



Introduction | A Regional Scan of Individualized Learning

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Dear Friends in Education,

The Bush Foundation is very excited to share the findings of a regional scan of individualized learning in our region. This broad scan was an undertaking the first of its kind in this region, and the findings will inform the work of the Foundation in supporting efforts to provide individualized learning to more students.

The guiding goal for the Bush Foundation's education initiative is to make our region the national leader in individualized education that meets the needs and ambitions of all students. We believe this work requires a shift in the culture of education to a more personal, more relevant approach that takes into account who students are, how they learn, and where they aspire to go. We refer to these areas as the three dimensions of relevancy – cultural, instructional and career.

The Foundation engaged Social Policy Research Associates (SPR) in 2017 to conduct a scan of individualized learning in our region, which includes Minnesota, North Dakota, South Dakota and the 23 Native nations that share the same geography. Specifically, the research gathered baseline data on the state of awareness, understanding and implementation of various forms of individualized learning in schools across the region. The research included interviews with field leaders and partner organizations in education, both locally and nationally. We also sent a survey to public, private, charter and tribal schools in the region.

Highlights from the Findings:

We are energized by the findings and opportunities identified in this research. We look forward to working together with our partners to use these insights to support individualized learning. Highlights include:

- There is genuine interest and excitement for the principles underlying individualized learning.
- Except for a handful of schools and practices, true individualized learning is largely absent in schools in the region and/or in its early stages.
- There are many definitions and terminology used to describe this way of learning, and there are even more ways in which schools are experiencing and implementing this approach to learning.
- While there is currently several challenges to implementation, there is a growing demand to build the necessary skills and infrastructure support to do individualized learning well.

We invite you to explore our executive summary and the full report, and to use the information to enhance your own thinking and work in education.

Finally, we deeply appreciate the work of the Social Policy Research Associates (SPR) team, who conducted the research and prepared the report. We also want to personally thank everyone who participated in the interviews and/or survey. Your insights are extremely valuable and contribute to our fuller understanding of the state of individualized learning in our region.

Thank you for your interest in this research and your partnership to make education more relevant for all students. We invite you to be in touch.

Sincerely,
The Bush Foundation Education Team

A Regional Scan of Individualized Learning

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EXECUTIVE SUMMARY

In 2016, the Bush Foundation launched its individualized learning strategy with the goal of supporting its region—Minnesota, North Dakota, South Dakota, and the 23 Native nations that share the same geography—to become the national leader in individualizing education to meet the needs and ambitions of all students. The Foundation defines individualized learning as education that makes learning more relevant for all students in terms of:

- **Who they are (cultural relevance).** Create learning environments that welcome and support students from all cultures and backgrounds.
- **How they learn (instructional relevance).** Help students learn in a manner and at a pace that meets their individual needs.
- **What they want to do (career relevance).** Help students imagine a career and provide them with support that is tailored to get them where they want to go.

In spring 2017, the Bush Foundation commissioned Social Policy Research Associates (SPR) to conduct baseline research on the state of individualized learning across the region in order to inform the Foundation’s education initiative. The goal of this research is to (1) capture the level of awareness and understanding of individualized learning concepts throughout the region; (2) document the conditions that foster individualized learning at the school level; (3) identify the challenges to implementing individualized learning practices; and (4) document existing individualized learning strategies and practices adopted by schools in the region.

This report is informed by a survey of school leaders and telephone interviews with school and district leaders, state education leaders, experts in the field of education, and aligned organizations (those working directly to support the region’s schools and districts to implement individualized learning). We describe the level of awareness around and understanding of individualized learning, as well as key practices, lessons, and challenges facing schools as they implement individualized learning strategies.

Primary Data Sources	Description
Telephone Interviews	<p>SPR conducted exploratory telephone interviews with 41 individuals across the following five categories:</p> <ul style="list-style-type: none"> School leaders from Minnesota, North Dakota, South Dakota, and Native Nations selected by the foundation for their knowledge and experience with individualized learning strategies (n=23); State education leaders (n=6); Aligned organizations (n=4); Field leaders (n=4); and Bush Foundation staff (n=4).

Primary Data Sources

Description

<p>School Leader Survey</p>	<p>SPR designed a school leader survey to elicit information about knowledge and awareness of individualized learning. SPR administered online surveys to 2,433 individuals across the defined region and received a total of 158 unique responses, representing 303 schools within the region.</p>
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Understanding and Awareness of Individualized Learning

INTERVIEW DATA

Education leaders noted that individualized learning represents a fundamental shift in how we conceptualize learning and the role of school in a child’s life. They acknowledge that traditional models of school no longer work to prepare students for success in today’s economy and global society, and believe that individualized learning represents a fundamental and necessary shift in the culture of education. School leaders generally believe that individualized learning means meeting learners at their individual achievement levels, differentiating support based on their unique capabilities, and actively engaging them in the process of learning. However, education leaders differ widely in what they believe are the essential characteristics of individualized learning, and in what terms they use to name the approach.¹

Awareness of individualized learning has grown substantially over the last two to five years, yet there remains a broad continuum of actual understanding of the concept. On the one hand, knowledge of individualized learning is widespread throughout the region, but understanding of concrete individualized learning practices and how to implement them varies widely and is often limited to specific schools or teachers.

Implementation of and Strategies for Individualized Learning

INTERVIEW DATA

Districts and schools implement individualized learning using a range of approaches. Most districts introduce individualized learning as a top-down strategy, while allowing it to simultaneously build organically from the ground up. While there are a few whole-school models focused explicitly on individualized instruction, the majority of districts start by implementing individualized learning within a subset of grade levels, subjects, or pathways.

Districts and schools most commonly use the following structures and practices to make learning more relevant: alternative or flexible schedules and learning spaces,

¹ Throughout this report, we use the term individualized learning as a unifying concept for the variety of approaches and principles that our interviewees named.

multi-age classrooms, a focus on student agency, project-based learning, and strategic use of technology. Very few interviewees indicated that students' cultural backgrounds currently influence their individualized learning practices.

Supporting Teachers to Individualize Learning

INTERVIEW DATA

Because individualized learning is a significant shift from the conventional way teachers engage with students and learning in the classroom, teachers require in-depth support to make that change. Schools and districts use professional learning communities, districtwide professional development, outside organizations or consultants, conferences, and book studies to equip teachers with the knowledge and tools they need to implement individualized learning. Many interviewees noted that a particularly effective method is direct observation of individualized learning “in action,” which helps bridge the gap between knowledge and implementation.

Interviewees unanimously agree that student success and growth with individualized learning necessitates non-traditional measures of achievement, but there is a lack of existing, reliable tools to capture this information; as a result, most schools continue to rely on standardized assessments to measure student learning. There are, however, some promising examples of assessment practices to support individualized learning. Districts and schools are beginning to measure success with individualized learning using tools such as rubrics, surveys, online learning platforms for formative assessment, and direct observation of student learning.

School Leader Survey Findings

SURVEY DATA

A survey capturing a broad sample of schools across the region revealed the following trends:

Understanding of individualized learning. The vast majority of respondents are at least familiar with the terms used to describe student-centered approaches, most often learning about individualized learning through professional development. However, while 97 percent of respondents indicated that they are at least familiar with individualized learning, only 61 percent reported they are currently implementing it in their schools to any degree.

Practices for instructional relevance. Most respondents design flexible learning environments in their schools or districts, and have strong student data systems that allow teachers to better individualize to students' unique needs. Many allow for individualized pacing but less frequently implement practices around student choice. These common individualized learning practices are more likely to be implemented in specific grades or classrooms than throughout the entire school.

Practices for career and cultural relevance. The vast majority of schools (96 percent) connect learning to real-world situations. While a majority of schools also report

encouraging culturally relevant practices, these practices are more common among respondent schools with more diverse student bodies.

Challenges to and supports for individualized learning. Overall, the most significant barrier to implementing individualized learning is “moving away from traditional notions of ‘what school looks like.’” Respondents also reported that financial resources, enhanced professional development, and resources for teachers would be the most helpful forms of support for implementing individualized learning.

Challenges and Obstacles

INTERVIEW DATA & SURVEY DATA

As identified through both qualitative interviews and the survey, the following overarching challenges are slowing the progress of individualized learning:

- There is a lack of shared understanding and vision for individualized learning.
- Buy-in from teachers, key district staff, and the broader community can be difficult to obtain.
- Schools must balance individualization with state regulations and accountability requirements that can hinder innovation.
- Limited funding is available to offer the necessary resources to implement individualized learning.

Recommendations

Based on the findings of this report, we present the following considerations for the Bush Foundation as it continues to support the region with individualizing learning:

- Establish a network of schools to share learnings.
- Support local teachers and/or community members as champions in order to build a broad base of support for individualized learning.
- Continue to provide schools with the financial resources, professional development, and instructional resources they need.
- Engage with state leaders to explore opportunities for school flexibility.
- Reflect on the continuum of understanding when designing outreach strategies and materials for multiple audiences.
- Adopt a learning orientation when measuring outcomes of individualized learning efforts.
- Continue to emphasize equity as a core tenet of individualized learning.

The Bush Foundation recognizes that students are the best engineers of their own learning and school leaders are the best architects of their own redesign. With the findings from this report, the Bush Foundation will continue to shape its work of inspiring, equipping and connecting people, schools, and communities to bring individualized learning into the region and carve pathways to deeper learning for all students.

CHAPTER I: INTRODUCTION

If you have ever been in a classroom where [individualized learning] is working, you don't have to ask [what it is]. You can see it in what is happening with learners. Learners can tell you why they are doing what they are doing. Their learning is purposeful and they have ownership over their learning. They have high levels of efficacy. You will see students at different places on a clear continuum and you will see variation in pace. You see students increasingly take responsibility for their learning. They want to push out and drive their own learning.

—James Rickabaugh, Senior Advisor
The Institute for Personalized Learning, Pewaukee, WI²

The Bush Foundation has long held the view that the success of all students requires an education system that is individualized and relevant in terms of who they are, how they learn, and what they want to do. The Bush Foundation's priority of making education more relevant for individual students is informed by years of research highlighting the need for more personalized, learner-centered approaches to education that cultivate student engagement and deeper learning. While a good amount is known about models or approaches to personalized education, such as differentiated instruction and personalized learning plans, little is known about the scope and scale of efforts to individualize learning in the Bush Foundation's region of focus: Minnesota, North Dakota, South Dakota, and the 23 Native nations that share the same geography (hereafter referred to as "the region").

It is within this context that the Bush Foundation commissioned Social Policy Research Associates (SPR) in the spring of 2017 to conduct baseline research on the condition of individualized learning across the region in order to inform the Foundation's education initiative. The goal of this project is to document the individualized learning strategies and practices adopted by schools in the region; discuss the level of awareness and understanding surrounding this approach; explore the conditions that foster individualized learning at the school level; and identify the challenges to implementing individualized learning practices.

Individualized Learning

The Bush Foundation believes that making education more relevant for all students requires individualization. The Foundation launched its individualized learning initiative in 2016 with the goal of helping the region become the national leader in individualizing education.³ To achieve this goal, the Foundation seeks to support the region's schools in making education more relevant for all students, in terms of:

² Note: Quotes and sample practices are attributed throughout this report to individuals who participated and schools represented in SPR's interviews. If a school or individual is not identified, this indicates that SPR did not receive permission for the identification, or that the individual wished to remain anonymous.

³ See <https://www.bushfoundation.org/education-initiative>

- ***Who they are (cultural relevance).*** Create learning environments that welcome and support students from all cultures and backgrounds.
- ***How they learn (instructional relevance).*** Help students learn in a manner and at a pace that meets their individual needs.
- ***What they want to do (career relevance).*** Help students imagine a career and provide them with support that is tailored to get them where they want to go.

As a concept, individualized learning is not prescriptive about what schools should look like. Rather, the Bush Foundation’s goal is the transformation of schools in how they support the development and success of every individual student—whether that is through incremental changes in the classroom experience, adding completely new educational tracks, creating true community partnerships, or other strategies. Individualized learning is unique to each school and its context, and the Foundation sees it as a wholesale change from the traditional school model to one that makes the experience of education relevant to all students.

Creating real, sustainable change to the way we approach education will require a lot of people to think bigger and differently about what is possible. That is why our work is fundamentally focused on people. We know that in order to accomplish our goal, we need to inspire, equip and connect people who want to make individualized learning an essential part of the education system.

**—Kayla Yang-Best, Education Portfolio Director
Bush Foundation, St. Paul, MN**

To support the region’s schools in this transformation, the Bush Foundation is working towards the creation and spread of new models of education that combine each element of relevance, described above. This effort is uniquely and fundamentally focused on people and providing the inspiration, resources, and connections that schools and practitioners need to individualize learning. In a three-pronged strategy, the Bush Foundation scaffolds support based on individuals’ needs by offering opportunities for (1) those who simply want to learn about individualized learning, (2) those who are ready to begin implementation in their schools, and (3) those who are already implementing individualized learning and seeking to connect with others to scale their practice. The Foundation hopes to equip schools and practitioners with what they need so that all students experience an education that is truly relevant to who they are, how they learn, and what they want to do in life.

The Baseline Research

In order to further the aims of the education initiative, the Bush Foundation hired SPR to collect data on the state of individualized learning throughout the Foundation's region. The synthesis of this data, presented in this report, can inform the Foundation's understanding of individualized learning as it is currently practiced in the region, and establish a baseline for measuring future growth.

SPR's research was guided by a series of core questions summarized below.

Research Questions

The following questions were provided by the Bush Foundation to guide the project. Questions in italics were added by SPR to deepen the understanding of individualized learning strategies and practices.

1. What is the level of awareness about individualized learning?
2. How many schools/districts in the region are individualizing education?
3. *What are the key components of individualized learning? How are schools organized to promote individualized learning?*
4. What conditions are important to implementing individualized learning in schools/districts?
5. For schools/districts that have been providing individualized learning successfully for 10–20 years, how do they measure student learning and success? What indications or metrics signify that individualized learning is occurring?
6. For schools/districts that have been providing individualized learning, what are the primary obstacles to operating an individualized learning school/district?

DATA SOURCES

This report was informed by a rich set of data and extensive engagement of the Bush Foundation staff whose thoughts and insights guided our data collection and analysis. SPR used a mixed methods design, which coupled quantitative and qualitative data to develop a comprehensive picture of individualized learning practices in the region. Exhibit I-1 summarizes the data sources used to inform this report.

Exhibit I-1: Key Data Sources

Data Sources	Description
Telephone Interviews	<p>SPR conducted telephone interviews with 41 individuals during the spring and summer of 2017. Interview participant categories and the number of interviewees within each are described below. We include a list of interviewees in Appendix A. The respondents fell into five categories:</p> <ul style="list-style-type: none"> • School leaders from the region including principals and district leaders with a connection to the Bush Foundation in some capacity—as grantees, participants in foundation-sponsored events, and/or people identified by the Bush Foundation staff as knowledgeable of individualized learning practices (n=23); • State education leaders working on state-level policy that may influence local-level individualized learning practices (n=6); • Aligned organizations, including those working directly to support schools and districts to implement individualized learning and/or transform schools (n=4); • Field leaders, including staff from leading foundations, researchers, and other thought leaders in the national field of education (n=4); and • Bush Foundation staff whose roles are essential to informing and shaping the individualized learning strategy (n=4). <p>The interviews were exploratory in nature. Interviewees helped to unpack some of the key issues in how schools individualize learning, including key practices and approaches, degree of support/buy-in for individualized learning, challenges, and emerging lessons. Their insights were invaluable and their voices undergird most of the findings in this report.</p>
School Leader Survey	<p>Following the interviews, SPR designed a school leader survey to a larger sample of schools from across the region to elicit information about knowledge and awareness of a variety of instructional approaches including: individualized learning; key practices related to individualized learning; conditions that facilitate or hinder individualized learning; and barriers to individualized learning implementation. In total, SPR administered online surveys to 2,433 individuals across the region and received a total of 158 unique responses, representing 303 schools within the region.⁴</p>

⁴ Many of the survey respondents are district leaders representing more than one school in their responses.

Data Sources	Description
Literature Review	SPR conducted an extensive review of the literature to inform data collection activities and this report. This included published research on personalized learning and other approaches that might align with individualized learning, such as customized learning, student-centered learning, and differentiated learning.

The data sources described in Exhibit I-1 provide a broad overview about individualized learning approaches and strategies throughout the region. We incorporate quotes from interview respondents throughout the report to add richness to our analysis.

It is important that we provide a number of observations about the findings in this report. First, neither the interviewees nor the survey respondents are representative of all those in the region. The sample of interviewees—including school leaders—was identified by the Bush Foundation based on the Foundation’s knowledge of their current or prior work on individualized learning approaches. While the survey was administered to a representative sample of schools and districts, the individuals who actually responded to the survey are not representative. Therefore, we cannot generalize about the state of individualized learning to the region as a whole. Rather, this report serves as a presentation of perspectives and common themes gathered through the data collection process.

