From State Commitment to District Implementation:

Approaches and Strategies for Personalized, Competency-Based Learning

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RESEARCH FOR ACTION

Acknowledgements

KnowledgeWorks is a national nonprofit organization advancing a future of learning that ensures each student graduates ready for what's next. For more than 20 years, we've been partnering with states, communities, and leaders across the country to imagine, build, and sustain vibrant learning communities. Through evidence-based practices and a commitment to equitable outcomes, we're creating the future of learning, together.

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Introduction

Personalized, competency-based learning efforts often take place in a single classroom or school, but not systematically across districts, let alone states. To address this dynamic and increase the scale of personalized, competency-based learning, KnowledgeWorks, an independent nonprofit organization that partners with education stakeholders to advance personalized competency-based learning efforts, has engaged in state level implementation support of personalized, competency-based learning in a number of states, including Arizona, Nevada, North Dakota, and South Carolina. Each of the four states working with KnowledgeWorks has a commitment to personalized, competency-based learning transformation statewide, with the goal of scaling the work from an initial cohort of demonstration sites to a broader set of districts.

Defining Personalized, Competency-Based Learning

KnowledgeWorks defines personalized, competency-based learning as an approach that centers each students' strengths, needs, and interests and provides differentiated supports and ways to demonstrate what they know and know how to do, ensuring each learner graduates ready for what's next.

About this Study

Research for Action (RFA), a nonprofit education research organization, partnered with KnowledgeWorks to document and analyze how personalized, competency-based learning is taking hold in these states and the initial cohorts of school districts implementing the work. *The purpose of this report is to serve as a resource for the states and districts already involved in personalized, competency-based learning, provide considerations for other states adopting personalized, competency-based learning, and offer lessons learned for the wider field.* The research team and KnowledgeWorks established three goals for the study at the outset:

- *Goal 1: Document approaches and lessons learned from policy adoption and implementation of personalized, competency-based learning policies in four states;*
- *Goal 2: Identify how the COVID-19 pandemic impacted the move towards personalized, competency-based learning in each state; and*
- *Goal 3: Identify how each state defines and operationalizes its equity commitment within the state's personalized, competency-based learning efforts.[1]*

The study was informed by an array of qualitative sources from the study states and districts. Specifically, the research team conducted interviews with state level policymakers and practitioners and conducted a review of documents in spring 2021 to develop individual logic models for Arizona, North Dakota, and South Carolina[2]; the interviews and logic model development in Nevada took place in the fall of 2021 and winter of 2022. The study also identified a sample of two districts in the three states implementing personalized, competency-based learning at the district level: Arizona, North Dakota, and South Carolina. At the time of the field work, Nevada had not yet recruited their first cohort of districts. In each of the study districts, we conducted interviews with a total of four respondents across the district, school, and classroom levels in the summer and fall of 2021. To inform the research over the life of the project, RFA recruited points of

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[1] The research questions developed to guide the project are included in Appendix B.
[2] The information included in this report reflects the state and district context at the time of the data collection; additional changes in policy and practice may have been made since then.

contact at the state and district levels to serve on the Research Advisory Committee (RAC). The RAC members provided feedback at critical intervals in the study, reviewing research questions and dissemination plans, data collection instruments, draft logic models, and the analyses used to develop this report (i.e., draft roadmap of state level conditions for personalized, competency-based learning and district analysis profiles).

About this Report

The report provides analyses based on state and district level data, and is divided into six sections:

1) **Study States and their Partnerships with KnowledgeWorks:** A brief overview of the personalized, competency-based learning efforts in each of the study states and equity considerations across the states.
2) **Creating State Level Conditions that Support Personalized, Competency-Based Learning:** A roadmap of decision points and state strategies to create state level conditions to support personalized, competency-based learning.
3) **State Supports for Local Implementation: A Cross-State Analysis:** A comparative analysis of state strategies to support district implementation of personalized, competency-based learning.
4) **Cross-District Analysis of Implementation:** A district level analysis exploring implementation across six districts in three of the study states.
5) **Lessons Learned for the Field on Implementation at the District Level:** Based on district level analysis, we provide lessons learned for study sites and the larger field.
6) **Recommendations for State and District Leaders and Next Steps:** Recommendations from both the state and district level analyses and potential next steps for the research.

Study States and their Partnerships with KnowledgeWorks

The states included in this study are each at different stages of their personalized, competency-based learning efforts, with North Dakota starting the project in 2016, South Carolina starting in 2017 and Arizona starting in 2019; in Nevada, the work at the state level began in the fall of 2021, and the cohort of districts to implement personalized, competency-based learning had yet to be identified at the time of data collection. More specifically:

- The Center for the Future of **Arizona** (CFA) developed the Personalized Learning Network (PLN), a cohort of four districts that made a five-year commitment to shift to a personalized learning approach: Amphitheater Public Schools, Mesa Public Schools, Santa Cruz Valley Unified School District No. 35, and Yuma Union High School District. District leaders in the PLN participate in district systems building and school implementation efforts and receive personalized support from CFA and KnowledgeWorks.
- In **Nevada**, the partnership with KnowledgeWorks continues to develop as the Nevada Department of Education (NDE) leads the work of identifying state policy changes needed to support personalized, competency-based learning and build collaboration across offices within the NDE in support of the effort.
- The **North Dakota** Personalized, Competency-Based Learning effort is currently supported by the North Dakota Department of Public Instruction (NDDPI) and KnowledgeWorks, as well as other partners, and is funded through a five-year grant from the Bush Foundation. Four school districts have made a commitment to personalized, competency-based learning through changes to both systems policy and instructional practice. Districts participating in this work during the study included

Marmot School at the North Dakota Youth Correctional Center, Northern Cass Public Schools, Oakes Public Schools, and West Fargo Public Schools.

