Across the country, there is a growing movement to personalize learning and tailor education to the needs of individual students. Research suggests that differentiating instruction with authentic and personally relevant content can increase student ownership, engagement, and agency. In turn, these efforts open up opportunities for students to engage more deeply with content that interests them and to practice applying what they learn beyond the classroom.

In 2016, Rhode Island launched a statewide initiative committed to moving toward this goal of personalized learning (PL) for all students. The initiative focuses on how educators can tailor the pace of learning, learning objectives, and instructional approaches to the strengths and needs of each student. Teachers can also leverage new technologies and techniques that further expand their ability to customize learning for each student.

There are still many questions about how personalized learning can work best for Rhode Island students and educators – in part because it looks different from classroom to classroom and student to student. Though the state has come together around a shared
understanding of the concept, detailed in the Rhode Island Shared Understanding of Personalized Learning White Paper, it can still be challenging for students, parents, educators, policymakers, and the general public to understand what personalized learning is and how teachers can integrate personalized learning practices effectively.

In order to learn more about how it works in practice, this research explores how teachers facilitate personalized learning in eight middle school classrooms in Rhode Island. We find that teachers are implementing personalized learning practices in a number of ways, but there are still many areas in which to strengthen and expand personalized learning in the state’s schools.

Research Questions

To better understand how personalized learning is implemented in Rhode Island schools, this research explores the following questions:

· How do teachers and students act and interact as they use digital resources and learning platforms in urban middle school classrooms?

· How do teachers perceive the process of designing and implementing lessons as well as using technology in personalized learning?

· How do students perceive teaching and the use of technology to tailor learning in their classrooms?

Research Methods

This research was conducted in two urban/urban ring middle schools in Rhode Island. Both schools have been working to integrate personalized learning into their curricula, one using the Summit Learning (SL) program and the other using a Blended Learning (BL) approach.

We recruited four teachers in each school who reported implementing personalized learning practices in their classrooms. Our sample included one sixth-grade teacher and three eighth-grade teachers at each school. Collectively, the eight teachers represent five women and three men, with teaching experience ranging from 4 years to 28 years. Each of the core academic subject areas is represented: English language arts, history, math, and science.

To understand how these teachers implement personalized learning in their classrooms, we conducted the following research activities:

· Three classroom observations per teacher, each lasting for one instructional lesson;

· One face-to-face interview with each teacher;

· An online survey of each teacher; and
A survey of 356 students who spent at least one class a day with one of the teachers.

Overview of Findings

To evaluate whether and how teachers were implementing personalized learning practices in their classrooms, we used two popular frameworks for understanding and analyzing personalized learning: Digital Didactic Designs (DDD) and the Personalized Learning (PL) framework developed by the Better Lesson Continuum. We chose these two frameworks to explore multiple elements of personalized learning – not only how technology enables PL, but also the role of teaching goals, relationships, and assessment (among other dimensions listed in Figure 1) and how teachers design authentic learning practices, classroom culture, and flexible instructional formats (and other dimensions listed in Figure 2) to personalize learning. Our findings situate the role of technology within these broader frameworks to help better understand the range of ways that teachers are engaging in PL practices in their classrooms.

Figure 1. The Five Elements of Digital Didactic Designs (DDD)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Teaching goals and intended learning outcomes</td>
<td>Teaching goals and intended learning outcomes are clear and visible for students. The teacher communicates relevant learning criteria so that students know how to make progress in their learning.</td>
</tr>
<tr>
<td>Learning activities</td>
<td>Learning involves a variety of meaningful learning activities or assignments that help students achieve the intended learning outcomes.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Assessment is a process of feedback and evaluation that allows students to receive guided reflections within the learning process about their performance and skills development.</td>
</tr>
<tr>
<td>Multiple social roles and relationships</td>
<td>Multiple roles and relationships for teachers and students are supported. Teachers are experts as well as process mentors and learning companions. Students are not only consumers of information, but also producers, meaning makers, creators, reflectors, and co-designers of learning.</td>
</tr>
<tr>
<td>Multiple technologies</td>
<td>Multiple technologies are integrated in a multimodal manner that allows students to access various information and communication spaces to support their learning. Technologies are used by students to enhance learning as a work in process; to create, collect, and produce products; and to share, reflect on, and present their learning progress.</td>
</tr>
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Figure 2. The Seven Dimensions of Personalized Learning from the Better Lesson Continuum
After coding our classroom observations, we found that the level of personalized learning practices in each lesson ranged from 2.8 to 3.4 on the DDD framework and 2.3 to 3.2 on the PL framework, on a scale from 1 (few characteristics of the dimension observed) to 5 (all characteristics of the dimension observed). These results indicate that the teachers demonstrated considerable effort toward enacting personalized learning practices in line with theory and research; however, there are still many areas where they could further develop their practice.