Second, there was great variation in terms of how explicitly individualized learning was described or named by both interview and survey respondents. As a result, it was difficult to consistently decipher practices that were explicitly individualized learning-focused versus standard practices found in conventional classrooms.

Third, though we couched our discussion of strategies and practices as individualized learning, most of the interviewees did not frame their work as individualized learning *per se*. Rather, they described practices and goals that overlap but do not perfectly align with the Bush Foundation’s definition of individualized learning. While this was not necessarily what we anticipated, the results do confirm much of the current literature and thinking about the diverse array of approaches intended to support student learning. Throughout this report, we use the term individualized learning as a unifying concept for the variety of approaches and principles that our interviewees named.

Remainder of the Report

The remainder of the report begins with Chapter II, which presents an overview of the level of understanding of individualized learning in the region as captured through qualitative interviews with selected stakeholders. It includes perceptions about individualized learning and perceived growth in awareness around the concept. Chapter III similarly relies on interview data and focuses on how schools and districts implement individualized learning, with particular consideration of the key features of individualized learning practices and the context and conditions necessary for individualized learning to successfully occur. Chapter IV highlights the ways in which interview respondents described supporting teachers to best individualize learning through professional development strategies and assessment practices. Chapter V summarizes the quantitative findings from a survey of school principals throughout the region. The survey was designed to capture information about common approaches to enhancing relevancy and the supports and challenges around individualized learning implementation. The report concludes with Chapter VI, which presents overarching challenges and considerations for the Bush Foundation going forward.



CHAPTER II: UNDERSTANDING AND AWARENESS OF INDIVIDUALIZED LEARNING

INTERVIEW DATA

We have the awareness now that we didn't have in the past, we can really individualize learning for students. If we have the ability to do that, why would we not?

—Mark Femrite, Assistant Superintendent of Public Instruction
Westonka Public Schools, Minnetrista, MN

In this chapter, we focus on the varying levels of understanding and awareness about individualized learning throughout the region. To do so, we unpack the findings from SPR's interviews with state leaders, field leaders, school and district leaders, and representatives of organizations aligned with the Bush Foundation's goals of supporting schools with individualized learning (hereafter referred to as "aligned organizations"). We begin with a discussion of the broad culture shift in education that frames much of the thinking about individualized learning.

A Culture Shift in Education

Interviewees noted that, at its core, individualized learning represents a fundamental shift in how we conceptualize learning and the role of school in a child's life. Behind the shift is an acknowledgment that traditional models of school no longer work to prepare students to be successful in today's economy and global society. From the perspective of the many individuals that SPR interviewed for this research, the traditional education system dictates a one-size-fits-all approach to teaching and learning that neglects the unique needs and interests of its students.

Nearly unanimously, the interview participants in this study revealed that shifting the culture of education is about discovering how to best support students as individual people so that they are successful in school and in life. When asked about what it means for them, most interview respondents revealed that there is a common conceptualization of individualized learning: *It is about meeting learners at their individual achievement levels, differentiating support based on their unique capabilities, and actively engaging them in the process of learning.* This common framing is the background for discussions about individualized learning, even as respondents diverge in the terms they use and the approaches they promote.

Individualized learning is not a program, but a philosophy of teaching and learning.

—Dr. Tanja Pederson, Principal
Freedom Elementary, Harrisburg, SD

The difficulty is in reimagining what school could look like under this new philosophy. According to SPR's interviewees, people working in the education system have only experienced the traditional format of school (as students and instructors), and so thinking of school differently is akin to "asking a fish to describe water," as one field

leader put it. The school and district leaders interviewed described a further challenge in reconceptualizing school, in that parents have also only been exposed to traditional models of education and they therefore likewise struggle to imagine how the experience could be different for their children. One school leader further explained that individualized learning means leaving behind the legacy of No Child Left Behind, and recognizing that “not all students have to be the same when they leave school.”

SPR’s interviews focused on how individuals within the region’s education system conceive of individualized learning. It is apparent that when the interviewees think about individualized learning, they often equate it with other instructional approaches or models that revolve around the same goal of better supporting students as unique individuals. For example, among aligned organization respondents, field leaders, and state leaders, the concepts around individualized learning are most familiar as one of the following models: customized learning, personalized learning, student-centered learning, or differentiated learning. While respondents’ definitions of these terms vary to some extent, the core message of each is about centering the student in the process of learning and in the structure of school. Where the Bush Foundation’s conception may differ is that it views instructional relevance as only one dimension of individualized learning, though very much entwined with the other two dimensions (student’s identity and their aspirations).

Notably, only four of the school and district leaders interviewed were specifically using the term “individualized learning” to describe approaches to teaching and learning at their schools. Instead, nearly half of the interviewees referred to individualized learning practices at their schools as personalized learning, with some also naming blended learning, customized learning, and competency-based learning.⁵ Respondents representing public schools and those in Minnesota schools more often used the term personalized learning, and respondents representing North Dakota schools more often said they focus on competency-based learning.

Defining Individualized Learning

There is a high degree of interest but limited collaboration and few systems across the state. Educators recognize that the education model hasn’t changed very much over the last 100 years yet know the possibility that exists and are often working on an individualized basis. However, knowledge of individualized learning varies and generally people have a sense of [only] one piece of it, as opposed to understanding their role in broader context.

—Levi Bachmeier, Policy Advisor
North Dakota Office of the Governor, Bismark, ND

Based on their conceptualization of individualized learning and the ways in which it intersects with other well-understood instructional approaches (e.g., personalized learning, student-centered learning), interviewees’ descriptions of what constitutes

⁵ As defined by EDUCAUSE, competency-based learning, or competency-based education, is an approach by which students advance within a subject at their own pace, based on their ability to master a particular skill or competency. See <https://library.educase.edu/topics/teaching-and-learning/competency-based-education-cbe>

individualized learning vary widely. In this section, we summarize the individualized learning characteristics named by each category of interviewee.

Aligned organizations and field leaders. For both interviewees from aligned organizations and field leaders, individualized learning is best manifested through setting competency-based standards for students. Both interviewee groups emphasized the importance of flexible “anytime, anywhere” learning, centering the learner as the primary agent of learning, and considering the needs of the whole child. For individuals from aligned organizations, cultural relevancy and engaging the school community are also key elements of achieving the aims of individualized learning.

The best learning happens in contexts where students become essential assets of the community and are supported in connecting what they are learning to personal and community transformation.

—Field leader respondent

State leaders. Although state leaders from all three states agreed that individualized learning entails competency-based learning targets, their understanding of approaches to teaching and learning differ from that of aligned organizations and field leaders. For state leaders, individualized learning means designing curriculum that takes into account the unique interests of students, including aspirations around college and career. State leaders also tend to emphasize the centrality of technology in facilitating that type of instruction, and the importance of personalized or individualized learning plans for each student.

School and district leaders. The most variation in what constitutes individualized learning is found among the 23 school and district leaders we interviewed:⁶

- Roughly half of the interviewees—predominantly those representing public schools and districts—mentioned student agency in terms of student choice.
- At least eight interviewees referred to competency- or standards-based instruction. This was more common among those from public schools, schools where 25 percent of students or fewer qualified for free or reduced-price lunch (FRPL), and schools with enrollments between 150 and 499 students.
- At least seven school and district leaders spoke about the importance of flexible learning coupled with technology integration. This was most popular with private parochial and public charter schools, schools with 26–50 percent of students qualifying for FRPL, and schools in Minnesota.
- At least five interviewees mentioned inquiry-based learning connected to students’ interests. This was more common among schools with 25 percent of students or fewer qualifying for FRPL.

⁶ These findings are drawn from the interview data—which, as stated earlier in the report—represent a select sample of schools and districts with experience implementing individualized learning strategies. Chapter V summarizes the survey findings, which include a larger sample of school leaders.

- At least five school and district leaders referenced the central role of formative assessment and feedback. This was predominantly in schools with enrollments of 50 to 149 students and in private parochial schools.

Actual approaches to individualized learning are less universally agreed upon. Some examples include: focusing on college and career, data-driven instruction, cultural relevance, growth mindset, whole child support and social emotional learning, student self-pacing, and more. Despite the common philosophical goal, the variety of terms for and approaches to individualized learning shows that this shift in the culture of school is the antithesis of the one-size-fits-all traditional education system—in other words, it is truly individualized.

Growth in Awareness of Individualized Learning

As the discussion around individualized learning grows within the education field, understanding and awareness of the concept has also grown. The level of understanding is, however, very much on a continuum, with some interviewees describing very little awareness and others having high levels of expertise. On one end of this continuum, state leaders explained that, at the state level, discussions around individualized learning are relatively new and vary from district to district, with bigger and better-resourced districts typically at the forefront of the conversation. Field leaders and interviewees from aligned organizations indicated that the broader field is likely ahead of state-level discussions, with ideas around individualized learning quickly gaining legitimacy and becoming more widespread. This is supported by school and district leaders, most of whom said that knowledge around individualized learning is widespread at the school and district levels, although at least seven of these interviewees explained that understanding of actual practices related to individualized learning is quite varied and often limited to specific schools or teachers.

Recently, awareness and knowledge about individualized learning have dramatically accelerated. Yet, the discussions happening around [individualized learning] are happening on a large continuum with regard to awareness and knowledge. For some, individualized learning is defined as simply putting students in front of a computer, for others it means planning an individual lesson for each student, and then there are those who are thinking of learners themselves as the crucial resource in the classroom.

**—James Rickabaugh, Senior Advisor
The Institute for Personalized Learning, Pewaukee, WI**

Even with the continuum of awareness, school and district leaders agree that knowledge about individualized learning has grown substantially in the past few years. They credit this expansion of understanding to a number of factors, first of which is the presence of teacher advocates and grassroots knowledge building at the school level. For at least three schools, these teacher advocates are new teachers coming out of schools of education and, for at least two others, they are experienced teachers who were frustrated with the current experiences of teaching and learning. Knowledge of individualized learning is further spread by field leaders who come to schools as consultants or coaches, through districtwide initiatives that aim to transform teaching and learning within a district, and through observation of the

direct effects of individualizing on student engagement and student–teacher interactions. Field leaders also point to the increasing presence of educational technology as one means by which the concept of individualization has been gaining traction.

Even with the growing understanding of *what* individualized learning is, there remains a deep lack of knowledge for the majority of interviewees and their schools around *how* individualized learning best occurs. Interviewees from all categories point to the dearth of information around how to do individualized learning well. For school and district leaders, this is a question of how to implement individualized learning practices holistically within a school and how to support teachers to be successful with them. For aligned organizations and field leaders, it is about defining practices of individualized learning for the field. And for state leaders, there remains a large question around how to define and measure the impact of individualized learning across many schools.

Some schools and teachers need more information and communication about [individualized learning] practices, but generally teachers in our district and state are very committed to doing whatever is needed to support and make kids successful.

—School Principal, ND

Reactions to the Term “Individualized Learning”

As awareness of individualized learning grows, and as practitioners explore their own approaches, some individuals have strong reactions to the term itself. Some of these reactions relate to the word “individualized;” for a few state, school, and district leaders, the word conjures up the idea that learners are isolated from others, or that learning is an activity that happens on one’s own. One field leader further clarified that this idea reflects a “Eurocentric model of education” revolving around individualism, which may not resonate with students of diverse cultural backgrounds. Also common was the reaction that the term is easily confused with language related to special education—for at least four interviewees, particularly public school and district leaders, “individualized learning” is reminiscent of individual education plans (IEPs) for students with special learning needs.

Lastly, some believe that individualized learning does not actually “go far enough” based on the definition put forth by the Bush Foundation. A few respondents from aligned organizations explained that individualized learning cannot be achieved until the structure of school is completely transformed. This perception indicates that there may be some confusion or lack of understanding around the Foundation’s vision for individualized learning, which at its core requires a commitment to transforming the structure of school. Despite the varied levels of knowledge and understanding of individualized learning, the research surfaced some promising practices in the field. These are described in the next chapter.

CHAPTER III: IMPLEMENTATION OF INDIVIDUALIZED LEARNING

INTERVIEW DATA

This is what inspired teachers go to school and this is what they love as professionals. The more you see kids engage and believe that they can close their own gaps, it shifts what's possible for them as learners. For teachers, it makes the work of instructional change, the use of technology, and the shift in process all seem worth it. Now you're able to focus on the learning because every student you are working with is ready for that skill and they are getting it.

—Marilynn Smith, Principal
Impact Academy at Orchard Lake Elementary, Lakeville, MN

As described in the previous chapter, the school and district leaders we interviewed define individualized learning in a wide variety of ways. They differ in how explicitly they refer to their efforts as individualized learning, preferring instead to use terms such as customized learning, personalized learning, and blended learning, among others. Despite the varied ways in which schools *define* individualized learning, however, interviewees share the goal of deeply engaging students in their learning so that learning is relevant. This requires a fundamental shift in the conception, practice, and policies of teaching and learning.

This chapter presents the key themes of how schools and districts implement individualized learning, as revealed through interviews. Specifically, we describe (1) how schools structure individualized learning at their local sites; and (2) the key features of individualized learning as currently implemented by schools and districts in our interview sample.

Implementation of Individualized Learning

In this section, we highlight strategies and approaches that school and district leaders identify as important to the implementation of individualized learning practices. We emphasize that the findings below represent our preliminary observations based on interview data from representatives of schools that were developing or had well-developed individualized learning practices at the time of the interviews (spring 2017). We expect that school practices have evolved in important ways since the interviews and expect practices to continue to evolve in the months and years ahead.

Of the 23 schools and district leaders represented in the interview sample, 21 began implementing individualized learning practices in the last two to five years. Specifically:

- ☑ 5 schools report less than two years of implementation;
- ☑ 13 schools report two to five years of implementation; and
- ☑ 3 schools report more than five years of implementation.

The following are key findings around implementation of individualized learning:

1. Individualized learning is typically introduced as a top-down strategy, but many districts allow it to simultaneously build organically from the ground up.
2. Schools implement individualized learning strategies at different rates and often within a subset of schools, grade levels, or subjects.
3. Individualized learning practices are often concentrated within a specific individualized learning “pathway” that offers opportunities for focused individualization and customization.
4. There are few whole-school models focused explicitly on individualized learning.

The schools in our sample use a combination of and/or variations of these four key strategies to implement individualized learning practices. We describe these strategies below.

- **Individualized learning is typically introduced from the “top,” but school and district leaders allow it to simultaneously build organically from the bottom up.** A handful of school and district interviewees indicated that they use a top-down approach to provide a guiding framework for individualized learning. They acknowledge that district leaders may be the driving force behind individualized learning, but ultimately teachers need to be the drivers of change.

Staff and teachers are critical in making individualized learning successful. At our school, much of the implementation of individualized learning is really being driven by teachers.

—Rick Pearson, Principal
Chamberlain Middle & High Schools, Chamberlain, SD

In particular, teachers and school leaders must work together to identify priorities for the school, with individualized learning practices undergirding their work.

- ② *In one district, district leaders have worked closely with teacher leaders to establish what individualized learning should look like in their district. During this two-year development phase, the district was able to gain significant buy-in because teachers felt they had a voice in the process. Once the district established a specific strategy, it trained instructional coaches and developed tools to help teachers implement individualized learning. The district designated individualized learning as an instructional priority, gave teachers a voice in the process, and continued to support them as they learned how to implement the approach.*
- ② *Schools also capitalize on existing instructional frameworks to launch individualized learning practices. One school had already identified an instructional framework to guide teaching and learning. Rather than starting from scratch, the district leveraged the existing framework elements to help teachers understand how individualized learning can fit within their existing teaching practices.*

- **Schools often implement individualized learning strategies first within a small number of schools, grade levels, or subjects.** About five schools have opted to implement individualized learning slowly, focusing on a small subset of schools, grades, classrooms, or subjects to test practices. There is a shared belief among a handful of interviewees that this approach can help build support and buy-in before expanding individualized learning schoolwide. Respondents also acknowledge that by strategically rolling out key elements at a small number of schools, within certain grades, or within selected subjects, school leaders can expose teachers to individualized learning gradually and allow them to fully understand what key practices look like before they adopt them schoolwide. By focusing on one classroom or one school at a time, educators can take time to reflect on their efforts and modify practices as needed.
 - ▣ *At least three schools target certain grade levels and/or teachers in selected classrooms to learn about individualized learning and “try out” key elements.* For example, leaders at one school offer professional development to a core group of teachers interested in learning about the principles of personalized learning, as it is called at this school. The school identifies cohorts of interested teachers to attend professional development on a regular basis. The cohorts visit other area schools four to five times during the year to observe individualization in classrooms. After these observations and other trainings, the principal asked the cohort teachers to “just try [individualized] learning elements and report back on what worked and what didn’t.” According to this school leader, having a core group of champions helps demystify individualized learning strategies. As she said, “Staff are not as fearful of it now and respect that their colleagues have figured out a way to reach kids better.”
 - ▣ *At least two other schools target selected specific academic subjects to implement individualized learning practices.* One school is incorporating pieces of individualized learning in reading and math classes at the elementary level through the use of station rotation, allowing teachers to work with students in small groups, while other students work independently using a set of web-based programs (e.g., iExcel, iReady, No Red Ink, Kahn Academy). Other interviewees spoke to the idea that individualized learning is better suited for some subjects than others, and said they encourage teachers to use certain practices more frequently in particular subjects.
 - ▣ *One district implements individualized learning during select portions of a class or lesson.* This district encourages teachers to use individualized learning practices “when it makes sense,” while also using more traditional instructional strategies like whole-group instruction at certain points in a lesson.
- **Individualized learning practices are often concentrated within a specific individualized learning “pathway.”** At least three schools offer students the option to choose between an individualized learning pathway or a traditional pathway. The individualized learning pathway includes instructional strategies that offer more focus on individual learning needs and goals, more frequent assessments, more opportunities to choose the types of and topics for class

projects, and more flexible scheduling. One school offers an individualized learning pathway in three designated subjects (math, language arts, and science); another offers an individualized learning pathway for students in the third, fourth, and fifth grades. By focusing efforts within a designated, individualized learning pathway, schools can concentrate their efforts within contained classrooms, and those teachers can later support others with individualized learning practices. School leaders noted that this approach comes with the added benefit of helping to build buy-in from teachers, parents, and students. They explained that when starting with a group that has opted in, those that opt out start to see success in the individualized learning pathway, making it easier to spread individualized learning practices throughout the school.