- The **South Carolina** Department of Education established an Office of Personalized Learning (OPL) and created a state level Framework for Personalized Learning to support all students in achieving the Profile of the South Carolina Graduate. The OPL and KnowledgeWorks are supporting schools and districts across the state in their implementation of personalized, competency-based learning; to date, schools in two-thirds of districts are involved at some level. Additionally, three "Lighthouse" districts (Edgefield County, Lexington County 3, and McCormick County) are now working with OPL and KnowledgeWorks to build district level polices to support personalized, competency-based learning in schools and classrooms.

In the majority of study states, the partnership with KnowledgeWorks includes the development of a state level learning community around personalized, competency-based learning; an opportunity analysis of the state policy supports and barriers to implementation; convenings on best practices around personalized, competency-based learning; and regular consultation between KnowledgeWorks and key points of contact in each state. In all but Nevada where district level work has yet to begin, KnowledgeWorks also helped to support district design teams that lead the work locally and have access to ongoing and customized technical assistance from KnowledgeWorks.

Equity Considerations Across Study States

One of KnowledgeWorks' Core Commitments for Quality Transformation is addressing the needs of traditionally underserved communities through an equity lens. In alignment with this core commitment, and as previously shared, one of the goals of the study was to identify how each state defines and operationalizes its equity commitment within the state's personalized, competency-based learning efforts.

The definition of equity is nuanced and evolving within the field of education. RFA explored equity considerations across study states through document review, policy scans, and interviews with state policymakers and practitioners. Instead of evaluating state approaches to incorporating equity into their personalized, competency-based learning efforts, RFA asked respondents to share their own definitions and considerations around equity; the common themes that emerged included the following:

- State level respondents often found it difficult to provide operational definitions of equity, but expressed an explicit **commitment to equity** through personalized, competency-based learning.
- **Key factors related to equity** were identified across the study states, including the socio-economic status of students, special education services received (including gifted services), student race and ethnicity, access to resources within the school and broader community, and school academic performance.
- State policymakers involved in personalized, competency-based learning emphasized the importance of the effort as **a way to address issues of equity**, with equity primarily discussed as a way to meet **the needs of each individual student**.
- Personalized, competency-based learning was often viewed as a **strategy or tool to improve equitable outcomes** for students.

Individual examples of state commitments to equity include the following:

- The **Center for the Future of Arizona** (CFA) identified a decrease in achievement gaps between subgroups as an equity goal for state personalized, competency-based learning efforts.
- **Nevada's** 2020 Statewide Plan for the Improvement of Pupils (STIP) includes several different "values"; including equity; "the learning needs of every student are supported... without regard to differences, including among other characteristics, socio-economic status, race, or ethnicity."
- The **South Carolina** Framework for Personalized, Competency-Based Learning "embeds equity within the culture, structure, and pedagogy of schools." In this framework, student ownership is at the core of creating equitable learning experiences through flexible learning environments, co-designed learner profiles, and learning pathways.
- In **North Dakota**, a commitment to developing and applying a systemic equity lens was one of the goals of the cohort sites for the 2020-21 school year.

While state policymakers and practitioners involved in personalized, competency-based learning initiatives emphasized the importance of addressing equity through the work, this focus stands in contrast to the larger state policy context in several cases. Specifically, state legislators in Arizona, North Dakota, and South Carolina have introduced or legislated bans on critical race theory, the 1619 Project, and instruction on concepts relating to race and racism. In these state contexts, race, or income-explicit conversations related to equity were not prevalent.

Creating State Level Conditions that Support Personalized, Competency-Based Learning: A Roadmap

Systemic adoption of personalized, competency-based learning at the local level requires support at the state level to remove barriers and assist implementation. For example, school level personalized learning systems often provide for learning opportunities outside of the typical classroom environment. State policy shifts are often necessary to remove seat time requirements or award credit for student experiences that occur outside of the traditional school setting. To achieve these and other changes, state policymakers and education advocates need to leverage their individual state contexts and opportunities for policy change in order to gather support for the adoption of personalized, competency-based learning. Further, to support the implementation of personalized, competency-based learning across a cohort of districts, states need to determine their leadership model for the effort, the partnerships that are necessary to support the effort, the order of local implementation (i.e., start with a focus on district systems or school implementation), and their scale-up strategies.

