tasks that start from where the student is, formatively assess existing skills and knowledge, and address the student’s needs and interests.
• Learning is Competency-Based: Students move ahead when they have demonstrated mastery of content, not when they’ve reached a certain birthday or endured the required hours in a classroom.
• Learning Happens Anytime, Anywhere: Learning takes place beyond the traditional school day, and even the school year. The school’s walls are permeable—learning is not restricted to the classroom.
• Students Take Ownership Over Their Learning: Student-centered learning engages students in their own success—and incorporates their interests and skills into the learning process. Students support each others’ progress and celebrate success.”
iNACOL—Personalized Learning Definition:

“Tailoring learning for each student’s strengths, needs and interests—including enabling student voice and choice in what, how, when and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible.”

Gates Foundation and other philanthropies and partners – Personalized Learning Components:

- Competency-based progression
- Flexible learning environments
- Personal learning paths
- Learner profiles

Next Generation Learning Challenges—Personalized Learning Definition:

Approaches that individualize learning for each student based on specific strengths and needs, student interests, and/or individualized goals.

Great Schools Partnership (Ed Reform Glossary)—Personalized Learning Definition:

“The term personalized learning, or personalization, refers to a diverse variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students.”

Education Reimagined—Personalized Learning Components:

- Competency-based
- Personalized, relevant, and contextualized
- Learner agency
- Socially-embedded
- Open-walled
Enhanced Leadership Development Network (ELDN)—Personalized Learning Vision:9
“Educators take collective ownership to customize individualized learning experiences that empower all students to be self-aware and to maximize their opportunities to realize rigorous goals and aspirations, become socially and emotionally competent, and master college and career-ready standards.”

William and Flora Hewlett Foundation—Deeper Learning Competencies:10
“Master core academic content, think critically and solve complex problems, communicate effectively, work collaboratively, learn how to learn, develop academic mindsets.”

Note: This is by no means an exhaustive list of the definitions used for personalized or student-centered learning. It is meant to be a representative sample of some of the widely used definitions available to offer a comparison and to be able to showcase the strong linkages and overlaps between them all.
Technology has become ubiquitous in our society and it is no different in education. Education in the twenty-first century regularly utilizes technology for managing student data, quickly providing students with feedback, facilitating communication with families, and much more. Similarly, technology is a tool that can make all aspects of personalized learning—deeper learning, project-based learning, student voice and choice, culturally relevant curriculum and more—easier to implement and manage at scale.

New technologies are beginning to emerge that can help the promise of redefining the one-size-fits-all schooling model. These tools are designed to support teachers in providing and managing personalized learning plans for every student on a daily basis. These personalized learning management tools support teachers and schools in the following way:

**CREATING, ASSIGNING, AND SHARING LEARNING MATERIALS AND PLAYLISTS**

Teachers in personalized learning environments may need the resources for dozens of lesson plans given students’ needs, instead of a single lesson for the full class. Personalized learning management tools give educators access to digital content and the ability to create and modify learning activity sequences, providing choices or different learning activities for individual students to participate in as they work towards mastery of learning objectives. This may include creating playlists that bring together learning materials and allow students to progress at their own pace. Tools that enable teachers to share learning activities and playlists can save time and encourage collaboration.

**ASSESSING LEARNING**

Tailoring learning to student needs requires regularly assessing students’ learning progress and needs, formally or informally, and matching the most appropriate learning opportunity in response to those needs.
VISUALIZING DATA

Personalized learning management tools allow for a variety of options to visualize student performance. Data can come from a variety of sources—formative assessments delivered through the personalized learning tool itself, data from computer-adaptive learning systems, state assessment results, district benchmark exams, and other measures of student performance. Personalized learning management tools help teachers, students, and parents visualize this data in meaningful, actionable ways that make it easier to make decisions on how to respond to student progress at an individual or group level, and provide students feedback and recommendations based on how they are progressing.

Many of the tools to support personalized learning are still in their infancy and need to be piloted and tested more broadly. When selecting technologies to support personalized learning, administrators and educators should think carefully about how the tools support their vision for personalized learning. Some key questions school leaders may want to consider when selecting personalized learning management tools are:

**PROFESSIONAL DEVELOPMENT**

- Are there learning opportunities to help teachers use the personalized learning management tools effectively?
- Are there different ways to manage and do PD that are more beneficial to educators and students? What PD opportunities are already available?

**ONGOING SUPPORT**

- Is technical or user support available when users encounter technical problems or have questions about using the tool?
- Is there a process for educators and students to provide feedback to improve a tool?

**TECHNICAL REQUIREMENTS**

- Are there certain devices or software that are necessary to support a particular personalized learning management tool? Is the tool compatible with other technologies that may already be in use?

Technology providers and schools should work together to ensure data will be kept securely and that privacy will be strictly protected, as required by FERPA, COPPA, and any other relevant state or federal policies.
A key element of the RI Personalized Learning Initiative is identifying and piloting tools that support teachers in personalizing learning. As such a variety of tools to support personalized learning will be made available to schools participating in the personalized learning initiative. For more information about the available tools and training opportunities are available at www.eduvateri.org.

Student data usage and data privacy are often major points of question and concern for districts. To help guide districts in navigating these issues are a number of resources including:

- The US Department of Education’s Privacy Technical Assistance Center (PTAC) is a “one-stop” resource for answering questions and addressing concerns related to privacy, confidentiality, and security practices.
- The Data Quality Campaign offers student data principles as well as recommendations for schools, districts, and states around around four action issues: data systems that work, strong teachers and leaders, empowering families and communities, and safeguarding data.
- Common Sense Media offers privacy information on leading ed-tech tools, helping districts make informed decisions about the technologies they adopt.

Rhode Island is among one of nineteen #GoOpen states in the country, working to expand access to quality, curated, and culturally relevant open licensed educational resources for teachers and students. These resources are available free of charge. The state’s Instructional Support System is one such repository. Additional repositories that support educators and administrators to find personalized learning technology tools include:

- The Illinois Department of Education has created a repository of curated learning resources.
- Open Up Resources, a nonprofit working in collaboration with eleven states, Achieve, Student Achievement Partners, UnboundEd, and others, has created open-licensed math curricula for grades six through eight.
- Open Ed, owned by the ACT, offers a large resource library of free online educational materials.

Through GoOpen, the Rhode Island Department of Education, local districts, and partners are identifying and vetting additional resource repositories as well. Districts interested in helping to vet resources or get connected with additional pilot repositories being created should reach out to the Office of Innovation at innovate.info@innovate.ri.gov.
The RI Personalized Learning Initiative, launched in September 2016, is an iterative, open-access effort amongst a number of Rhode Island education entities. We hope families, educators, administrators, state and nonprofit leaders, researchers and the higher education community—and anyone else who believes in the potential of personalized learning—will participate with and support partners across the state in this effort. If you have ideas or projects that you would like to connect with the initiative, please reach out to innovate.info@innovate.ri.gov.