For teachers, [individualized learning] means a conscious practice of keeping the learner at the center and not just doing what is comfortable for teachers. All teachers have said that they could not go back to teaching in a regular classroom after this past year.

**—Dr. Tanja Pederson, Principal
Freedom Elementary, Harrisburg, SD**

Sample Practice: Individualized Learning Pathways

Harrisburg Freedom Elementary has two pathways that students and families can choose—an individualized learning pathway or a traditional pathway. The individualized learning pathway is defined by several distinct features. First, the students in the individualized pathway do not receive letter grades but instead, take competency-based assessments. Under this model, students are assessed along a learning continuum that is informed by the state and Common Core standards. Second, students are expected to master skills within each subject area and can move through the material at their own pace. Third, the first two weeks of school learners spend the majority of their time learning about the 16 Habits of Mind, which imparts skillsets for lifelong learning. Fourth, students attend multi-age “studios,” which are akin to classrooms with courses in reading and math. When learners demonstrate mastery, they can move amongst the studios based on the mastery target they are working on. These individualized learning practices have gained widespread support and enthusiasm among teachers.

Chamberlain High School’s long-term vision is to have two pathways—one that is customizable and one that is traditional. In the 2016–2017 school year, teachers in the middle school began to implement individualized learning practices in the eighth grade, including frequent assessments to tailor instruction for individual students. Additionally, students work through the curriculum at their own pace and can use the online learning management system Schoology to guide them. Lastly, students can customize their schedule to allow for more time in certain subjects if needed (though there is still a minimum amount of time in each class).

- **Fewer schools have adopted whole-school models for individualized learning.** Three schools—a small portion of the interviewee pool—are implementing individualized learning schoolwide rather than within selected classrooms, grades, or subjects.
 - ▣ *One school was designed and structured to be an individualized learning-focused school from the beginning.* Students are the drivers of their learning and have significant freedom of choice, including which classes they take and when, and most classes are project-based and student-driven. To keep students on track academically, teachers serve as advisors and meet individually with their advisee students on a weekly basis.

Key Features of Individualized Learning Practices

SPR's interviews revealed that there is no singular model or approach to individualized learning. In this section, we summarize the common individualized learning practices that interviewees identified.

The following are key findings around practices associated with individualized learning:

1. Schools often implement alternative/flexible schedules and learning spaces in order to create opportunities for individualized learning to occur.
 2. Several schools offer multi-age classrooms as a facet of individualized learning.
 3. Student agency is encouraged as a central value of individualized learning.
 4. About half of school leaders described project-based learning as a key feature of individualized learning.
 5. Schools commonly report the strategic use of technology to facilitate individualized learning practices.
 6. Very few interviewees indicated that students' cultural backgrounds influence individualized learning practices.
- **Schools implement alternative/flexible schedules and learning spaces in order to create opportunities for individualized learning to occur.** At least seven school and district leaders reported that they organize their schools in a way that offers flexible and/or alternative scheduling practices. These range from the use of block scheduling, flipped classrooms, and advisory periods, to alternative schedules and spaces that support learning anytime and anywhere.
 - ▣ *Several schools have adopted a schoolwide common schedule.* One school starts the day with a common schedule for the whole building, beginning with a classroom meeting that allows students to connect, build community, and work on collective problem solving. Students then move on to their academic classes.

- ▣ *Seven schools are creating alternative learning environments that extend learning beyond the school walls. One school is rethinking the role of the physical classroom to better individualize learning practices. The school is using collaborative workspaces, such as a research room, to allow students to work together on group projects.*

Sample Practice: Flexible Learning

Minnetonka Public Schools individualizes learning in their elementary through high school levels by practicing what they call “disrupting the time and space dynamic” of the learning environment. Their elementary school teachers practice this in two ways: (1) rethinking the physical classroom, and (2) increasing engagement in online and virtual learning. They encourage students to go out into the community to have an authentic audience for their projects. This allows students to own their learning in a different way, by controlling when and where they learn. The practice has also led to many teachers thinking differently about learning. As many as 700 district students across multiple grade levels took online courses over the past summer break, proving that learning does not have to happen at school or on a specific time schedule.

- **At least four schools offer multi-age classrooms to encourage individualization.** Schools also report that they offer flexible groupings of students to promote student choice and honor where students are in their learning. Rather than group students by age and grade levels, these schools group students based on academic proficiency. At one school, this means doing away with grade levels, instead having multi-age students in “studios.” For another school, this means creating specific times for multi-age grouping in specific subjects. At yet another school, classrooms are structured around grade level, but there are cross-grade level math and science classes (K-Grade 2; Grades 3-5).
- **Student agency is encouraged and valued as a core tenet of individualized learning.** Nearly three-quarters of all school leaders interviewed (15 out of 23) highlight student agency as a key feature of individualized learning in their schools and districts. Student agency is promoted in different ways, including by giving students more control over their schedules; allowing students to decide what topics to explore and how to gain mastery of them; tapping into students’ unique interests and passions; and creating environments where students can work at their own pace. For example, at one school, students are given the opportunity to direct their learning, as teachers provide a menu of learning tools and strategies from which to choose.

With student voice and choice, students are able to dive in with their own passions, drive their learning in terms of knowing how they learn best, and reflect on where and when they learn best. Students have more opportunity to practice making decisions and learning from mistakes while in school.

—Barbara Duffrin, Executive Director Educational Services
Farmington Area Public Schools, Farmington, MN

While student choice is a valued element of individualized learning, schools also acknowledge that the context must be conducive to student choice and that students must demonstrate readiness for self-guided learning. As one school leader said, “[Individualized] learning is not always learner-driven all the time. We need to balance when instruction has to be teacher driven...and students have to learn to drive their own learning through a process of gradually being given responsibility.”

Sample Practice: Student Agency

Avalon School is a small public charter school in Minnesota that was founded as an individualized learning-focused school. The school individualizes learning through its student-centered approach, defined by students being in the “driver’s seat” as their learning unfolds. In practice, students begin reviewing state standards with their advisor in the ninth grade and work together to develop a multi-year individualized learning plan to meet standards for graduation. With the support of their advisor, students have significant control over their schedules and choose when to take required subjects, what their school day looks like, and how many classes they take at one time. Internships are integrated into the individualized learning plan to allow students to deeply explore topics in which they are interested and earn credits by logging internship hours. Students are also engaged in decision making at the schoolwide level. The school has a constitution written by students that establishes three branches of government, and a student legislature can pass rules for the school, with school staff agreement.

- **About half of school leaders describe project-based learning as a key feature of individualized learning.** At these sites, individualized learning is commonly equated with project-based learning because, according to interviewees, project-based learning allows schools to tailor projects to student interests, gives space for students to demonstrate mastery of a given topic, and promotes engagement in learning through real-world problem-solving strategies. School leaders indicate that capstone projects, as part of project-based learning, allow students to demonstrate their learning. The extent to which students have autonomy to choose projects or complete projects outside of the traditional classroom settings varies. In some cases, teachers provide a specific topic of focus but allow students choice in how they

demonstrate mastery (e.g., teachers assign a project that asks students to demonstrate their knowledge of the scientific method).

- **Schools commonly report the strategic use of technology to facilitate individualized learning practices.** About half of the school leaders specifically mentioned using technology as a tool to facilitate and enhance individualized learning practices. For example, one-on-one devices (laptops, iPads, computers), online courses, student management systems (e.g., Schoology), or scheduling apps help to track student progress and allow for customization and real-time feedback as well as provide access to supplemental learning materials. School leaders do not, however, see technology as the primary vehicle to deepen individualized learning practices. More common among the interviewees is the belief that technology is one tool to enable customization, readily access data on student progress, and help students manage their own schedules.
- **Very few interviewees indicated that students' cultural backgrounds influence individualized learning practices.** Interviewees provided limited information about the degree to which students' cultural backgrounds and experiences influence individualized learning practices. Rather, school and district leaders emphasize the importance of making learning relevant by taking into account students' individual interests. Interviewees feel that tapping into students' unique passions allows them to be more engaged learners. However, one school offers culture-based language immersion education centered around the values, language, norms, and beliefs of a cultural group (see the box below).

Sample Practice: Cultural Relevance

School B is governed by the Bureau of Indian Education (BIE). Teaching and learning in this program are rooted in Ojibwe culture. The Ojibwe word for learning is itself reflective; by its definition, learning occurs between two people, or two beings, which is how the school approaches teaching and learning. In addition, there exists the concept that every person is born with a gift that goes along with their spirit, their being, their personality, and their characteristics. As a child grows up, the community members start to recognize that the child is gifted in a particular set of knowledge. This framing is aligned with aspects of individualized learning, and it serves as the model for this school.

Every classroom in the school has a certified teacher who is learning Ojibwe as a second language and a teacher who is a native Ojibwe speaker. Both teachers provide students with individualized attention. The classes are all multi-age, which allows older students to support and model behavior for younger students. The program emphasizes experiential learning, using Ojibwe cultural activities to teach lessons. For example, students learn hands-on about harvesting rice, and teachers connect this to literacy and numeracy lessons.

CHAPTER IV: SUPPORTING TEACHERS TO INDIVIDUALIZE LEARNING

INTERVIEW DATA

Individualized learning is a significant shift from the traditional way teachers engage with students and learning in the classroom, and teachers require in-depth support to make that change. In this chapter, we highlight the ways in which schools and districts are supporting teachers to individualize learning. According to SPR’s interviewees, the two primary methods of support for teachers are (1) professional development around individualizing learning and (2) assessment practices that capture real-time information, allowing teachers to better tailor instruction for individual students.

[Our teachers came to the conclusion that] the reason we’re thinking about [individualized learning] is because we are great at what we do. This will only make us more effective. The conversation has changed drastically from when we introduced it to now... If you stood in front of our teachers and said, “Tell us why you’re going into [individualized] learning,” they will say, “It’s because of the kids. It’s because we have to do what’s right for the kids.”

—Cory Steiner, Superintendent
Northern Cass School District 97, Hunter, ND

Professional Development for Individualized Learning

For many teachers, individualized learning is an entirely new concept; for others, the difficulty is in translating understanding of individualized learning approaches to actual practice. School and district leaders described key professional development strategies for supporting their teachers to better individualize learning.

The following are key findings around approaches to professional development for individualized learning:

1. The professional learning community is a particularly common structure for professional development.
 2. Schools often engage outside organizations or consultants to support them with professional development for individualized learning.
 3. Other forms of professional development include conferences and book studies.
 4. Some districts provide districtwide professional development around individualized learning practices.
- **The most popular mode of professional development is the professional learning community (PLC).** Nearly half of the interviewees—mostly at public schools—named PLCs as the primary vehicle for professional development for their schools’ teachers. Through PLCs, teachers come together to share their experiences and expertise, and to learn from and with each other to improve instructional practices. Most of the PLCs convene once per month and rely on a peer-teaching model in which one teacher presents each month on a

different topic such as interpreting student data or designing curriculum. For example:

☐ *Teachers at one school have self-organized into a rich professional learning community, which includes self-directed research and book studies on individualized learning. Four teachers are considered leaders in individualizing learning, and they act as mentors and role models for others. Teachers have presented on the work they are doing at the National Personalized Learning Conference, and have hosted trainers from Marzano to work with them as a leadership group.*⁷

- **Schools commonly engage outside organizations or consultants to support them in designing and delivering teacher professional development related to individualized learning.** These trainers focus on building teachers’ knowledge of individualized learning practices, supporting teachers to use data for instruction, building teachers’ capacity for collaborative instruction, and imparting best practices around curriculum redesign for 21st century learning. Based on the interviews, Minnesota’s public charter and private schools are more likely than other schools in the region to engage consultants for assistance with understanding data, and consultants are more commonly brought in (for all topics) at the elementary and middle school levels across all three states.
- **Conferences and all-faculty book studies also expose teachers to individualized learning concepts.** Several aligned organization representatives and school and district leaders, particularly those from North Dakota, described designing book studies during the summer or during the school year to engage teachers in reading and discussing the literature on individualizing learning.⁸ Respondents representing public schools referenced book studies more often than respondents from other school types.
- **Teachers also participate in districtwide professional development opportunities.** These include summer learning opportunities for all teachers within a district so that professional development is aligned across all schools. Often these workshops focus on instructional strategies, although some districts have instituted

Teacher professional development for individualized learning also includes:

- ☐ **Common planning time** to collaborate on curriculum design;
- ☐ **Instructional coaches** who offer weekly support on effective instructional practices; and
- ☐ **“Technology integrationists”** who provide training on effective use of online tools for instruction.

⁷ See <https://www.marzanoresearch.com/>

⁸ The books most frequently mentioned for these book studies were *Inevitable: Mass Customized Learning* by Charles Schwab and Beatrice McGarvey, and *The Art and Science of Teaching* by Robert J. Marzano.

CHAPTER IV: SUPPORTING TEACHERS TO INDIVIDUALIZE LEARNING (INTERVIEW DATA)

workshops focused on the use of technology in the classroom.

- ▣ *One district offers a “technology camp” to all district teachers the week following the end of the school year. At this camp, hundreds of teachers come together to learn from each other about technology in the classroom and how to use it to enhance individualized learning.*
- ▣ *Another district hosts a “Teaching and Learning Academy” each August, comprised of sessions that cover district instructional priorities, including individualized learning. The district also hosts a two-day summer workshop focused solely on personalization.*

Each school exists within a unique context, and professional development must be tailored to the environment of the school and the needs of its teachers. Nevertheless, some best practices are emerging around supporting teachers to individualize learning. In particular, interviewees of all categories pointed out that the most important way to support teachers in adopting individualizing learning practices is for them to experience individualization for themselves. For example, one interviewee from an aligned organization described designing professional development to include elements like voice and choice in which teachers follow their unique interests at their own pace.

Relatedly, interviewees noted that an effective strategy for enhancing teacher knowledge and understanding of individualized learning is through direct observation of individualized learning “in action.” The scale of these experiences varies, from teachers observing colleagues’ classrooms, to site visits to other schools or districts within the same state, to multi-day trips to other states to learn from their schools. North Dakota schools appear to take this approach to professional development more often than those in South Dakota or Minnesota.

It comes alive when you see another professional doing this work and being able to ask them questions. This is what will really move this forward.

**—Mark Femrite, Assistant Superintendent of Public Instruction
Westonka Public Schools, Minnetrista, MN**

Field leaders, state leaders, and interviewees from aligned organizations also mentioned the importance of involving the broader community in supporting teachers’ development. One field leader explained that designing culturally relevant lesson plans depends on “understanding the cultural community [of the school] and developing pedagogy based on that.” Community involvement was not named by any school or district leaders, however, perhaps pointing to the difficult realities of instituting such a practice.

Through exposure to individualized learning in action and through trying on individualized learning practices in the classroom, teachers are beginning to see a fundamental shift in their role as educators. School leaders pointed out that teachers are beginning to embody the role of the “facilitator” of learning, in which their primary role is acting as a guide for learners. As one school leader described, “teachers are facilitators of learning, not the ‘sage on the stage anymore.”

Assessments for Individualized Learning

SPR's interviewees unanimously agree that student success and growth with individualized learning necessitates non-traditional measures of achievement, but there is a lack of existing, reliable tools to capture this information, much of which is anecdotal. In order for teachers to truly individualize instruction for their students, they need access to real-time assessment data that provides a comprehensive picture of students' successes and challenges. Just as individualized learning represents a different conception of education, it also requires a different way of assessing student growth than what traditional school-based assessments currently offer.