In this section we present a roadmap of the various approaches to creating state level conditions that support personalized, competency-based learning across the four study states. The roadmap and discussion below examine central components of state efforts and describe how personalized, competency-based learning has been fostered by the four states included in the study (Arizona, Nevada, North Dakota, South Carolina). The approaches are outlined in seven decision points encountered by all four states during their adoption process:

- **Decision Point 1.** What are the potential **catalysts** for the advancement of personalized, competency-based learning?
- **Decision Point 2.** How can personalized, competency-based learning advance the larger **state vision** for education?
- **Decision Point 3.** What state **policy mechanisms** can be used to create the conditions needed to support personalized, competency-based learning?
- **Decision Point 4.** What type of **state leadership model** will be used to support the adoption and scaling of personalized, competency-based learning?
- **Decision Point 5.** What are the potential **partner organizations** that could provide ongoing professional development and technical assistance for the work?
- **Decision Point 6.** What will be the **order of implementation** from the district to the school level?
- **Decision Point 7.** What **scaling strategies** will best fit the state political and cultural context?

In the following section we discuss each decision point and provide a roadmap of approaches that each state took to address it. By identifying these approaches in the study states, other states can work to recognize opportunities in their own states to adopt personalized, competency-based learning.

Decision Point 1. What are the potential catalysts for the advancement of personalized, competency-based learning?

Each of the study states identified at least one catalyst as an important driver in the advancement of personalized, competency-based learning in their local context, as outlined in Figure 1. These catalysts helped to encourage or accelerate the adoption of personalized, competency-based learning. Policymakers and advocates need to consider how to identify and leverage these catalysts to gather support for personalized, competency-based learning adoption.

Figure 1. Catalysts across Study States

CATALYSTS	Adoption of related State Legislation & Regulation	Changing Instructional Needs in wake of COVID-19	Development & Adoption of State Graduation Pathways
Definition	Contextual shifts that helped to encourage adoption in states		
State Examples	AZ ND NV SC	NV	AZ ND SC

The catalysts in each state are explored below:

- **Adoption of related State Legislation and Regulation:** In 2010, "Move on When Ready" was passed in **Arizona**, opening the door for new thinking by providing an opportunity for students to earn the Grand Canyon High School Diploma based on demonstrated mastery of college and career readiness instead of the model of accumulating seat time and high school credits.[i] Passage of **North Dakota's** Education Innovation Bill (Senate Bill 2186) in 2017 allowed schools and districts to use state policy waivers to develop Innovative Education Program proposals, including personalized, competency-based learning. Similarly, Assembly Bill 110 created the opportunity for schools in **Nevada** to participate in a competency-based education network and pilot program.[ii] Along with other policies that allow for flexibility (discussed below), **South Carolina's** Regulation 43-261 provides that the State Board of Education may waive any regulation that would impede the implementation of an approved district strategic plan or school renewal plan, which has facilitated personalized, competency-based learning in the state.[iii]

- **Changing Instructional Needs in the Wake of COVID-19:** The pandemic has highlighted the value of personalized, competency-based learning in meeting the needs of students where they are. In **Nevada,** state policymakers point to the pandemic as the catalyst for the personalized, competency-based learning effort; the Blue Ribbon Commission for a Globally Prepared Nevada was convened in 2020 based on the need to update policies to meet the changing circumstances and adapt instructional delivery moving forward.[iv] Further, Nevada started their personalized, competency-based learning work with KnowledgeWorks in the midst of the pandemic, and so lessons learned from the pandemic may become a catalyst for other new states to consider personalized, competency-based learning as well.

- **Development and Adoption of State Graduation Pathways:** Policy around high school graduation pathways in three states (Move on When Ready in **Arizona**, the **North Dakota** Learning Continuum and Mastery Framework, and the Profile of the **South Carolina** Graduate) also became catalysts to personalized, competency-based learning efforts by opening new avenues to earn a high school diploma that allow for more flexibility in meeting state graduation expectations.

Decision Point 2. How can personalized, competency-based learning advance the larger state vision for education?

Personalized, competency-based learning can be one potential vehicle to achieve a state's larger education goals, such as helping each student succeed, facilitating educational flexibility and innovation, and supporting state goals for high school graduates, as shown in Figure 2.

Figure 2. State Visions across Study States

STATE VISION	Help Each Student Succeed	Facilitate Educational Flexibility & Innovation	Support State Goals for High School Graduates
Definition	Educational changes that states hope to achieve		
State Examples	AZ ND NV SC	AZ ND NV SC	ND SC

As outlined in Figure 2, study states have common visions that can be supported by personalized, competency-based learning:

- **Help Each Student Succeed:** Across study states there was a recognition that some students are not receiving the instruction they need, that the state's goal is to effectively serve each student, and that personalized, competency-based learning could be a strategy to help address these dynamics. In **Arizona**, interest in personalized, competency-based learning at CFA grew from a desire to design education around the success of *every* individual student. While **Nevada** is in the very early stages of the work, the shift to distance learning during the pandemic "exposed challenges… to address the needs of *every* student in a non-traditional setting."[v] Similarly, **North Dakota** policymakers and practitioners commonly described personalized, competency-based learning as a vehicle to better serve *all students*. The **South Carolina** Framework for Personalized Learning also supports *all* students in achieving the Profile of the South Carolina Graduate.