In interviews, the eight teachers reported similar frequencies of using personalized learning practices in their classrooms, yet their definitions of personalized learning and their descriptions of a typical lesson incorporating these practices are wide and varied. These differences suggest that each teacher’s own beliefs about teaching and learning in their unique contexts influences how they implement personalized learning in their classrooms.

Many of the teachers described efforts that focused on changing classroom structures (e.g., flexible grouping), diversifying learning materials (e.g., media with varied reading and math levels), and providing customized and regular feedback to students in order to foster opportunities for student choice and voice in their learning. Indeed, many

<table>
<thead>
<tr>
<th>Dimension</th>
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<tr>
<td>Authentic learning</td>
<td>How the teacher organizes the context and processes of learning to account for student goals and backgrounds.</td>
</tr>
<tr>
<td>Student agency</td>
<td>How the teacher designs learning experiences that promote and support ownership of content and learning processes.</td>
</tr>
<tr>
<td>Flexible instructional formats</td>
<td>How the teacher designs instructional formats or modalities to engage students with content in various ways.</td>
</tr>
<tr>
<td>Role of technology</td>
<td>How the teacher selects and deploys educational technology in support of content and learning processes.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>How the teacher designs experiences that foster skills, habits, and dispositions of effective collaborators.</td>
</tr>
<tr>
<td>Use of data</td>
<td>How the teacher uses data from diverse sources, including technology platforms, to inform teaching and learning.</td>
</tr>
<tr>
<td>Classroom culture</td>
<td>How the teacher designs and communicates to students about classroom systems, expectations, routines, and strategies.</td>
</tr>
</tbody>
</table>
teachers reported students were completing more work than in previous years, and that some students were more engaged and more willing to revise their work when given the opportunity.

Notably, students perceived personalized learning practices happening less frequently than did their teachers, which is more in line with how the researchers scored observations of teacher lessons. Teachers reported using personalized learning practices at the highest levels, between 4 (often) and 5 (almost always), while students consistently rated teacher use of personalized learning practices as closer to a 3 (occasionally).

Overall, these results suggest that while teachers are confident in their purposeful intentions to design instruction that personalizes learning, students may have a different perspective on how these practices shape the learning opportunities they have access to in their classrooms.

Figure 3. Researcher Observations of the Implementation of Personalized Learning

Figure 4. Teacher and Student Perceptions of the Implementation of Personalized Learning
Lessons

Our research reveals six key insights regarding how personalized learning is defined and implemented in Rhode Island:

1. **Student and teacher contexts influence how they experience personalized learning.**

   Students demonstrate varied levels of self-regulation, motivation, and capacity for self-direction in different contexts and across content areas. Their ability to stay focused and engaged is also affected by the complex physical, intellectual, emotional, and social changes experienced during middle school. These differences affect how students respond to their teachers' efforts to personalize learning.

   Similarly, variations in teachers’ dispositions, skills, understanding, and professional development affect how they engage in personalized learning. Teachers who reported more extensive professional development opportunities expressed more confidence and enthusiasm in their personalized learning practices. Personalized learning is still relatively new to these teachers and the research and best practices in the field are continually evolving.

2. **Teachers’ personalized learning practices are driven by their beliefs about their students.**
Teachers make intentional decisions about how to incorporate various practices based on their perceptions of their students’ needs, abilities, and personalities. Whether teachers use more or less of a particular element of personalized learning may be a deliberate choice based on what they perceive is in the best interest of their students. In our interviews, for instance, some teachers who did not frequently implement practices designed to promote student agency explained this as a conscious decision intended to intentionally limit and structure students’ choices as part of a larger goal of scaffolding their development as self-directed learners.

One teacher, for example, described how she purposefully modeled how to take notes from different resource types (e.g., a text, a video, and a website) before releasing students to choose their own resource types later in the school year based on their needs. Another teacher discussed the tension between autonomy and curriculum. He reported that encouraging students to work at their own pace fosters more independence but also creates challenges for sharing products across varied timelines that don’t always align with grade-level curriculum goals.

3. The importance of teacher-student relationships affects how teachers implement personalized learning.

In our interviews, teachers consistently talked about their desires for their students to feel supported, prepared, confident, and validated. They also articulated high academic expectations for students and a willingness to push them to ensure they are prepared for the rigor of high school and the real world. Thus, teacher-student interactions reflect a balance of both academic and personal purposes aimed at increasing academic rigor while also building positive relationships. For example, during classroom observations, teachers grappled with how to balance the use of digital feedback aligned to academic expectations with opportunities to connect with students face to face.

4. Personalized learning can make a teacher’s work more challenging, especially when technology is involved.

Designing high quality personalized instruction is time consuming. Teachers have to learn the benefits and constraints of all available supportive technologies to determine which will meet their students’ needs in different contexts. They also must invest a great deal of time curating resources for students, giving feedback on student work, and designing plans to support students in monitoring and reflecting on their learning progress.