Interviewees across all categories are still in exploratory stages of understanding what to look for when measuring individualized learning. When asked what they believe are the indicators of achievement for individualized learning, interviewees commonly pointed to quantitative measures such as grade point average, hours of work experience, behavior incidents, attendance, and college completion rates. On the qualitative side, they named factors such as student engagement, social emotional learning, creativity, and critical thinking.

It is far less clear how to actually capture evidence of these qualitative indicators. At the state level, interviewees reported that there are very few conversations being held about measuring individualized learning outcomes, although there is some movement towards broadening the scope of current state-mandated assessments. Comparing across state-level respondents, it appears that there is more discussion of measurement within South Dakota state offices than in Minnesota or North Dakota.

Among field leaders and aligned organizations, measurement of individualized learning is just as elusive. While interviewees named entities that are working on developing metrics,⁹ they recognize the difficulty of capturing information on individualized learning outcomes in ways that are reliable and can be replicated across students and over time, particularly because many qualitative indicators are subject to individual interpretation.

Given that it is far simpler to capture quantitative data, many schools continue to use standardized assessments as their primary means of measuring success with individualized learning practices. While most schools represented in the interviews are mandated to administer state assessments, many are also using alternate assessments that offer valid and reliable quantitative data. In particular:

- Nearly one-quarter of the school and district leaders interviewed indicated that their schools administer the NWEA MAP¹⁰ assessment to measure student growth.

⁹ For example, they mentioned Next Generation Learning Challenge, the Ball Institute, and Education Reimagined.

¹⁰ NWEA MAP is a K-12 assessment that reveals growth and proficiency over time and can produce results that can be used by teachers to inform classroom instruction. See <https://www.nwea.org/map-growth/>

CHAPTER IV: SUPPORTING TEACHERS TO INDIVIDUALIZE LEARNING (INTERVIEW DATA)

- NWEA use was mentioned by respondents from private, public, and public charter schools alike, though it was more commonly reported by those representing middle schools and schools in Minnesota than other school levels and states.
- A few school and state leaders mentioned using the results of the ACT to understand student competency, and some schools are currently exploring the use of PISA¹¹ results to measure growth.

However, interviewees made clear that standardized assessments alone cannot adequately measure the elements or impacts of individualized learning, and that a more formative approach to assessment is required. To that end, schools and districts are creating unique measurements and practices that allow them to better understand student achievement within their own contexts.



¹¹ The Program for International Student Assessment (PISA) is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. It is administered and analyzed by the Organization for Economic Cooperation and Development (OECD). See <http://www.oecd.org/pisa/>

The following are key findings around the means by which schools are measuring success with individualized learning:

1. Many schools are creating specific rubrics that capture elements of individualized learning.
 2. Schools are experimenting with surveys that gather qualitative information from students and parents.
 3. Teachers use online learning platforms for formative assessment and direct observation of student learning.
- **One popular approach among the schools represented in the interviews is to create school- or district-specific rubrics for all teachers to use.** These rubrics vary in scope, from measuring individual student outcomes along the “Four Cs” (critical thinking, communication, collaboration, and creativity),¹² to proficiency scales and learning targets, to project rubrics that capture students’ reflections on their own growth. The use of rubrics was mentioned more often by interviewees representing the middle and high school levels than other levels, and more often by charter school respondents than those from other types of schools.
 - **Schools are exploring surveys to gather qualitative information about student and parent satisfaction, student engagement, and school climate and culture.** For two schools, teacher self-assessment surveys are also valuable in capturing this information. Survey use was more often reported by public school district-level respondents than by school-level respondents, and by respondents representing schools in Minnesota than in other states.
 - ▣ *One district has surveyed students, teachers, and community members to measure support for individualized learning.* The district is now conducting focus groups to better understand key questions and concerns with this approach.
 - **Other approaches to measuring individualized learning include the use of online learning platforms that offer self-directed assessments for students, and in-person teacher observations of student growth,** particularly for respondents from elementary schools.
 - **School- and district-level stakeholders are grappling not only with *how* to measure success with individualized learning, but also with *why* the measurement matters.** Respondents vary in terms of the purpose they see for assessing individualized learning practices: For some, the aim of assessment is to measure growth; for others, it is to measure competency; and for still others, it is to measure mastery. This variation in opinion is important in that it colors how schools and districts design assessments and codify measurement practices around individualized learning.

¹² The Four Cs were identified by the National Education Association as the most important 21st century skills for K-12 education. See <http://www.nea.org/tools/52217.htm>

**Sample Practice:
Assessing Individualized Learning**

School C uses the following quantitative and qualitative data to understand student outcomes related to individualized learning:

- ☑ 21st century skills assessment (Four Cs rubric);
- ☑ An internal, online application called Compass that allows students to give themselves and their peers feedback;
- ☑ Traditional assessment data to help teachers differentiate instruction;
- ☑ Internal data on how frequently project-based learning is used in classrooms; and
- ☑ The Marzano rubric for effective teaching to capture successful teaching practices, including those that promote individualized learning.

Just as moving away from traditional models of education is difficult, so too is altering the way student achievement is measured. Interviewees described resistance to changing assessment practices; in particular, a few school and district leaders expressed a fear within the school/district community that moving away from standardized assessment or grades-based measurement would affect college acceptance rates for their students. One respondent from an aligned organization commented that if individualized learning is “done right,” it may actually lead to a drop in standardized test scores. For example, a student who builds an individualized curriculum around an interest in urban planning rather than traditional high school math will likely score lower on a standardized math assessment than if that student had taken a conventional course. The challenges suggest that reflection about the role of assessment needs to be ongoing, especially as individualized learning continues to gain momentum in the region.

CHAPTER V: ANALYSIS OF SCHOOL LEADER SURVEY

SURVEY DATA

The prior chapters highlighted the analysis of data collected through SPR's in-depth interviews with field leaders, individuals from aligned organizations, and school, district, and state leaders. The findings provide us with a snapshot of individualized learning from the perspective of all those interviewed. However, the individuals who were interviewed were chosen specifically because of their knowledge of and/or work in individualizing learning, both of which indicate that they may be farther along in the individualized learning continuum of knowledge and practice than others in the region. In order to see whether the findings from the interviews hold true for the rest of the region, SPR designed a survey to capture data that is more representative of the large number of schools and districts operating within the region. In addition to focusing on a different sample of individuals with a wider range of experience with individualized learning, the survey contains different focal areas than the interviews; rather than asking about the process and strategies for successful implementation, the survey captures a simpler snapshot of current knowledge, practices, and needs.

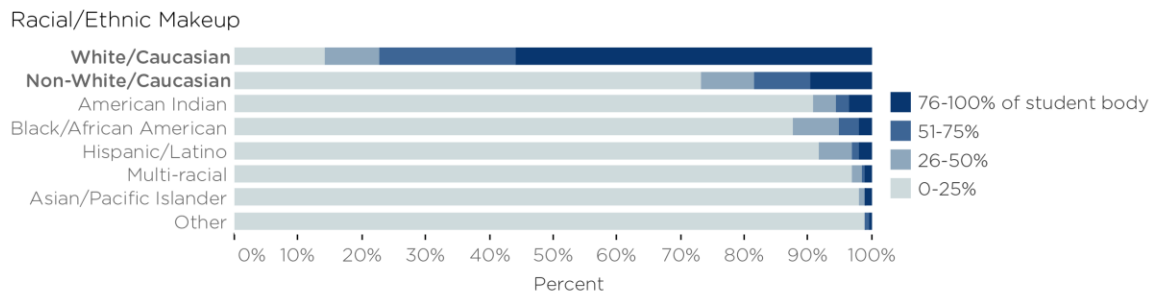
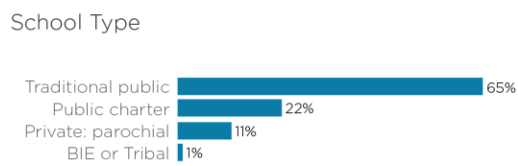
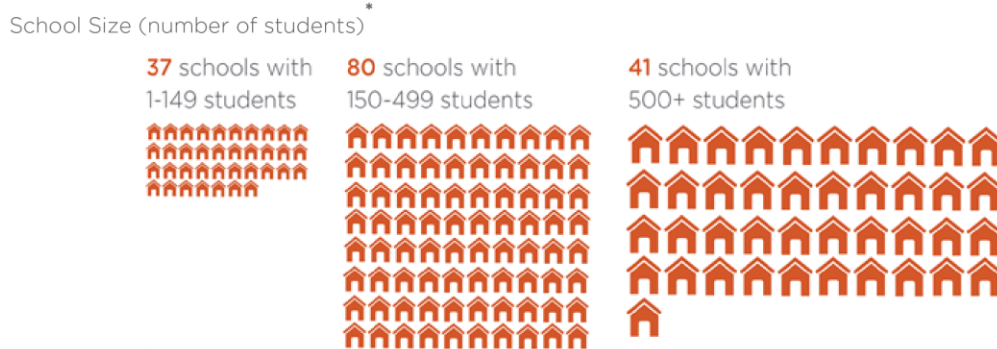
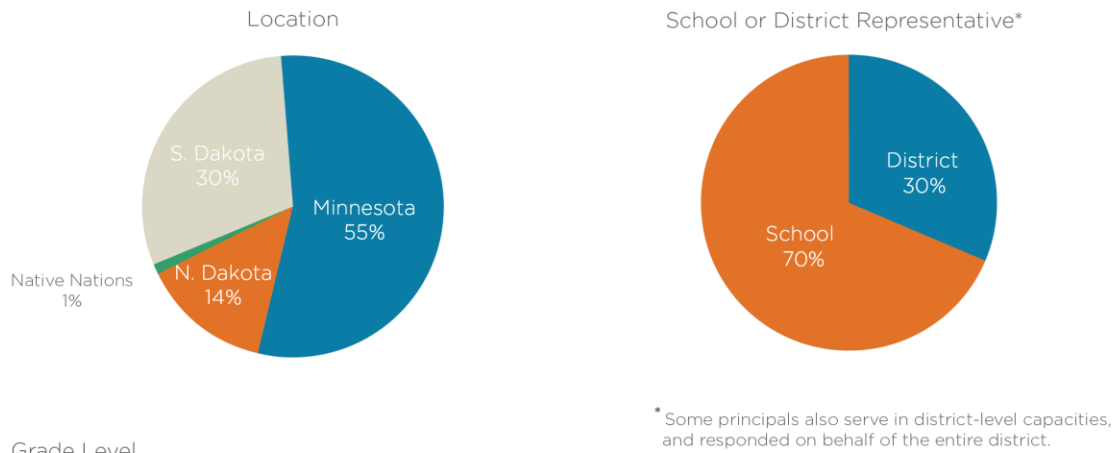
The 22-item survey was sent to all school principals in the region in order to understand how individualized learning is being implemented throughout the region, the level of awareness around this approach, and the key barriers facing schools in implementing individualized learning practices. The survey items were generated to align with the Bush Foundation's baseline research questions, and were informed both by prior research on individualized learning¹³ and by the data gathered from SPR's interviews. To account for representativeness and analyze differences between different types of schools, the survey also asked respondents to answer questions about the characteristics of the schools they represent. Throughout this section, we frame the survey analysis by describing "respondent schools." This term refers to the schools represented by the individuals who completed the survey. Please see Appendix B for a discussion of the survey methodology and limitations of the analysis.

Characteristics of Respondent Schools

SPR's survey generated 158 unique respondents representing schools and districts from across the region. Exhibit V-1 below provides a general profile of respondent schools.

¹³ Sources include An and Reigeluth (2012), Pederson and Liu (2002), Pane et al (2017), and Levenstein (2016).

Exhibit V-1: Respondent Characteristics



CHAPTER V: ANALYSIS OF SCHOOL LEADER SURVEY (SURVEY DATA)

Location. Over half of respondent schools are located in Minnesota (55 percent). An additional 29 percent are in South Dakota, 14 percent are in North Dakota, and 1 percent are in one of the 23 Native nations.

School versus district. Thirty percent of respondents represented their districts rather than individual schools when completing the survey.¹⁴ District-level responses were much more common from North Dakota and South Dakota; in fact, nearly two-thirds (63 percent) of South Dakota responses were district-level, as were over half (55 percent) of those from North Dakota. Only 5 percent of responses from Minnesota were on behalf of an entire district.

Grade level. Respondent schools represent all grade levels. Once districts were excluded, there were no significant differences in grade levels by location.

School size. We excluded districts from our analysis of school size, which was measured by student enrollment. The sizes of schools in our sample have a fairly normal distribution, with the majority housing between 150 and 499 students. We define “small” schools as those with 1-149 students, “medium” schools as those with 150-499 students, and “large” schools as those with 500 or more students enrolled. An examination of district size reveals that respondent districts are not significantly larger than respondent schools. This is likely because many of these districts have the same individual serving as principal of a school and superintendent of the district, and are therefore likely to be rural districts with small student populations.

School type. The majority (65 percent) of respondent schools are traditional public schools. The other types of schools represented include public charter (22 percent), private parochial (11 percent),¹⁵ BIE schools (one respondent), and tribally governed schools (one respondent). All public charter schools in this sample are from Minnesota, as North Dakota and South Dakota are two of the seven states in the United States without charter school laws. Both the BIE school and the tribally governed school share a geography with South Dakota. The private parochial schools are distributed across all three states.

Student socioeconomic status. About 30 percent of respondents represent schools where the majority of students qualify for FRPL, a common proxy for identifying students from low-income households. Respondent schools in Minnesota are slightly more likely to have most students qualify for FRPL (40 percent) as compared to respondent schools in North Dakota (19 percent) and South Dakota (16 percent).

Predominant ethnicity. We define “predominant ethnicity” as the largest racial or ethnic student population at a respondent school. Schools that reported no predominant ethnicity are categorized as “multi-ethnic.” Respondent schools in

¹⁴ This determination was made if at least two of the following three criteria were met: (1) the respondent serves as a district-level staff person (typically superintendent); (2) the grade levels selected correspond to a district rather than the school for which the respondent is principal; and (3) the school name entered is actually that of the district and not the school.

¹⁵ This includes schools that listed themselves as “Other” (n=4), which were determined to be parochial private schools upon further investigation.

Minnesota are more likely than those in the other two states to be multi-ethnic or to have a predominant ethnicity other than White; 62 percent of schools in Minnesota are predominately White, compared to 91 percent of schools in North Dakota and 86 percent of schools in South Dakota.

Analysis of Survey Findings

SPR's survey was designed to capture information that would provide a baseline snapshot of individualized learning across the region. To this aim, it solicited information about individualized learning within the following categories:

1. Understanding of individualized learning
2. Practices for instructional relevance
3. Practices for career and cultural relevance
4. Challenges to and supports for individualized learning

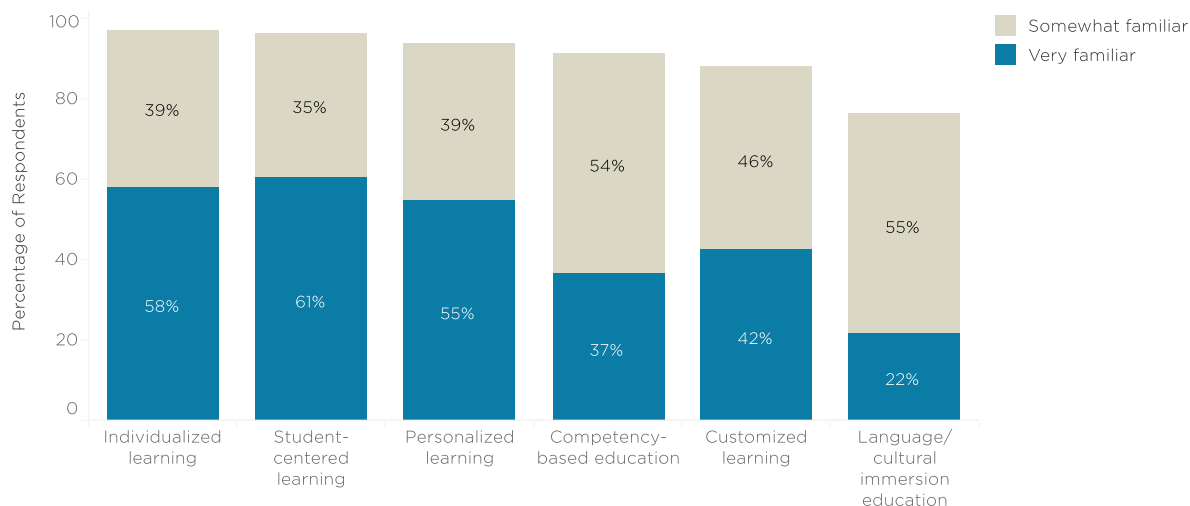
The findings for each category are described in detail throughout this section.

UNDERSTANDING OF INDIVIDUALIZED LEARNING

Survey respondents were first asked about their familiarity with a set of terms in order to understand how widespread knowledge is around student-centered approaches to teaching and learning. These terms are: individualized learning, personalized learning, customized learning, competency-based education, student-centered learning, and language/cultural immersion education. Respondents were also asked to indicate whether their schools are implementing any of these approaches and where they learned about them.