- **Facilitate Educational Flexibility and Innovation:** Allowing for flexibility in the ways instruction is provided can lead to increased innovation. Under **Arizona** House Bill 2862 (2021), although students must receive a minimum number of instructional hours, those hours may be completed through direct instruction, project-based learning, independent learning or mastery-based learning, either in-person or remotely.[vi] In **North Dakota**, the Choice Ready Framework supports the Department of Public Instruction's mission that all students will graduate choice ready with the knowledge, skills, and disposition to be successful in any area of their choice, whether it be college, career, or the military, and therefore allows flexibility for students to complete the graduation standards that meet their goals.[vii] As mentioned, North Dakota's Education Innovation Bill (Senate Bill 2186) also allows North Dakota schools and districts to use state policy waivers to develop Innovative Education Program proposals. **Nevada's** Blue Ribbon Commission, a group of policymakers and practitioners convened by the State Superintendent and a catalyst for personalized, competency-based learning, was formed to "support innovation" and "make recommendations to increase flexibility for districts and schools in areas such as competency-based education, distance learning, and instructional time."[viii] In **South Carolina**, the State Department of Education released an

Education Flexibility Guide in support of personalized learning, which describes ways for local leaders to "maximize flexibility for innovation", such as exemptions, options, and waiver opportunities available to districts and schools.[ix]

- **Support State Goals for High School Graduates:** The development of the portrait of a graduate, whether at the state or district levels, has been a central theme across the study. This is clearest in **South Carolina**, where personalized, competency-based learning is one way to achieve the knowledge, skills, and dispositions outlined in the Profile of the South Carolina Graduate. Similarly, the personalized, competency-based learning effort in **North Dakota** is seen as a way to help students to graduate choice ready with the knowledge, skills, and disposition to be successful.

Decision Point 3. What state policy mechanisms can be used to create the conditions needed to support personalized, competency-based learning?

While legislation is perhaps the most common mechanism for policy change at the state level, states used several vehicles to advance policy in support of personalized, competency-based learning, as shown in Figure 3.

Figure 3. Policy Mechanisms across Study States

POLICY MECHANISMS	State Legislation	Commissions & Task Forces	Accountability & Instructional Frameworks	Pilot Testing
Definition	State policy levers creating a landscape in support of reform			
State Examples	AZ ND NV	ND NV	ND SC	NV SC

Each of the policy mechanisms utilized in the study states are outlined below:

- **State Legislation:** Prior to the personalized, competency-based learning efforts in three states, the state legislature passed bills that facilitated the adoption of the effort; each of these bills have been discussed earlier in this report as state catalysts. Since initial adoption, additional pieces of state legislation in **Arizona, South Carolina** and **Nevada** also support personalized, competency-based learning:

  o Arizona's **House Bill 2862** gives school districts and public charter schools the flexibility to adopt an instructional model that permits them to deliver annual required instructional time through a variety of methods, including personalized, "mastery-based" learning.[x]
  o Based on recommendations from the Blue Ribbon Commission in Nevada, **Senate Bill 215** was passed in 2021 and supports competency-based education, allowing students to work at their own pace.[xi]
  o **House Bill 3589** was passed in South Carolina in 2021 to clarify that public school districts can establish multiple schools of innovation and provide procedures for obtaining and renewing status as a school of innovation; schools of innovation are exempt from "applicable state statutes and regulations which govern other schools in the district."[xii]

- **Commissions and Task Forces:** As discussed, the Blue Ribbon Commission in **Nevada,** supported in partnership by the state department of education and KnowledgeWorks, has been central to the growing interest around personalized, competency-based learning. Prior to the Blue Ribbon Commission, in 2015 Nevada's then-Governor Sandoval created a Competency-Based Education Task Force, which was the first step in the development of competency-based education in the state.[xiii] In **North Dakota**, Governor Doug Burgum established an Innovative Education Task Force in 2017; their goals included creating a "system of identification and support for schools and districts implementing innovative practices" and identifying "changes to state education policies that will promote the strategic adoption of student-centered learning experiences."[xiv]

- **Accountability and Instructional Frameworks:** The **North Dakota** Learning Continuum is a statewide framework that identifies key qualities within a set of learning expectations and indicates the performance level that students should know and be able to demonstrate.[xv] The **South Carolina** Framework for Personalized Learning offers a framework to support all students in achieving the Profile of the South Carolina Graduate by fostering student ownership, developing learning profiles, creating personalized learning pathways, and adopting flexible learning environments.[xvi]

- **Pilot Testing:** In **Nevada**, Assembly Bill 110 created the opportunity for schools to participate in a competency-based education network and pilot program. This pilot program allowed schools to explore the use of competency-based education in classrooms, while the network studied how competency-based education could be offered across the state and provided lessons learned. The pilot program served as the precursor to the Blue Ribbon Commission and ultimately the expansion of personalized, competency based learning efforts across the state. In **South Carolina**, as mentioned above, a local board of trustees may establish or designate one or more schools of innovation within the district to pilot new approaches to teaching and learning. Schools of innovation are exempt from "applicable state statutes and regulations which govern other schools in the district."[xvii]

Decision Point 4: What type of state leadership model will be used to support the adoption and scaling of personalized, competency-based learning?

Each of the states developed different state leadership models for the effort, ranging from a broad coalition of policymakers to a single nonprofit. Figure 4 outlines the state leadership models utilized in each of the study states.