Personalized learning also creates new challenges regarding how teachers and students should understand and use the data produced by students’ digital activities to inform learning. The shift toward personalized learning requires a re-prioritization of how instructional preparation is carried out, how and when feedback is delivered to students, and how student work is assessed.

5. Promoting student agency is a complex and multifaceted undertaking.
An important goal of personalized learning is to promote student agency and help learners evolve from being extrinsically to intrinsically motivated. Existing research suggests that student agency is a multifaceted construct and a continual development process involving numerous elements. Teachers in our study reported undertaking a number of practices to encourage student choice, voice, and ownership in their learning, such as allowing students to choose their own topics, create learning goals, and set their work pace. We also observed some teachers reminding students how activities are tied to “real life” experiences and encouraging students to be self-directed in managing their learning.

While teachers in our study emphasized student choice, voice, and ownership, other key elements of student agency – such as engagement, motivation, self-efficacy, and purpose – were less often reported as explicit goals during teacher interviews. This is important to recognize, as recent efforts in the field have stressed the value of thinking beyond familiar goals of student voice and choice to acknowledge the complex nuances of learner agency. By understanding and addressing all seven unique dimensions of learner agency, teachers can more effectively enable students to engage in purposeful learning without depending heavily on external structures or support.

Overall, our observations found that teachers usually dictated the “what” of the learning, for example, by assigning all students to read a common text in English class or practice the same concept in math. In some cases, students had some control over the “when” and “how,” such as choosing which activity they wished to complete first. Missing from most classrooms were opportunities for students to more totally control their own learning with respect to deciding what to learn, what skills to improve or build, and how to do so.

6. Differences between teacher and student perceptions indicate an opportunity to further empower students as learners.

Teachers indicated a commitment to incorporating personalized learning practices in their classrooms and described a number of ways that these approaches were influencing their planning and teaching practices. Students, however, generally perceived personalized learning practices happening less frequently than did their teachers. Efforts to foster personalized learning should consider how students understand their role in the learning process and perceive themselves as empowered learners.

Given the high level of professional commitment on the part of the teachers, it is interesting to consider whether teacher and student perceptions will converge over time. It is also an open question of how far teachers can move toward student-driven learning within the context of standards-aligned curriculum in age-graded schools.

Recommendations

Our findings suggest a number of issues for administrators, teachers, and other stakeholders to consider as they seek to promote personalized learning:
1. **School Districts & Administrators:** Creating an instructional environment that incorporates personalized learning requires concerted teacher effort. In this study, teachers discussed the importance of professional development to advance their practices. Extended professional development targeted to what teachers want and need to learn is essential to the success of personalized learning initiatives.

2. **School Districts & Administrators:** Although large-scale technological solutions can be tempting, the effort and thought needed to successfully implement personalized learning practices means that teacher buy-in and commitment are essential. In this study, teachers demonstrated the intentionality and preparation necessary to change their practices. One effective way to prepare teachers is to create opportunities for them to observe personalized learning in action, and to promote successful classrooms as models for others.

3. **School Districts & Administrators:** Teachers in this study discussed the importance of working with colleagues to improve their practice. Although some of this happens informally, teachers need built-in time to problem-solve, plan, and discuss personalized learning practices with their peers.

4. **Instructional Coaches:** Teachers in this study discussed the value of having another set of eyes to observe and provide feedback on the alignment between their teaching practices and students’ learning, self-direction, and agency. Coaches can be that lens, helping teachers adapt their practices and continually push themselves to release more responsibility to students.

5. **Teachers:** This study sheds light on the importance of teacher-student relationships in a personalized learning environment. Teachers should continue to build these relationships to foster student independence and help students set and achieve their goals.

6. **Teacher Educators:** Some teaching practices aligned with personalized learning may conflict with more traditional frameworks for teaching middle school students. In addition, teacher-driven decisions about what works best for students in specific learning contexts are a necessary part of personalizing instruction. Thus, new teachers need a strong theoretical understanding of the importance of personalized learning and the various practices that support it. They should have opportunities in their practicum and student teaching experiences to engage in PL practices and work within systems designed to support personalized learning in different contexts.

### The Future of Personalized Learning in Rhode Island

This research indicates that Rhode Island teachers who are committed to personalized learning are successfully adopting practices that promote it, but there is still a ways to go in empowering teachers and students to foster truly student-driven learning. Our study makes clear the important
role that teachers and teacher practices play in fostering personalized learning, and the degree to which perceptions of its implementation vary across teachers and students.

Because this study explored the practices of eight teachers in two schools, it has only scratched the surface in terms of understanding how personalized learning can and should work in Rhode Island. Future efforts could focus on learning more about how teachers define and implement PL practices in different contexts, and ultimately, how these practices impact learning outcomes and students’ perceptions of themselves as empowered learners.

*Note: To view the longer report that provides details about the research methods, examples of the two scoring rubrics, more of the qualitative findings, etc. please click, here.*

**ADDITIONAL INFO**

- Type of Research

**Endnotes**

**References**