- **The vast majority of respondents are at least familiar with the terms used to describe student-centered approaches.** As shown in Exhibit V-2, respondents are most familiar with “individualized learning” and “student-centered learning,” and least familiar with “language/cultural immersion education.” Schools with more students qualifying for FRPL and schools that are not predominantly White are more likely to be familiar with the term “language/cultural immersion education” than other schools.

Exhibit V-2: Familiarity with Terms

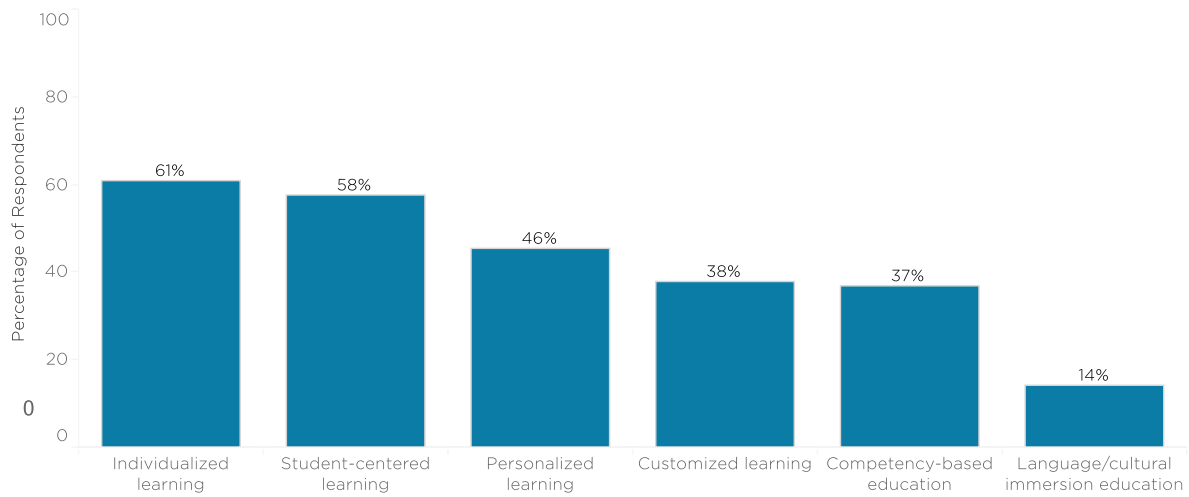


Source: School leader survey (N=158).

Respondents who described their familiarity in more detail in a free response section (n=20) revealed that, for them, individualized learning and similar approaches mean that the student is at the center of the educational experience—just as in the interviews. For example, one respondent explained, “We work to ensure that all learning is student-centered, [with] teachers guiding students through projects; [and] students exploring and researching topics on their own.”

- **While 97 percent of respondents indicated that they are at least familiar with individualized learning, only 61 percent reported they are currently implementing it in their schools.** This trend was consistent for all related terms and approaches, and resonates with the perspectives of SPR’s interviewees. Compared to the percentage of respondents familiar with these terms, far fewer are actually implementing them (see Exhibit V-3). Although high-FRPL schools and schools that are not predominately White are significantly more familiar with language/cultural immersion education, these schools are not implementing it at significantly higher rates than other types of schools. Bridging the gap between understanding and implementation clearly represents a challenge and an opportunity to bring individualized learning to more students across the region.

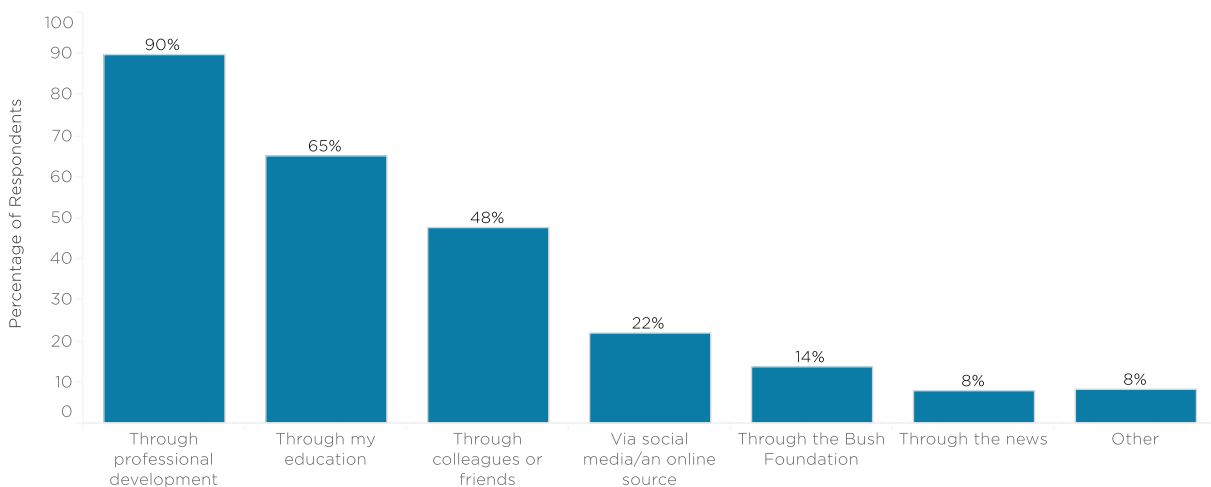
Exhibit V-3: Current Implementation of Individualized Learning and Other Approaches



Source: School leader survey (N=158).

- **The most common vehicle for learning about individualized learning is professional development.** The majority of respondents (90 percent) reported that professional development is at least one of the ways in which they have learned about individualized learning or other instructional approaches (Exhibit V-4). Most respondents learn about these approaches from multiple sources, including their own education (65 percent), colleagues or friends (48 percent), social media (22 percent), the Bush Foundation (14 percent), and the news (8 percent). Only 3 percent of respondents have *not* heard about individualized learning through professional development or their own education, highlighting that such approaches are being most widely shared through formal channels.

Exhibit V-4: Source of Knowledge



Source: School leader survey (N=156).

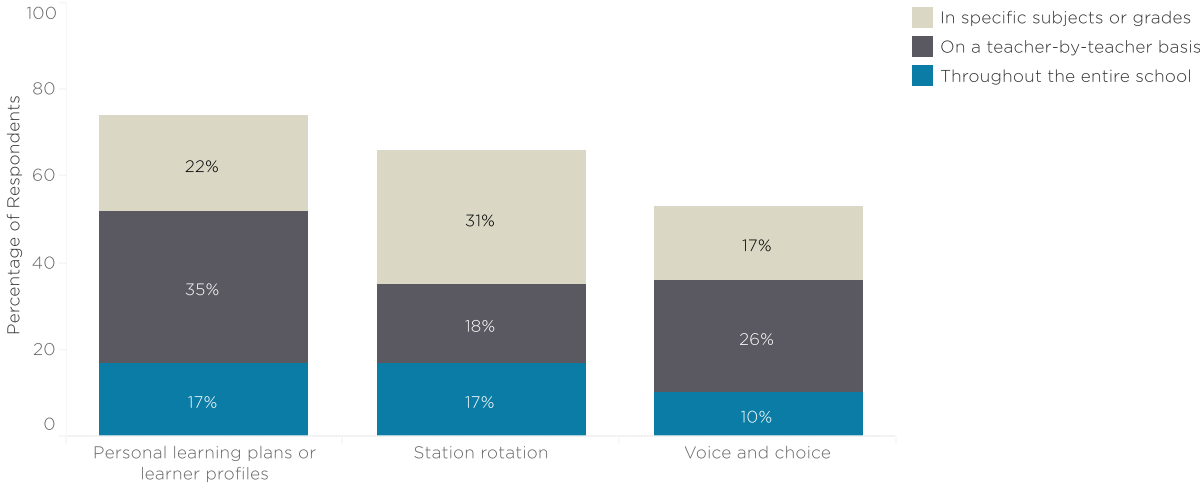
PRACTICES FOR INSTRUCTIONAL RELEVANCE

SPR’s survey was also designed to gather information about which instructionally relevant practices schools or districts are engaging in and how frequently they do so, including those that allow students to move at their own pace, exercise voice and choice, and learn in flexible environments.

- **Common individualized learning practices are more likely to be implemented in specific grades or classrooms than throughout the entire school.**

Respondents were asked how prevalent personal learning plans, station rotation, and voice and choice are at their schools.¹⁶ As shown in Exhibit V-5, student voice and choice (allowing students to choose how and what they learn) is the least prevalent, with nearly half of respondents reporting that this is not practiced in their school at all. All three practices are more common in public charter schools. Station rotation is more common in schools where the majority of students are not White and in high-FRPL schools.

Exhibit V-5: Common Practices for Individualized Learning

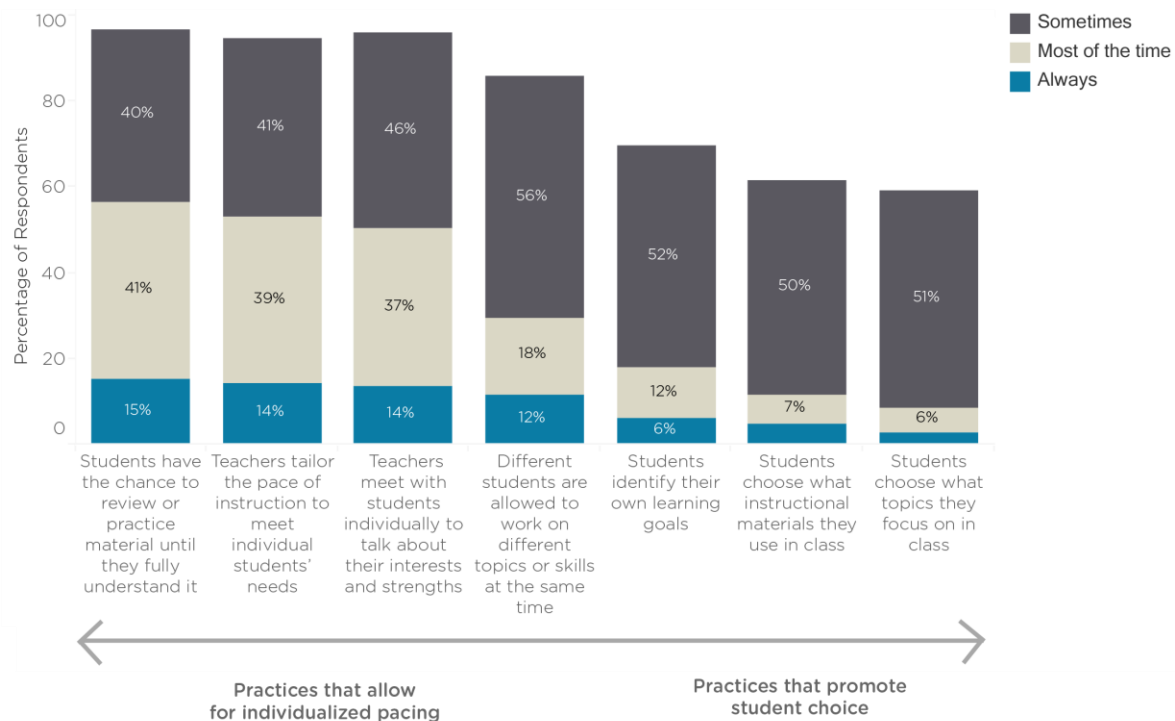


Source: School leader survey (N=157).

¹⁶ These practices were chosen for the survey because SPR’s interviews revealed that they are the most commonly associated with individualized learning.

- Practices that allow for individualized pacing are more common than those that promote student choice.** While more than half (56 percent) of schools allow students to review or practice material until they fully understand it most or all of the time, only eight percent of schools regularly allow students to choose what topics they focus on in class (Exhibit V-6). Practices related to student voice and choice are the least commonly implemented in schools, a finding that is in conflict with what SPR heard during the interviews. Survey results indicate that public charter schools are significantly more likely to employ any of the practices displayed below than other types of schools.

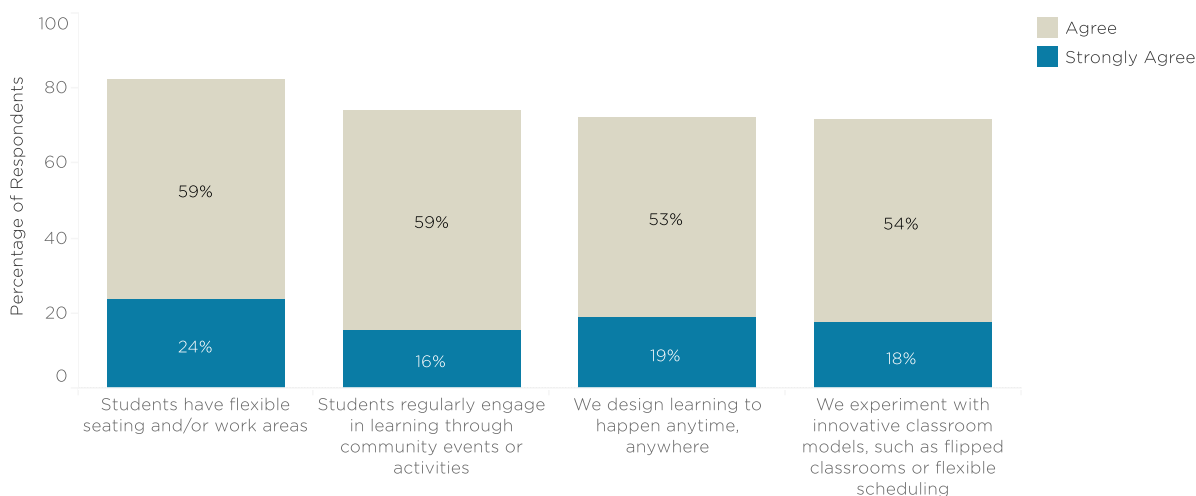
Exhibit V-6: Individualized Pacing and Student Choice Practices



N= 147. Source: School leader survey.

- Most respondents design flexible learning environments in their schools or districts.** This is especially true for respondent schools in Minnesota, more so than schools in North Dakota or South Dakota. The most common practice is flexible seating, which occurs in 76 percent of schools, while the least common is innovative classroom models such as flipped classrooms or flexible scheduling, though this still occurs in most respondent schools (66 percent).

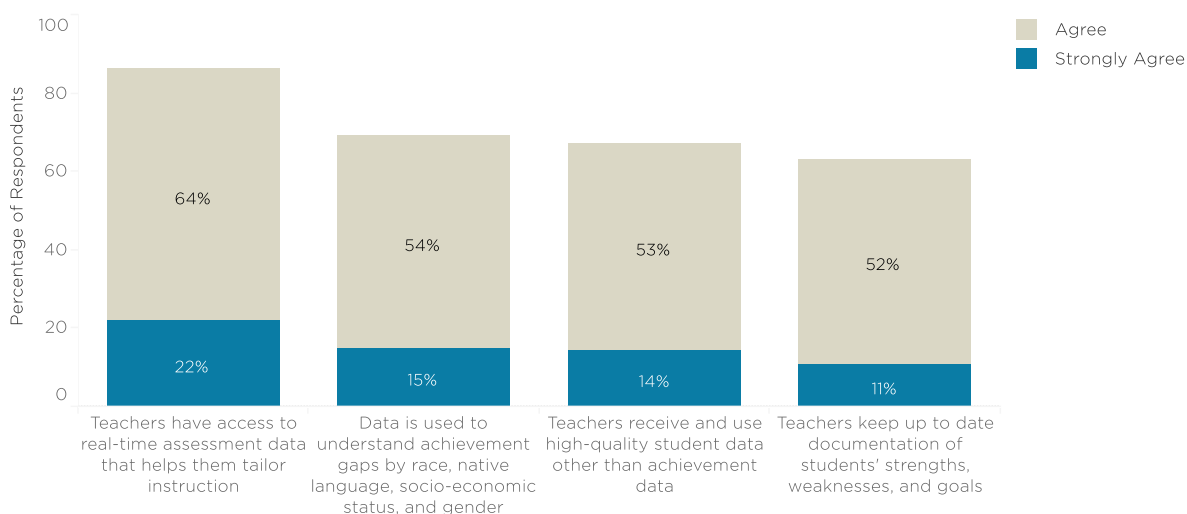
Exhibit V-7: Elements of Flexible Learning Environments



Source: School leader survey (N=147).

- Most respondents have strong student data systems that allow teachers to better individualize to students' unique needs.** The majority of schools (86 percent) report that their teachers have access to real-time assessment data that helps them tailor instruction. Two-thirds of respondents (67 percent) also use non-achievement data, and slightly fewer (63 percent) document individual students' strengths, weaknesses, and goals. These practices are more common among elementary school teachers than secondary school teachers. More than half of schools (69 percent) use student data to understand achievement gaps, and this is more common among high-FRPL schools.