Figure 4. State Leadership Models

STATE LEADERSHIP	State-Based Nonprofit Organization	Multiple Offices within the State Department of Education (SDE)	Coalition of State Stakeholders	Designated Office within the State Department of Education
Definition	The state-level organization(s) making decisions about the effort			
State Examples	AZ	ND NV	ND NV	SC

The state leadership models across the study states included the following:

- **State-Based Nonprofit Organization:** The **Arizona Personalized Learning Network (PLN)** is led by the Center for the Future of Arizona (CFA), a non-partisan organization that works to attract districts, secure funding, measure success, influence policy change, and directly support districts in the PLN. CFA's position outside of state government provides autonomy and opportunities to sustain the work even if there are leadership changes in state government.

- **Multiple Offices within the State Department of Education:** In both **North Dakota** and **Nevada**, the state department of education serves as the lead agency, and coordinates multiple offices within the department to work together in support of personalized, competency-based learning.

- **Coalition of State Stakeholders:** While the state department of education in **North Dakota** has become the primary lead in the personalized, competency-based learning effort, multiple state groups were a part of the initial stages of the work. It was critical to have a number of advocacy and policymaking groups at the table for discussions around personalized, competency-based learning, including the governor's office, K12 Education Coordination Council, the North Dakota Chamber of Commerce, the North Dakota Council of Educational Leaders, and North Dakota United (State Teachers Union). While not as far along in the work, **Nevada's** Blue Ribbon Commission has also included policymakers, practitioners, community members, parents, and students from across the state who have supported the work.

- **Designated Office within the State Department of Education:** The strong central presence of the Office of Personalized Learning (OPL) in South Carolina supports statewide personalized, competency-based learning adoption by providing coaching, professional development, communities of practice, and targeted supports to school design teams. While primary responsibility rests within the OPL, the state superintendent of education has been a strong supporter for personalized, competency-based learning and the OPL collaborates across offices within the department in support of these efforts.

Decision Point 5. What are the potential partner organizations that could provide ongoing professional development and technical assistance for the work?

Personalized, competency-based learning requires ongoing professional development and technical assistance. KnowledgeWorks facilitated the development of different types of partnerships to provide these supports, including resources from inside and outside the state, and from the local, regional, state, and national levels. Figure 5 outlines the types of partners states have leveraged to support their work in collaboration with KnowledgeWorks.

Figure 5. Partners across the Study States

PARTNERS	Structured Network of Cohort Districts	Regional Education Service Centers	Technical Assistance Providers	State Partnerships
Definition	Organizations from inside and outside the state that support the effort			
State Examples	AZ SC	ND NV	ND SC	AZ ND NV SC

Partner organizations included the following across study states:

- **Structured Network of Cohort Districts:** The districts involved in the KnowledgeWorks effort can act as partners in the work when formal networks are developed. In **Arizona**, the PLN primarily consists of the districts involved in the initial cohort of personalized, competency-based learning. Three "Lighthouse" districts (Edgefield County, Lexington County 3, and McCormick County) in **South Carolina** are working with OPL and KnowledgeWorks to build district level policies to support personalized, competency-based learning in schools and classrooms. Further, Personalize SC provides an online platform for community-building and networking.

- **Regional Education Service Centers:** In **Nevada,** the state department of education is planning to leverage the three Regional Professional Development Programs to support the work. In **North Dakota**, the Northeast Education Services Cooperative, a Regional Education Association in the state, provided an education fellow to support personalized, competency-based learning implementation and participated in the development of the Learning Continuum.

- **Technical Assistance Providers:** Along with KnowledegeWorks, states worked with organizations from inside and outside their states to provide customized support for specific areas of the work. For example, **North Dakota** has worked with several partners from outside the state that provided technical assistance, including WestEd, which serves as an external evaluator, the Center for Collaborative Education, which has provided support around developing performance assessments appropriate for personalized, competency-based learning, and Battelle for Kids, which has helped with the development of district level Profiles of a Graduate. In **South Carolina**, the Riley Institute at Furman University is leading the state evaluation of personalized, competency-based learning.

- **State Partnerships:** While not explicitly involved in the work of the **Arizona** PLN, Mary Lou Fulton Teachers College (MLFTC) at Arizona State University and A for Arizona are both collaborating state partners: MLFTC focuses on the college's personalized learning initiative for educators, called the Next Education Workforce, and A for Arizona has worked alongside CFA to propose legislation that better supports personalized, competency-based learning. As mentioned previously, multiple policymaker and advocacy groups shared in the work in **North Dakota**; in addition, ed.Xtraordinary has recently received funding from the **Nevada** Department of Education to build the state's Profile of a Graduate and work on district engagement. In **South Carolina**, reDesign and TransformSC have served as partners in the work: reDesign is an education design lab for learner-centered communities and Transform SC is an education initiative of the South Carolina Council on Competitiveness.

Decision Point 6. What will be the order of implementation from the district to the school level?

As shown in Figure 6 and discussed below, initially two of the study states began local implementation by focusing on district system building before school level implementation, while the other focused on implementation at the school and classroom level first. Most importantly, all three states with district cohortshave begun focusing on both district systems and school implementation simultaneously, as both are critical to successful implementation, and can inform one another.