Exhibit V-8: Data Use for Individualized Instruction



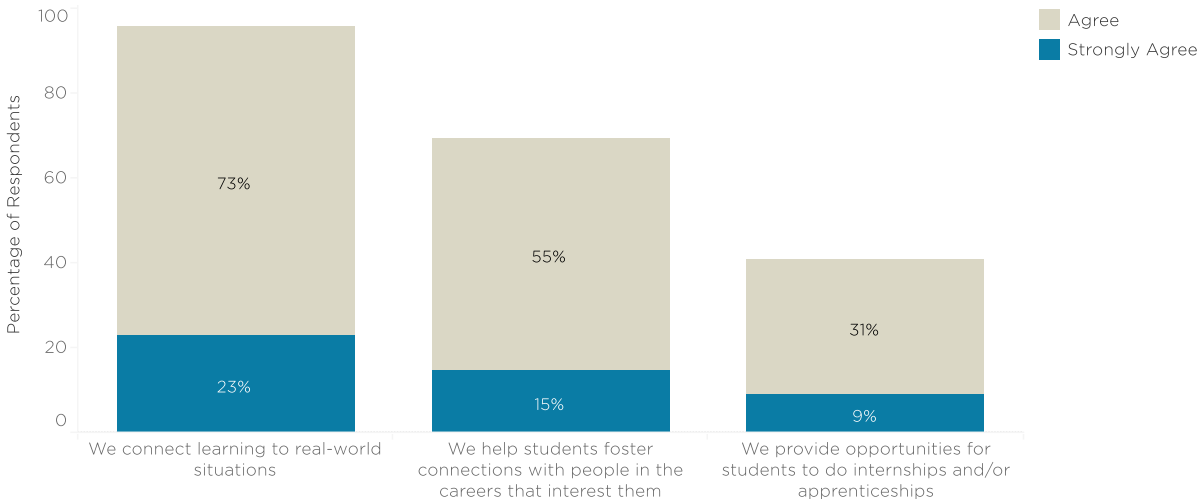
N=146. Source: School leader survey.

PRACTICES FOR CAREER AND CULTURAL RELEVANCE

As the Bush Foundation defines it, in order for learning to be truly individualized, it must be contextualized to students’ unique cultural backgrounds and their goals for the future. Respondents were asked how they make learning relevant for students based on their career interests and their cultural identities.

- **The vast majority of schools (96 percent) connect learning to real-world situations.** In order to bring this relevance to the classroom, many foster connections between students and people in careers that interest them (70 percent), or they provide internship or apprenticeship opportunities (40 percent; see Exhibit V-9). These real-world work experiences and professional connections are more common in high schools (82 percent and 70 percent, respectively). The 17 respondents who completed a free response about how their schools help students explore careers cited activities such as guest speakers, career fairs, career-focused classes, field trips, and meetings with counselors.

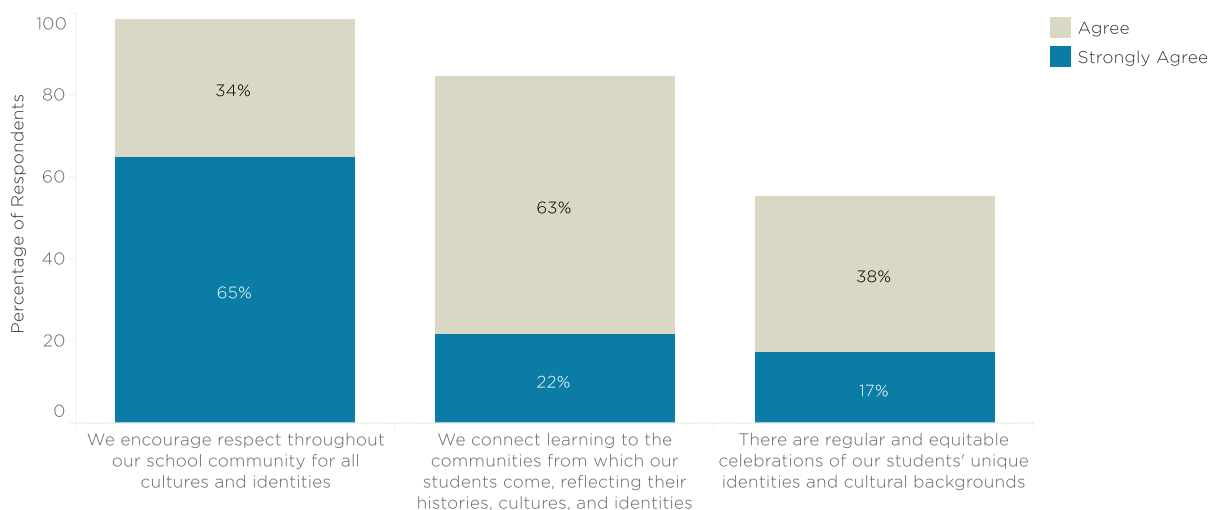
Exhibit V-9: Real-World and Career-Relevant Practices



Source: School leader survey (N=143).

- **While a majority of schools report encouraging culturally relevant practices (Exhibit V-10), these practices are more common among respondent schools with more diverse student bodies.** In particular, schools that are not predominantly White are more likely to “encourage respect...for all cultures and identities,” “connect learning to the communities from which...students come,” and have “regular and equitable celebrations of...students’ unique identities and cultural backgrounds” than their predominantly White counterparts. The last two statements are also more common in high-FRPL schools and public charter schools. The 19 respondents who described their schools’ efforts in this area largely regarded cultural relevancy as teaching students about different cultures. Two admitted their schools fall short in this area, with one saying, “We don’t do a very good job of this.”

Exhibit V-10: Culturally Relevant Practices



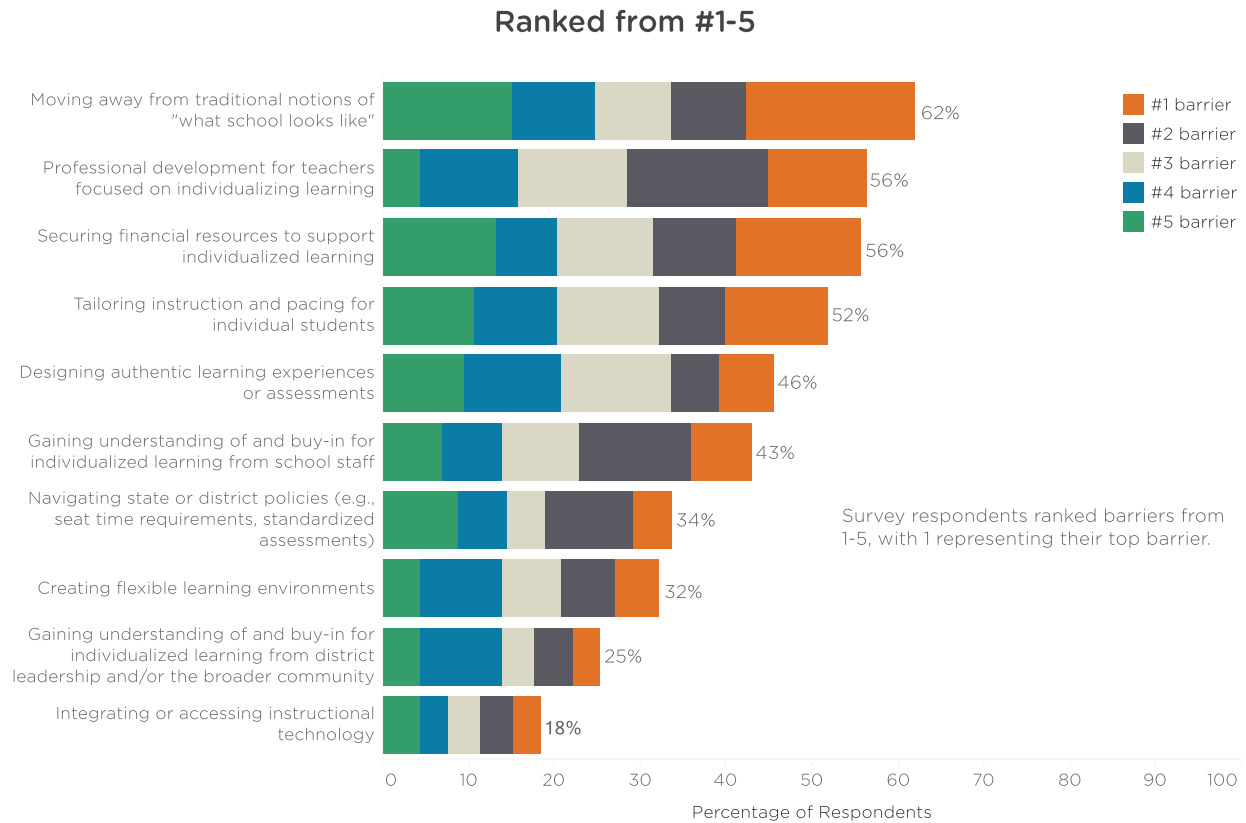
Source: School leader survey (N=143).

CHALLENGES TO AND SUPPORTS FOR INDIVIDUALIZED LEARNING

Finally, respondents were asked about the barriers that prevent their schools from implementing individualized learning practices, and the supports they need in order to move their efforts forward. They were asked to rank their top five barriers from a list of 10 barriers related to issues with perception, lack of resources, and lack of knowledge or capacity among school staff. Respondents were asked to similarly rank the supports they think would be most beneficial in implementing individualized learning.

- **Overall, the most significant barrier to implementing individualized learning is “moving away from traditional notions of ‘what school looks like.’”** As a strong echo of SPR’s interviews, the majority of respondents (62 percent) rated this barrier among their top five, and 20 percent rated it as their number one barrier (Exhibit V-11). Providing professional development opportunities for teachers and securing financial resources were also commonly among the top five barriers (56 percent each). Integrating or accessing instructional technology was the lowest reported barrier (18 percent), highlighting that having technology in place is not enough; schools require additional support to use it in a way that results in deep individualized learning.

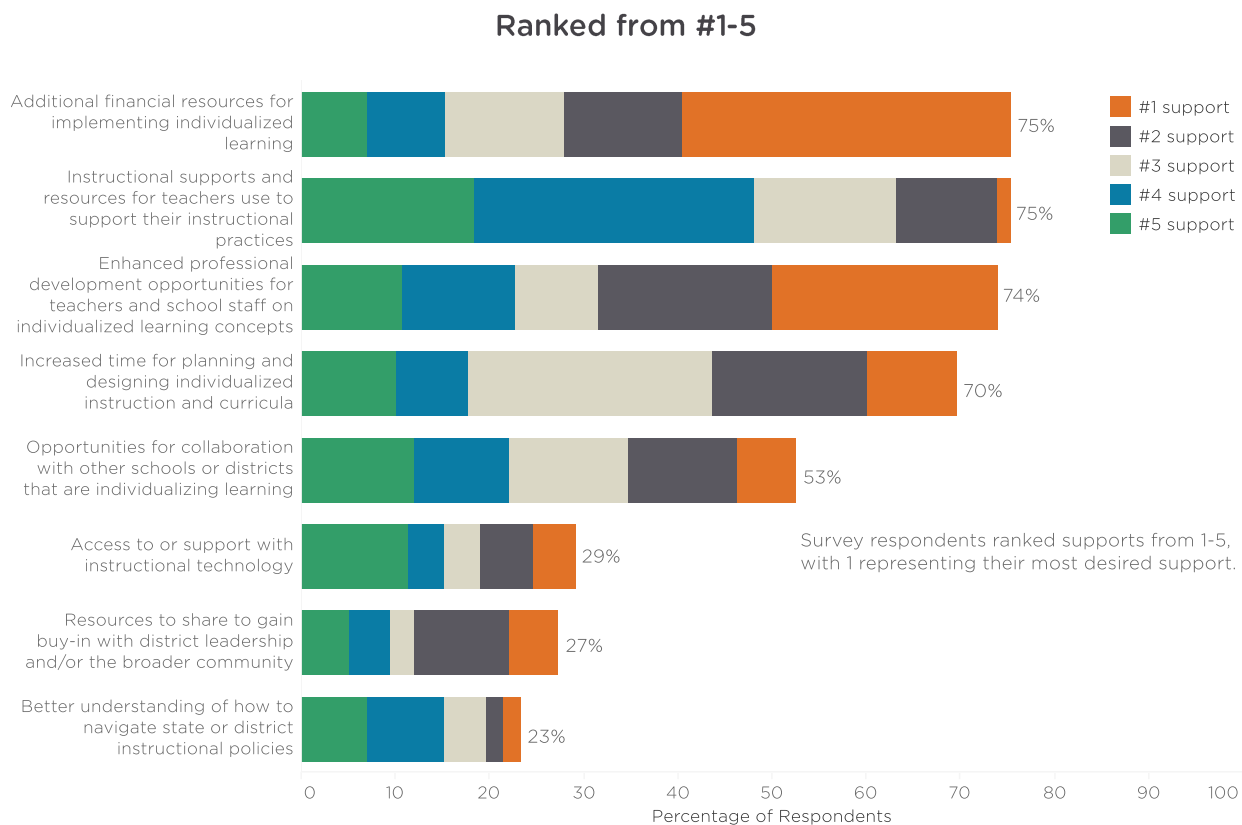
Exhibit V-11: Challenges to Individualized Learning Implementation



N=158. Source: School leader survey.

- Survey respondents reported that financial resources, enhanced professional development, and resources for teachers would be the most helpful forms of support for implementing individualized learning.** As shown in Exhibit V-12, each of these types of support had approximately three-quarters of respondents rating it among their top five. Schools are least likely to desire support in accessing instructional technology (29 percent), gaining buy-in with district leadership and/or the broader community (27 percent), and navigating state or district policies (23 percent).

Exhibit V-12: Desired Supports



N=158. Source: School leader survey.

Discussion of Survey Findings

As highlighted above, there appears to be a high level of awareness of individualized learning and related concepts across the region, and the majority of schools and districts are individualizing education in some way. This finding is in keeping with the perspectives of the individuals interviewed by SPR. The majority of schools are implementing practices related to individualized pacing, flexible learning environments, and data-driven instruction, but practices around student choice and agency in learning are less common.

Based on survey data, public charter schools appear to be implementing individualized learning practices to a greater degree than other types of schools. This may be because other types of schools face barriers to implementation related to differences in governance and flexibility. Likewise, small schools in the survey sample are more likely to be currently implementing individualized learning practices than medium or large schools. This finding may be due to a number of reasons, such as the fact that smaller schools generally have more freedom to implement new approaches, or that survey respondents from smaller schools are more easily aware of what is happening in individual classrooms.

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It also appears that schools with larger low-income and non-White student populations are more likely to be implementing certain individualized learning practices. These schools are more likely to be familiar with the term “language/cultural immersion education,” use data to understand achievement gaps, and celebrate cultural differences. Given the additional barriers that schools with high percentages of low-income students are likely to face, this finding lifts up the strengths of these schools in reaching students where they are.

Finally, the information collected through SPR’s survey reveals (and reflects the interview analysis) that—across all school types and all locations—individualized learning practices are not implemented as widely as they are understood. This finding reveals that bridging the gap between understanding and implementation represents a continued challenge. Respondents indicate that the primary barrier to implementation is philosophical in nature, and this harkens back to the initial discussion in this report about changing the culture of education. Survey respondents believe that this can be approached with enhanced financial resources to strengthen discrete practices such as high-quality professional development and instructional supports for teachers.



CHAPTER VI: CHALLENGES AND CONSIDERATIONS

In this final chapter, we highlight the similarities and differences between the interview and survey data, and discuss overarching challenges to implementing individualized learning across the Bush Foundation's region. We conclude with some key considerations for the Foundation's education initiative going forward.

Findings Across Data Sources

This report summarized the findings from the interview and survey data collected from a diverse group of education leaders. As mentioned previously, SPR interviewed a select number of school and field leaders with knowledge of and experience with individualized learning. In order to capitalize on their experiences, we designed the interview questions to elicit information about approaches to implementation and core practices, philosophies, and challenges and lessons learned. The open-ended nature of the interviews allowed interviewees to respond freely to our areas of inquiry. By contrast, the survey was designed to be close-ended with "write-in" opportunities for respondents to elaborate on their experiences with individualized learning. The survey was intentionally brief and close-ended to increase the likelihood of response and reduce burden, and as such focused on core practices and barriers rather than implementation processes or reflections.

While the interview and survey data collection techniques were designed for different populations and to capture information on different focal areas, there are some general elements for comparison between the two data sources that can be lifted up.

Below are some of the key findings that that emerged from both the interview and survey data:

1. Overall, there is a generally high level of awareness of individualized learning practices, and most schools are individualizing education to some extent.
2. Individualized learning practices are not implemented as widely as they are understood.
3. The term "individualized learning" means that the student is at the center of the educational experience.
4. There is an expressed need for professional development and instructional support to prepare teachers.
5. Enhanced financial resources are the most desired form of support to implement individualized learning practices.
6. Moving away from traditional notions of "what school looks like" is one of the strongest barriers to implementing individualized learning.

There was only one notable difference between the interview and survey data: among schools represented by interviews, individualized learning practices related to voice and choice are the *most* commonly implemented; however, in schools represented in the survey, practices around voice and choice are the *least* commonly implemented. This finding indicates that while the level of awareness and understanding of

individualized learning is generally consistent across schools, there is less consistency in how individualized learning is actually practiced. Further, despite any differences in practices, the needs and barriers to individualized learning are equally felt by many schools across the region.

In the next section, we explore in more detail the overarching challenges that emerged from the interviews, from the survey, and across both data sources.

Overarching Challenges

Across the region, interviewees revealed an openness to and excitement for individualized learning. Educators are being exposed to individualized learning through schools of education, professional development, literature, and word of mouth. This growing awareness has led many district, school, and classroom leaders to implement bold new strategies, likely increasing the number of students who experience a truly individualized education. However, obstacles remain that prevent leaders—even those who are knowledgeable and excited about individualized learning—from implementing these practices in their schools. Below we present the most common challenges, expressed in interviews and the school leader survey, that are slowing the spread of individualized learning across the region.

- **There is a lack of shared understanding and vision for individualized learning.**

Even though some interviewees noted that momentum is growing around individualized learning in some parts of the region, the majority reported that there is a lack of consensus around what it actually means, its key tenets, and what it looks like both across the region and within schools.

- ▣ *For some interviewees, individualized learning means individualized attention and formative feedback; for others, it is synonymous with project-based learning. While some variation should be expected due to differences in local context, the lack of a common definition of individualized learning points to a missed opportunity to arrive at a shared understanding of this approach. This point was highlighted in several interviews; at least six interviewees expressed that the work that schools and districts are doing around individualized learning is siloed because conceptions diverge so greatly.*
- ▣ *When schools and districts decide to implement individualized learning approaches, there is often a lack of clear vision across the district and/or schools. As a result, interpretation about individualized learning can vary widely and often remains too abstract for educators. This can result in a tweaking of existing practices rather than a dramatic shift in teaching and learning. At least eight interviewees cited this as a problem; for some of these districts and schools, communication from leadership was unclear or district leadership was unable to agree amongst themselves on what individualized learning actually means.*

Many in leadership have very different perspectives on how to approach [individualized learning] goals... The district has been challenged with

definitions of the terminology used in the goals of the strategic plan. As a result, they are not as far along as they would like to be.

—Dr. Shawn Hoffman-Bram, Director of Community Educational Services
Eden Prairie Schools, Eden Prairie, MN

- **Buy-in from teachers, key district staff, and the broader community can be difficult to obtain.** Our interviews reveal three common reasons for a lack of buy-in about individualized learning. These findings are supported by our survey results.
 - ▣ *There is a lack of knowledge about individualized learning, which can lead to misinterpretations of this approach.* Interviewees detailed that school staff embody a spectrum of understanding when it comes to individualized learning. Some envision it as every student working alone on a computer, some as the teacher having to create a separate lesson for each student, and some as giving students unchecked control in the classroom. Understanding of individualized learning within the broader community can vary just as widely, if not more.
 - ▣ *Limited training and resources make teachers and key staff feel ill-prepared to implement individualized learning.* Survey respondents cited access to professional development for teachers as a top barrier, and instructional supports as a top desired support. As revealed in our interviews, even when teachers are knowledgeable about individualized learning, they are often reticent to fully embrace this approach. One interviewee attributed a lack of buy-in to “new initiative fatigue,” which results from teachers having to relearn their craft every time there is a new education “fad.”
 - ▣ *Some stakeholders may be resistant to moving away from traditional notions of “what a school looks like.”* Given that most teachers and parents had a more traditional education experience, envisioning and being open to alternatives can be a challenge. In the experience of at least six school and district leaders, parents and community members were hesitant to embrace an approach that seemed different and “experimental,” as compared to their own experiences of school. Among survey respondents, this hesitance was the most common challenge to implementing individualized learning.

Often times, because every person in the country has gone through school, they think they have a deep understanding of education as a student. This mindset does not take into consideration the progress made in the field over time and progress that still needs to come, and that is limiting...like trying to turn a large ship.

—Jane Bona, Principal
Immaculate Conception School, Columbia Heights, MN

- **Schools must balance individualization with state regulations and accountability requirements that can hinder innovation.**
 - ▣ *The most common barriers cited in interviews include accountability tied to standardized testing and seat time requirements.* This is consistent with 50 surveyed school leaders who felt that navigating state policies is a top barrier to individualized learning.. The pressure to “teach to the test,” in

which every student reaches the same benchmarks at the end of the year, is at odds with many foundational principles of individualized learning. For instance, meeting students at their unique levels of proficiency and allowing them to progress at their own pace might mean they are unable to reach grade-level mastery by the end of the year. Allowing students more choice in what they learn and when presents another challenge: If students focus more time on particular topics of interest over others, they may not master some of the concepts on traditional standardized tests for their grade level. While three schools leaders said they believe their individualized learning practices actually improve standardized test scores, three others said they feel unable to reconcile these two competing demands.

- ☐ *Several schools reported that, despite state policies intended to promote innovation, departing from state requirements remains a challenge. At one school, for example, leaders want “room to tinker” and seek to waive certain state requirements like seat time.¹⁷ Located in an Innovation Zone,¹⁸ this school was granted a waiver for seat time requirements, but has faced significant obstacles as it has sought to actually exercise this waiver.*
- **Limited funding is available to offer the necessary resources to implement individualized learning.** Interviewees and survey respondents alike emphasized that transitioning from traditional education to an individualized learning model requires money, training, and resources.

 - ☐ *At least 11 of the interviewed school leaders and 119 surveyed school leaders named financial resources as a needed form of support, making it the most commonly desired support across our data sources.*
 - ☐ *Finding relevant professional development presents an additional hurdle. Of the 158 school leaders surveyed, 117 reported that they would like more and better professional development opportunities to make individualized learning a reality. They indicated that tailoring instruction and pacing, designing authentic learning experiences, and creating flexible learning environments all necessitate skills that require high-quality training for teachers and administrators.*

You have to hold the bar high for teachers but [you also have to] give them the resources to meet that bar.

**—Morgan Forness, Superintendent
Central Cass Schools, Casselton, ND**

When educators observe individualized learning in action, they are able to envision a new culture of learning and engagement in their own schools and classrooms. The challenges described above present opportunities for funders, policymakers, and

¹⁷ “Seat time” refers to a mandate in most states that awards course credit only when a student has spent a specific amount of time in a class (and has earned a non-failing grade).

¹⁸ In 2012, the Minnesota legislature passed the Innovation Zones law, which allows designated school districts to work together to share district resources and provides flexibility on certain state laws. In 2017, North Dakota passed a bill that similarly provides more flexibility to districts that submit innovative proposals.

school leaders to provide targeted support to schools and districts as they seek to innovate and implement individualized learning practices.

Key Considerations

The Bush Foundation has been making strategic education investments across its region of focus in order to make learning more relevant and effective. Based on the findings of this report, SPR presents the following considerations that we believe will help further strengthen the Foundation's efforts:

- **Establish a network of schools to share learnings.** School and district leaders report a desire to connect and collaborate on individualized learning with their peers in the region. As one school leader put it, “We need to get involved in a group of schools or with organizations, so we don’t have to always reinvent the wheel.” To increase school and district collaboration, the Bush Foundation can facilitate connections and consider formalizing a network, perhaps through online collaboration and networking paired with regular, in-person convenings. This will allow pioneering districts, schools, and teachers to disseminate lessons learned and best practices, and educators to find thought partners as they envision what individualized learning could look like at their schools.
- **Support local teachers and/or community members as champions in order to build a broad base of support for individualized learning.** School leaders reported that building a base of support for individualized learning is essential to implementation. Interviewees found that incorporating the voices and perspectives of key stakeholders—including teachers and parents—into conversations about individualized learning is key to building the case for why this approach holds promise for students. Several school leaders discovered that identifying teachers to serve as champions of individualized learning is a particularly useful strategy to gain buy-in, especially because teachers are often the primary drivers of individualized learning efforts.
- **Continue to provide schools with the financial resources, professional development, and instructional resources they need.** The Bush Foundation has already created a mechanism for direct financial support through School Design for Individualized Learning grants, and our findings reiterate the need for such support. Continuing this work will allow schools the financial flexibility they need to implement change. Schools also report needing professional development opportunities and instructional resources for teachers. In addition to the professional development it provides directly, the Foundation could create a resource repository that links to comprehensive instructional resources and upcoming professional development opportunities throughout the region. This repository could also include a toolkit offering detailed case studies of individualized learning practices at schools throughout the region that can serve as models and inspiration for others.
- **Engage with state leaders to explore opportunities for school flexibility.** Interviewees reported that local autonomy and flexibility are key ingredients for schools’ ability to innovate and make individualized learning a reality. Schools that have successfully implemented individualized learning practices

exercised their local autonomy to test out new ideas aligned with individualized learning principles. However, school leaders reported feeling dissuaded from redesigning their learning environments due to state and federal requirements that are best met through a traditional education framework. By communicating directly with state leaders on this issue, the Bush Foundation can better understand opportunities for flexibility within the current regulatory framework, and communicate this to district and school leaders, which is especially helpful when paired with examples of districts with experience in this area. In turn, the Foundation can educate state leaders on the ways in which current regulations are suppressing innovation.

- **Reflect on the continuum of understanding when designing outreach strategies and materials for multiple audiences.** Individualized learning can be championed by state legislators, governors, state departments of education, tribal leaders, aligned organizations, education experts, superintendents, principals, teachers, parents, and community members. To leverage the potential that exists for individualized learning, there must first be a consideration of the wide continuum of understanding and interest within each of these groups and of their unique contexts; some stakeholders already have deep knowledge around individualized learning and desire implementation partners, while others need support to understand the basic principles. The Bush Foundation can tailor its outreach and resources to meet each audience where it is, and in this way, model individualized learning.
- **Adopt a learning orientation when measuring outcomes of individualized learning efforts.** The Foundation can consider designing grant opportunities in the spirit of individualized learning, in which grantees are provided the chance to follow their own learning trajectories. In this scenario, grantees are able to test out their own hypotheses regarding how individualized learning will affect student outcomes, with the ultimate result being the learning the grantees gain around shifting the culture of education. Under this grantmaking structure, schools have flexibility to fail safely and iterate, knowing that they are on a path of learning alongside the Foundation.
- **Continue to emphasize equity as a core tenet of individualized learning.** The Bush Foundation can capitalize on the momentum that is growing around individualized learning by encouraging school systems to place equity at the center of their efforts. Schools can promote equity by acknowledging and celebrating students' unique identities, cultural backgrounds and traditions, as well strengths, passions, and interests. Our research found that, in particular, there is not an apparent connection for most schools between culture and individualization. The few schools we encountered that are centering students' cultural identities can be further lifted up by the Foundation as teachers for the field of how individualized learning can truly set the experiences of students and their communities at the core of learning.

CHAPTER VI: CHALLENGES AND CONSIDERATIONS

The Bush Foundation has long recognized that students are the best engineers of their own learning and school leaders are the best architects of their own redesign. The experiences and reflections highlighted in this report illustrate the progress that has already been made towards individualized learning and the opportunities that exist for a radical shift in the culture of education moving forward.

With the findings from this report, the Bush Foundation will continue to shape its work with schools and communities to bring individualized learning into the region and carve pathways to deeper learning for all students. The Foundation will use these results to continue on its path of continuous learning, delve deeper into specific areas of individualized learning, and share its knowledge throughout the region.

SPR looks forward to the opportunity to continue supporting the Foundation as it continues to learn about individualizing education, and exploring how to bolster the Foundation's commitment to educators and communities so that the region—Minnesota, North Dakota, South Dakota, and the 23 Native Nations that share the same geography—can lead the country in individualized learning.



APPENDIX A: INTERVIEW RESPONDENTS

Category	Name	Organization	Position
Bush Foundation staff	Allison Barmann	Bush Foundation	VP of Strategy and Learning
	Elli Haerter	Bush Foundation	North & South Dakota Activities Manager
	Justin Christy	Bush Foundation	Manager of Strategy and Learning
	Kayla Yang-Best	Bush Foundation	Director of Education Portfolio
Field leader	Jeff Duncan-Andrade	San Francisco State University	Associate Professor of Raza Studies and Education Administration and Interdisciplinary Studies
	Jim Rickabaugh	The Institute for Personalized Learning	Senior Advisor
	Sonia Caus Gleason	Nellie Mae Education Foundation	Director of Strategic Learning and Evaluation
	Ted Kolderie	Education Evolving	Co-Founder and Senior Fellow
Aligned organization	Julie Mathiesen	Technology and Innovation in Education (TIE) Black Hills Special Service Cooperative	Director/ Technology & Innovation in Education @ Black Hills
	Kyle Davidson	South East Education Cooperative	Executive Director
	Lars Esdal	Education Evolving	Executive Director
	Matt Lonn	North Dakota Center for Distance Education	Director of Statewide Programs
School leader	Allen Burgad	West Fargo School District, ND	Assistant Superintendent
	Barbara Duffrin	Farmington Area Public Schools, MN	Executive Director, Educational Services
	Becky Kennedy	Our Lady of the Lake Catholic School, MN	Principal
	Bob Grosz	Fargo Public Schools, ND	Assistant Superintendent
	Carrie Bakken	Avalon Charter School, MN	High School Advisor
	Clint Christopher	Eastern Carver County Schools, MN	Superintendent
	Cory Steiner	Northern Cass School District #97, ND	Superintendent
	Dave Archambault	Standing Rock Sioux Tribe	Senior Education Consultant
	Dave Wheeler	Thompson Elementary School, ND	Elementary Principal
	Eric Schneider	Minnetonka School District, MN	Assistant Superintendent for Instruction

Category	Name	Organization	Position
School leader	Jane Bona	Immaculate Conception Catholic School, MN	Principal
	Jeff Ronneberg	Spring Lake Park Schools, MN	Superintendent
	Kerry Muse	Venture Academy, MN	Chief of Learning Officer
	Lauren Caton	St. Therese Catholic School, MN	Principal
	Leslie Harper	Leech Lake Band of Ojibwe	Government Relations Specialist
	Marilynn Smith	Impact Academy at Orchard Lake Elementary, MN	Principal
	Mark Femrite	Westonka Public Schools, MN	Assistant Superintendent of Teaching and Learning
	Morgan Forness	Central Cass Schools, ND	Superintendent
	Rick Pearson	Chamberlain High School, SD	Principal
	Sarah Hanson	West Side Summit School, MN	Interim Principal
	Shawn Hoffman-Bram	Eden Prairie Schools, MN	Superintendent
State education leader	Tanja Pederson	Harrisburg Freedom Elementary, SD	Principal
	Tim Godfrey	Richland #44 School District, ND	Superintendent
	Greg Keith	Minnesota Department of Education	Chief Academic Officer
	Kirsten Baesler	North Dakota Department of Public Instruction	State Superintendent
	Levi Bachmeier	North Dakota Office of the Governor	Policy Advisor
	Melody Schopp	South Dakota State Department of Education	Secretary
	Paula Palmer	Minnesota Department of Education	Director of Career and College Success
Russ Ziegler	North Dakota Association of School Administrators	Assistant Director & Principal Lead	

APPENDIX B: SURVEY

SPR developed a 22-item survey for school principals to understand how individualized learning is being implemented throughout the region, the level of awareness around this approach, and the key barriers facing schools in implementing individualized learning practices. These items were generated to align with the Bush Foundation’s baseline research questions, and are informed by prior research on individualized learning.¹⁹ The survey also asked respondents to answer questions about the characteristics of the schools they represent to account for representativeness and analyze differences between different types of schools.

SPR administered the survey to 2,433 school principals via email in October 2017.²⁰ Email addresses were obtained through state Department of Education databases²¹, the Bush Foundation’s own database, and databases maintained by aligned organizations.

The following types of schools were excluded from the survey: non-parochial private, alternative, continuation, independent, and early childhood-only. We decided to focus on parochial private schools, rather than other types of private schools, as they tend to serve higher shares of under-served populations, in alignment with the Bush Foundation’s focus on equity. The remaining excluded school categories (alternative, continuation, independent, and early childhood-only) have structures or goals that are significantly different from “mainstream” schools, making a fair comparison of individualized learning implementation difficult. If more than one administrator was listed per school, those individuals were excluded to ensure only one survey was completed per school. If an individual was the principal of more than one school, they were instructed to fill out the survey once for each school of which they are principal.²²

After an initial email on October 10, 2017, respondents received four follow-up emails on October 16, 23, 26, and 30. The survey closed on November 10, 2017. 199 individuals completed the survey. 41 of those surveys were dropped due to incompleteness or duplication, resulting in 158 unique responses.

Our analysis of this survey includes (a) a summary of the characteristics of schools that completed the survey (“respondent schools”) with an examination of strong

¹⁹ Including An & Reigeluth (2012), Pederson & Liu (2002), Pane, et al (2017), Levenstein (2016).