Figure 6. Order of Implementation across Study States

ORDER OF IMPLEMENTATION	Focus on District Systems & then School Level Implementation	Focus on School Level Implementation & then District Systems
Definition	Initial sequence of district systems change and classroom instruction	
State Examples	AZ ND	SC

As outlined in Figure 6, the initial focus of implementation is described below:

- **Focus on District Systems and then School Level Implementation: Arizona** and **North Dakota** initially focused on creating systems change at the district level to support personalized, competency-based learning. Both have since created learning cycles to support schools and educators ready to explore and implement personalized learning. In North Dakota, for example, online learning modules provide opportunities for individual professional development on topics such as assessment.

- **Focus on School Implementation and then District Systems:** In contrast, **South Carolina's** personalized, competency-based learning work started with individual schools across the state and has more recently expanded to address systems change at the district level to support personalized, competency-based learning in three "Lighthouse" districts.

Decision Point 7. What scaling strategies will best fit the state political and cultural context?

The four states included in the research each have a political culture in which local control is a dominant dynamic in state education. As shown in Figure 7 and discussed below, the study states considered their local political and cultural contexts in designing strategies for scaling the work beyond the first cohort of districts, realizing the approach needed to be bottom-up rather than top-down.

Figure 7. Scale-Up Strategies across Study States

Scale-up strategies across the states include the following:

- **Organic Expansion for Wider Adoption:** In **all four states**, the decision whether to adopt personalized, competency-based learning is a local decision. Even in **South Carolina**, despite the development of the OPL and it's cadre of coaches, personalized, competency-based learning districts are described as a "coalition of the willing."

- **Peer-to-Peer Network of Educators: Nevada** is envisioning a peer-to-peer network of educators across districts who support each other in adopting, implementing, and scaling personalized, competency-based learning. In **North Dakota**, districts meet quarterly as a network to learn from and with each other. Collaboration across educators has been and will continue to be a strategy for support and scale-up in the remaining study states as well. **South Carolina's** OPL offers access to an online platform, PersonalizeSC, for classroom educators in the state to share student-centered resources and collaborative discussions with their peers. In **Arizona**, the Personalized Learning Network also provides avenues for communication across districts to ultimately build a community of support.

- **Initial Cohort Demonstration Sites:** In **North Dakota** and **South Carolina**, local districts will play a key role demonstrating the value of personalized, competency-based learning to other potential sites interested in the work. In **North Dakota**, the districts in this first cohort are expected to serve as demonstration sites for other districts and schools interested in exploring and launching personalized, competency-based learning. In South Carolina, an inquiry lab approach is used in which classrooms implementing personalized, competency-based learning can be observed by educators from other districts interested in potentially adopting similar practices.

- **Multiple Entry Points and Supports: Arizona** is in the process of developing and **South Carolina** is already utilizing a three-pronged approach with multiple entry points into personalized, competency-based learning: Explore (for individual educators), Launch (for individual schools), and Transform (for entire districts).

State Supports for Local Implementation: A Cross-State Analysis

To understand each state's approach to personalized, competency-based learning, RFA developed four state-specific logic models (Appendix A). The logic models were based on interviews with both KnowledgeWorks and state respondents familiar with the work in each state, as well as document reviews. The components of the logic model include: 1) resources to adopt, implement, and support personalized, competency-based learning; 2) implementation activities; 3) short-term results and long-term impact. The logic models served as an analytic tool for the discussion that follows.

Common Resources to Support the Local Adoption and Implementation of Personalized, Competency-Based Learning

In each of the logic models, we explored the resources that were provided at the state and district levels to support personalized, competency-based learning. When looking across the state logic models, we identified four common types of resources:

- **State Policymakers and Agencies:** State policymakers and agencies have played a central role in the personalized, competency-based learning efforts. The state department of education in three of the states (Nevada, North Dakota, and South Carolina) have been the lead state agency in the work. Across all four states, policymakers and advocates have helped to pass legislation that enables schools and districts to pursue personalized, competency-based learning practices.

- **State-Based Organizations:** Along with state policymakers and agencies, additional state-based resources have been leveraged to support personalized, competency-based learning. Arizona provides the clearest example, where the Center for the Future of Arizona has been the lead agency for personalized, competency-based learning, and the Mary Lou Fulton Teachers College has been a partner in the work. Other organizations, such as the Riley Institute at Furman University in South Carolina and the regional education service centers in North Dakota and Nevada have been or will be used to support personalized, competency-based learning as well.

- **External Organizations:** Along with KnowledgeWorks, organizations from outside of the study states, including WestEd, reDesign, the Center for Collaborative Education, and Battelle for Kids provided states with professional development and technical assistance on personalized, competency-based learning generally and specific aspects of the work, such as the development of district portraits of a graduate and research efforts.

- **District Leaders and Educators:** Local stakeholders are critical to personalized, competency-based learning in order for district level systems building and implementation to take place. District leadership, often in the form of district design teams, determine the overall strategy for adoption and implementation in their local context and provide professional development and ongoing support to teachers. Most importantly, the teachers themselves have to use their time and expertise as educators to translate personalized, competency-based learning best practice into classroom instruction, as well as provide examples of implementation to those inside and outside their district.