²⁰ Respondents were informed that upon completion their name would be entered into a \$20 gift card raffle.

²¹ Minnesota Department of Education Organization Reference Glossary, List of Districts and Schools; Minnesota Department of Education Organization Reference Glossary, Charter Schools; North Dakota Department of Public Instruction, Education Directory Information, Microsoft Outlook School Contact List

²² In some cases, surveyed individuals serve as both a principal and a district leader, and responded on behalf of their entire district rather than the school for which they are Principal. We excluded district-level responses when reporting school size, and examined how these responses differ from school-level responses.

differences by school characteristics,²³ and (b) overall summaries of survey responses with an examination of strong associations by school characteristics.²⁴

Limitations

Our analysis includes 158 unique responses (six percent of survey recipients). While this completion rate is in the expected range for an unsolicited email survey of district leaders and school principals, the self-selection bias inherent to online surveys means that schools that completed the survey likely differ systematically from schools that did not complete the survey. These systematic differences may be associated with survey responses, and therefore may bias our results.²⁵ While most of these sources of bias cannot be captured, this survey measures seven school characteristics, allowing us to establish that some groups are over- or under-represented.²⁶ Therefore, all results, but especially results reported by subgroup, are suggestive but not generalizable to all schools within the region.

Survey Text

Survey for the Bush Foundation

The purpose of this survey is to gather information about learning and instruction at schools throughout the Minnesota, North Dakota, and South Dakota region. We are interested in understanding **how schools individualize learning and make education more relevant for students**, and the successes and challenges you've encountered in doing so. Your feedback is very valuable to us and is critical to understanding how schools work with students to help them succeed.

We recommend this survey be **completed by the school principal** or the person who is most familiar with instructional practices at the school. We request only one survey response per school.

²³ We performed chi square tests of independence between the state variable and six other school characteristics variables.

²⁴ Tests employed to examine strong associations between survey responses and school characteristics include: Kruger-wallis test of independence for ordinal survey items, followed by Dunn's test to determine which specific categories were significant; Chi-squared test of independence for categorical survey items; and logit regression for binary (yes/no) survey items. We performed follow-up tests to account for co-linear characteristic variables (for example, state and charter schools).

²⁵ For example, school leaders who completed the survey may be more enthusiastic to complete it because they are implementing more individualized learning practices at their schools, or are more motivated in general, affecting both their likelihood to implement individualized learning and complete a survey. On the other hand, school leaders implementing more individualized learning practices may have less time to complete surveys.

²⁶ For example, charter schools make up 40 percent of schools from Minnesota that completed the survey, but only account for 8 percent of all public schools in Minnesota, meaning that charter schools are over-represented in our survey results, and traditional public schools are under-represented.

This survey should take **approximately 10 minutes** to complete. We appreciate your thoughtfulness and honesty in your comments. Your individual survey is confidential and your responses will be combined with that of other survey respondents before being shared.

******Please note: This survey is best completed using a computer or mobile phone device. Tablets are not recommended.******

As a thank you, all those complete the survey will be entered in a drawing to win a \$20 Amazon gift card. 50 gift cards will be awarded in all and sent via email.

Thank you so much for your time!

BACKGROUND INFORMATION

1) What is the name of the school for which you are completing this survey? *

2) What school level(s) does the school serve? *
(Please select all that apply.)

- Early childhood/Pre-Kindergarten
- Elementary
- Middle
- High

3) In what state is the school located? *

- Minnesota
- North Dakota
- South Dakota
- Native nation or tribe

4) What type of school is it? *

- Bureau of Indian Education (BIE) school (federally governed)
- Tribal school (tribally governed)
- Public (district)
- Public charter
- Private

Other - Write in:

5) How many students does the school serve? *

- Less than 50 students
- 50 to 149 students
- 150 to 499 students
- 500 to 999 students
- 1000 or more students

6) Please indicate the racial/ethnic makeup of the student population by percentage of total students. *

	0-25%	26-50%	51-75%	76-100%
Asian/Pacific Islander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Black/African American	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hispanic/Latino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
American Indian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White/Caucasian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multi-racial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7) Please indicate the percentage of total students at the school who qualify for Free and Reduced-Price Lunch. *

- 0-25%
- 26-50%
- 51-75%
- 76-100%

INSTRUCTIONAL APPROACHES

8) Please mark the extent of your familiarity with the following approaches. *

	Very familiar	Somewhat familiar	Not at all familiar
Individualized learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personalized learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customized learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competency-based education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student-centered learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Language/cultural immersion education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9) Please describe what this approach(es) means to you.

10) Where did you learn about this approach(es)? *
(Please select all that apply.)

- Through professional development
- Through my education
- Through colleagues or friends
- Through the Bush Foundation
- Via social media/an online source
- Through the news
- Other:

11) Is the school currently implementing any of these approaches? *

	Currently implementing	Not currently implementing
Individualized learning	<input type="radio"/>	<input type="radio"/>
Personalized learning	<input type="radio"/>	<input type="radio"/>
Customized learning	<input type="radio"/>	<input type="radio"/>
Competency-based education	<input type="radio"/>	<input type="radio"/>
Student-centered learning	<input type="radio"/>	<input type="radio"/>
Language/cultural immersion education	<input type="radio"/>	<input type="radio"/>

12) Please give an example of what this approach(es) looks like at the school.

▲

▼

◀

▶

13) To what extent does the school currently practice or use any of the following? *
(Please select all that apply.)

	Throughout the entire school	In specific subjects or grades	On a teacher-by-teacher basis	Not currently practicing
Personal learning plans or learner profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice and choice (i.e., students choose how and what they learn)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Station rotation (i.e., students rotate between classrooms or learning areas throughout the day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUCTIONAL RELEVANCE

14) At the school, how often does the following occur? *

	Always	Most of the time	Sometimes	Never/Rarely	Don't know/Can't say
Teachers tailor the pace of instruction to meet individual students' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers meet with students individually to talk about their interests and strengths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Different students are allowed to work on different topics or skills at the same time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students have the chance to review or practice material until they fully understand it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Always	Most of the time	Sometimes	Never/Rarely	Don't know/Can't say
Students choose what instructional materials they use in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students choose what topics they focus on in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students identify their own learning goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15) Please state your agreement with the following. *
At this school...

	Strongly Agree	Agree	Disagree	Strongly Disagree	I Don't Know
We design learning to happen anytime, anywhere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We experiment with innovative classroom models, such as flipped classrooms or flexible scheduling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students have flexible seating and/or work areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students regularly engage in learning through community events or activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUCTIONAL TECHNOLOGY SUPPORTS

16) Please state your agreement with the following. *
At this school...

	Strongly Agree	Agree	Disagree	Strongly Disagree	I Don't Know
Teachers have access to real-time assessment data that helps them tailor instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers receive and use high-quality student data other than achievement data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers keep up to date documentation of students' strengths, weaknesses, and goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data is used to understand achievement gaps by race, native language, socio-economic status, and gender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CAREER AND CULTURAL RELEVANCE

17) Please state your agreement with the following. *
At this school...

	Strongly Agree	Agree	Disagree	Strongly Disagree	I Don't Know
We connect learning to real-world situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We help students foster connections with people in the careers that interest them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We provide opportunities for students to do internships and/or apprenticeships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18) In what other ways do you help students explore career opportunities, if applicable?

19) Please state your agreement with the following. *
At this school...

	Strongly Agree	Agree	Disagree	Strongly Disagree	I Don't Know
We encourage respect throughout our school community for all cultures and identities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We connect learning to the communities from which our students come, reflecting their histories, cultures, and identities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are regular and equitable celebrations of our students' unique identities and cultural backgrounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20) In what other ways do you make learning culturally relevant for students, if applicable?

CHALLENGES TO INDIVIDUALIZING LEARNING

21) We are interested in understanding the primary barriers to providing individualized learning opportunities. Of the topics below, please rank the top 5 most challenging for the school, with #1 being the most challenging. *

If there is another top barrier not mentioned here, please describe in the comments box below.

<input type="text"/>	Tailoring instruction and pacing for individual students
<input type="text"/>	Creating flexible learning environments
<input type="text"/>	Offering individual student pacing
<input type="text"/>	Offering individual student choice
<input type="text"/>	Designing authentic learning experiences or assessments
<input type="text"/>	Designing authentic assessments
<input type="text"/>	Professional development for teachers focused on individualizing learning
<input type="text"/>	Integrating or accessing instructional technology
<input type="text"/>	Using data to support individualization
<input type="text"/>	Gaining understanding of and buy-in for individualized learning from school staff
<input type="text"/>	Gaining understanding of and buy-in for individualized learning from district leadership and/or the broader community (e.g., parents, business partners)
<input type="text"/>	Gaining understanding and buy-in from
<input type="text"/>	Securing financial resources to support individualized learning
<input type="text"/>	Moving away from traditional notions of "what school looks like"
<input type="text"/>	Navigating state or district policies (e.g., seat time requirements, standardized assessments)

Comments:

SUPPORTS FOR INDIVIDUALIZED LEARNING

22) Of the topics below, please rank the top 5 supports your school could use for implementing individualized learning practices, with #1 being the most beneficial. *

If there is another top support not mentioned here, please describe in the comments box below.

Additional financial resources for implementing individualized learning

Enhanced professional development opportunities for teachers and school staff on individualized learning concepts

Resources to share to gain buy-in with district leadership and/or the broader community

Access to or support with instructional technology

Opportunities for collaboration with other schools or districts that are individualizing learning

Increased time for planning and designing individualized instruction and curricula

Better understanding of how to navigate state or district instructional policies

Instructional supports and resources for teachers use to support their instructional practices

Comments:

AMAZON GIFT CARD DRAWING

First name *

(Your name will never be shared. We collect this for response tracking only.)

Last name *

You will be entered into a drawing to win a \$20 Amazon gift card. What email address may we use to contact you about the drawing? *

A Regional Scan of Individualized Learning

Prepared by:

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March 23, 2018



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EXECUTIVE SUMMARY

In 2016, the Bush Foundation launched its individualized learning strategy with the goal of supporting its region—Minnesota, North Dakota, South Dakota, and the 23 Native nations that share the same geography—to become the national leader in individualizing education to meet the needs and ambitions of all students. The Foundation defines individualized learning as education that makes learning more relevant for all students in terms of:

- **Who they are (cultural relevance).** Create learning environments that welcome and support students from all cultures and backgrounds.
- **How they learn (instructional relevance).** Help students learn in a manner and at a pace that meets their individual needs.
- **What they want to do (career relevance).** Help students imagine a career and provide them with support that is tailored to get them where they want to go.

In spring 2017, the Bush Foundation commissioned Social Policy Research Associates ([SPR](#)) to conduct baseline research on the state of individualized learning across the region in order to inform the Foundation’s education initiative. The goal of this research is to (1) capture the level of awareness and understanding of individualized learning concepts throughout the region; (2) document the conditions that foster individualized learning at the school level; (3) identify the challenges to implementing individualized learning practices; and (4) document existing individualized learning strategies and practices adopted by schools in the region.

This report is informed by a survey of school leaders and telephone interviews with school and district leaders, state education leaders, experts in the field of education, and aligned organizations (those working directly to support the region’s schools and districts to implement individualized learning). We describe the level of awareness around and understanding of individualized learning, as well as key practices, lessons, and challenges facing schools as they implement individualized learning strategies.

Primary Data Sources	Description
Telephone Interviews	<p>SPR conducted exploratory telephone interviews with 41 individuals across the following five categories:</p> <ul style="list-style-type: none"> School leaders from Minnesota, North Dakota, South Dakota, and Native Nations selected by the foundation for their knowledge and experience with individualized learning strategies (n=23); State education leaders (n=6); Aligned organizations (n=4); Field leaders (n=4); and Bush Foundation staff (n=4).

Primary Data Sources

Description

School Leader Survey

SPR designed a school leader survey to elicit information about knowledge and awareness of individualized learning. SPR administered online surveys to 2,433 individuals across the defined region and received a total of 158 unique responses, representing 303 schools within the region.

Understanding and Awareness of Individualized Learning

INTERVIEW DATA

Education leaders noted that individualized learning represents a fundamental shift in how we conceptualize learning and the role of school in a child's life. They acknowledge that traditional models of school no longer work to prepare students for success in today's economy and global society, and believe that individualized learning represents a fundamental and necessary shift in the culture of education. School leaders generally believe that individualized learning means meeting learners at their individual achievement levels, differentiating support based on their unique capabilities, and actively engaging them in the process of learning. However, education leaders differ widely in what they believe are the essential characteristics of individualized learning, and in what terms they use to name the approach.¹

Awareness of individualized learning has grown substantially over the last two to five years, yet there remains a broad continuum of actual understanding of the concept. On the one hand, knowledge of individualized learning is widespread throughout the region, but understanding of concrete individualized learning practices and how to implement them varies widely and is often limited to specific schools or teachers.

Implementation of and Strategies for Individualized Learning

INTERVIEW DATA

Districts and schools implement individualized learning using a range of approaches. Most districts introduce individualized learning as a top-down strategy, while allowing it to simultaneously build organically from the ground up. While there are a few whole-school models focused explicitly on individualized instruction, the majority of districts start by implementing individualized learning within a subset of grade levels, subjects, or pathways.

Districts and schools most commonly use the following structures and practices to make learning more relevant: alternative or flexible schedules and learning spaces,

¹ Throughout this report, we use the term individualized learning as a unifying concept for the variety of approaches and principles that our interviewees named.

multi-age classrooms, a focus on student agency, project-based learning, and strategic use of technology. Very few interviewees indicated that students' cultural backgrounds currently influence their individualized learning practices.

Supporting Teachers to Individualize Learning

INTERVIEW DATA

Because individualized learning is a significant shift from the conventional way teachers engage with students and learning in the classroom, teachers require in-depth support to make that change. Schools and districts use professional learning communities, districtwide professional development, outside organizations or consultants, conferences, and book studies to equip teachers with the knowledge and tools they need to implement individualized learning. Many interviewees noted that a particularly effective method is direct observation of individualized learning “in action,” which helps bridge the gap between knowledge and implementation.

Interviewees unanimously agree that student success and growth with individualized learning necessitates non-traditional measures of achievement, but there is a lack of existing, reliable tools to capture this information; as a result, most schools continue to rely on standardized assessments to measure student learning. There are, however, some promising examples of assessment practices to support individualized learning. Districts and schools are beginning to measure success with individualized learning using tools such as rubrics, surveys, online learning platforms for formative assessment, and direct observation of student learning.

School Leader Survey Findings

SURVEY DATA

A survey capturing a broad sample of schools across the region revealed the following trends:

Understanding of individualized learning. The vast majority of respondents are at least familiar with the terms used to describe student-centered approaches, most often learning about individualized learning through professional development. However, while 97 percent of respondents indicated that they are at least familiar with individualized learning, only 61 percent reported they are currently implementing it in their schools to any degree.

Practices for instructional relevance. Most respondents design flexible learning environments in their schools or districts, and have strong student data systems that allow teachers to better individualize to students' unique needs. Many allow for individualized pacing but less frequently implement practices around student choice. These common individualized learning practices are more likely to be implemented in specific grades or classrooms than throughout the entire school.

Practices for career and cultural relevance. The vast majority of schools (96 percent) connect learning to real-world situations. While a majority of schools also report

encouraging culturally relevant practices, these practices are more common among respondent schools with more diverse student bodies.

Challenges to and supports for individualized learning. Overall, the most significant barrier to implementing individualized learning is “moving away from traditional notions of ‘what school looks like.’” Respondents also reported that financial resources, enhanced professional development, and resources for teachers would be the most helpful forms of support for implementing individualized learning.

Challenges and Obstacles

INTERVIEW DATA & SURVEY DATA

As identified through both qualitative interviews and the survey, the following overarching challenges are slowing the progress of individualized learning:

- There is a lack of shared understanding and vision for individualized learning.
- Buy-in from teachers, key district staff, and the broader community can be difficult to obtain.
- Schools must balance individualization with state regulations and accountability requirements that can hinder innovation.
- Limited funding is available to offer the necessary resources to implement individualized learning.

Recommendations

Based on the findings of this report, we present the following considerations for the Bush Foundation as it continues to support the region with individualizing learning:

- Establish a network of schools to share learnings.
- Support local teachers and/or community members as champions in order to build a broad base of support for individualized learning.
- Continue to provide schools with the financial resources, professional development, and instructional resources they need.
- Engage with state leaders to explore opportunities for school flexibility.
- Reflect on the continuum of understanding when designing outreach strategies and materials for multiple audiences.
- Adopt a learning orientation when measuring outcomes of individualized learning efforts.
- Continue to emphasize equity as a core tenet of individualized learning.

The Bush Foundation recognizes that students are the best engineers of their own learning and school leaders are the best architects of their own redesign. With the findings from this report, the Bush Foundation will continue to shape its work of inspiring, equipping and connecting people, schools, and communities to bring individualized learning into the region and carve pathways to deeper learning for all students.