Implementation Activities

Along with the four components of the logic models listed above, the documentation of activities included in each state logic model is based on KnowledgeWorks' *Four Strategies for System Design:*

- Building Capacity
- Cultivating Systems Change
- Empowering Student Learning and
- Ensuring Quality.[xviii]

These strategies serve as the foundation for the 12 policy conditions necessary for personalized, competency-based learning implementation at scale. The discussion that follows utilizes this framework to explore the implementation activities across the study states that support local implementation, but does not evaluate the presence of the policy conditions.

Building Capacity

Building capacity involved both the provision of professional development and technical assistance to allow district leaders, teachers, and staff to understand and be able to implement the work, and the leadership structures to support the work. **Across logic models in the four states, we documented several common characteristics in the activities reported:**

- **Convenings:** In all four states, the personalized, competency-based learning initiatives have included or will include convenings to provide opportunities for professional development, collaboration, and networking. The convenings were hosted by KnowledgeWorks and state-based leads, and have included state and district level participants in the work. The strategy behind the convenings was not simply the provision of knowledge about personalized, competency-based learning from the presenters to the participants, but instead the "co-design" and "co-facilitation" of discussions about each state's vision for personalized, competency-based learning and how personalized, competency-based learning would be adopted and implemented in each context. The convenings were first in-person, and then offered virtually in response to the pandemic.

- **Ongoing Monitoring and Coaching:** Regular monitoring and coaching calls between KnowledgeWorks staff and state leads were also a key part of building capacity in study states.

- **Cross-District Collaboration:** Districts in each state are working together in various ways as they implement personalized, competency-based learning. Collaboration among the initial cohorts of districts involved in personalized, competency-based learning was a part of the activities in North Dakota. The monthly calls in Arizona with KnowledgeWorks include Transform district leaders and provide opportunities for district collaboration. In Nevada, the hope is to develop a peer-to-peer network in which districts and educators collaborate on how to build and implement personalized,

competency-based learning. In South Carolina, the PersonalizeSC provides access to a platform for community-building and networking (i.e., #PersonalizeSC).

- **Technical Assistance:** A number of organizations, including KnowledgeWorks, also provided targeted supports to address particular aspects of personalized, competency-based learning. For example, in North Dakota, Battelle for Kids provided support around the development of district level portraits of a graduate, while in South Carolina, reDesign assisted in the development of the Profile of the Graduate competencies.

- **Online Professional Development Tools:** In part due to the pandemic, online professional development models were developed in multiple states. In North Dakota for example, teachers could access individual professional development on personalized, competency-based learning through instructional pathways with online learning cycles to complete each pathway (e.g., the assessment pathway has four learning cycles with outcomes).

At the local level, districts were to develop **design teams** to lead the work and further build capacity on site. We will discuss the roles, composition, and goals of these design teams and how they differed across states and districts as part of the district analysis.

Cultivating Systems Change

In addition to building capacity, it is critical to make sure that systems at the state and district levels support personalized, competency-based learning and will help scale and sustain the effort. Common activities to cultivate systems change include the following:

- **Provide State Opportunity Analysis:** As an initial step, in most study states KnowledgeWorks conducted an opportunity analysis to determine the areas where policy could be strengthened to support personalized, competency-based learning.

- **Advocate for State Policy aligned to Personalized, Competency-Based Learning:** Across study states, KnowledgeWorks has worked with state leaders in advocating for policies that would support personalized, competency-based learning. For example, based on recommendations from the Blue Ribbon Commission in Nevada of which KnowledgeWorks has a part, Senate Bill 215 was passed in 2021 and supports competency-based education, allowing students to work at their own pace.[xix] Under the mastery-based framework policy in North Dakota, a school district can award units based on the successful completion of the relevant portions of the North Dakota learning continuum.[xx]

- **Coordinate Personalized, Competency-Based Learning Supports within the State Department of Education:** In Nevada, North Dakota, and South Carolina, the state departments of education have played a lead role in the personalized, competency-based learning effort. Even in South Carolina where an Office of Personalized Learning was established, engaging and aligning department offices proved important to supporting personalized, competency-based learning.

- **Scale Personalized, Competency-Based Learning:** Across study states, cultivating systems change has included working to scale the adaptation and implementation of personalized, competency-based learning. Multiple entry points (explore, launch, and transform) seek to expand the network of individual educators, schools, and districts involved in personalized, competency-based learning. Another strategy is the use of classroom observations to help potential district implementers understand how personalized, competency-based learning can be included in classroom instruction; in North Dakota, cohort districts are to act as "demonstration sites" and in South Carolina they act as "inquiry labs".

Empowering Student Learning

The specific strategies to empower students through personalized, competency-based learning were outlined by KnowledgeWorks through the *District Conditions Navigation Tool*, as well as other resources and materials provided to help guide implementation.[xxi] However, the order in which personalized, competency-based learning instructional components were to be implemented and the structures needed to support those components were largely left to the local districts and schools to determine, with support from state leads and KnowledgeWorks. Further, the components of personalized, competency-based learning that teachers have adopted and implemented in their classrooms are often based on teacher discretion and the decisions of local district leadership.

However, increased **student agency** is commonly the focus of instructional change aligned to personalized, competency-based learning; a further discussion of common instructional practice will follow in the district analysis.

Ensuring Quality

Due to the early phase of the work and the complexity of implementing personalized, competency-based learning, states and districts continue to primarily focus on identifying indicators to **measure the level of personalized, competency-based learning implementation** as opposed to student outcomes. Evidence of impact therefore has been anecdotal to date as specific goals related to the impact of personalized, competency-based learning on student outcomes have yet to be identified. However, two strategies for ensuring quality included:

- **Independent Evaluation:** At the time of data collection, the states were leveraging (North Dakota, South Carolina) or planned to have (Arizona, Nevada) independent evaluation organizations help them measure the level of implementation and determine the impact of personalized, competency-based learning. As mentioned, WestEd and the Riley Institute at Furman University are leading the evaluation in North Dakota and South Carolina, respectively; evaluators have yet to be selected for Arizona and Nevada.

- **Action Planning Metrics:** Interview respondents reported action planning as part of their initial visioning processes that included or will include the development of metrics to help determine the level of implementation and measures of success at the state level. For example, CFA has worked with the Arizona Personalized Learning Network (PLN) to formulate an overall aspiration or vision for personalized, competency-based learning and identified potential metrics, including outputs and outcomes, for Years 1, 3, and 5 of implementation.

Short-Term Results and Long-Term Impact

Setting clear goals for the work provides targets for districts and schools to strive towards meeting. As mentioned, the study states are still in the process of setting goals for personalized, competency based learning, both in short-term results and long-term impact. However, there were common responses across states regarding goals for the work.

- **Short-Term Results:** Common short-term results identified by respondents across the study states included increased educator knowledge about and capacity to implement personalized, competency-based learning; adoption of state and district policies aligned with personalized, competency-based learning; implementation of personalized, competency-based learning into classroom instruction; completion and/or integration of the portrait of a graduate in districts; increased student agency; development of metrics to measure the impact of personalized, competency-based learning; and development and dissemination of lessons learned.

- **Long-Term Impact:** Common long-term impacts anticipated across the study states included scaling personalized, competency-based learning to more districts; development of evidence on the impact of personalized, competency-based learning on student outcomes; elimination of student achievement gaps; and increased student readiness for college and career after high school.

Summary

While there has been variation in the resources, activities, and goals across states, the logic models helped to identify common components:

- The common **resources** to support the local adoption and implementation of personalized, competency-based learning include **state policymakers and agencies, state-based resources, external resources,** and **district leaders and educators.**

- Based on the **Four Strategies for System Design** (Building Capacity, Cultivating Systems Change, Empowering Student Learning and Ensuring Quality):

    o Activities for **building capacity** included hosting convenings, offering ongoing monitoring and coaching, cross-cohort collaboration, technical assistance, and online professional development tools.
    o Activities for **cultivating systems change** included state opportunity analysis, advocacy for state policy aligned to personalized, competency-based learning, coordination of personalized, competency-based learning supports within the state department of education, and scaling personalized, competency-based learning.
    o Activities for **empowering student learning** focused primarily on encouraging student agency.
    o Activities for **ensuring quality** leveraged independent evaluation partners and action planning metrics.

- Study states are still in the process of setting goals for the work, both in the **short-term results** and **long-term impact**, but common goals included increased educator knowledge; adoption of state and district policies aligned with personalized, competency-based learning; implementation of personalized, competency-based learning into classroom instruction; completion and/or integration of the portrait of a graduate in districts; increased student agency; development of metrics to measure the

impact of personalized, competency-based learning; and development and dissemination of lessons learned, as well as scaling personalized, competency-based learning to more districts; development of evidence on the impact of personalized, competency-based learning on student outcomes; elimination of student achievement gaps; and increased student readiness for college and career after high school.

Analysis of Implementation at the District Level

Based on a sample of district representatives, the research team explored the motivations for the adoption of personalized, competency-based learning, the district visions and expectations for implementation, district systems change in support of the effort, capacity building strategies, classroom implementation, and short- and long-term goals. Finally, we discuss how districts perceived personalized, competency-based learning as a strategy to address issues of equity and the influence of the COVID-19 pandemic on district adoption and implementation.

District Motivations for the Adoption of Personalized, Competency-Based Learning

Multiple districts across the study states identified the following motivations for the adoption of personalized, competency-based learning:

- **Previous work or existing interest aligned with personalized, competency-based learning:** Three districts reported that personalized, competency-based learning was something that they "already wanted to do" or had started to implement through aligned policies and practices prior to the adoption of the effort with KnowledgeWorks. Individual teachers involved also identified personal alignment between personalized, competency-based learning and their prior teaching philosophies and practices.

- **Preparation for graduation, college, and career:** As was the case at the state level, at least one district in all three states identified personalized, competency-based learning as a strategy to help students achieve the state graduation standards and/or prepare them for the world after high school.

- **External site visits and observations of personalized, competency-based learning:** Observations of teachers in other districts, whether inside or outside the state, can act as a powerful motivator for district and classroom adoption of personalized, competency-based learning. For example, both of the districts in Arizona identified such external visits as a catalyst for their involvement.

Expectations for Implementation

District visions for the implementation of personalized, competency-based learning were not always clearly defined. Further, the "personalized" nature of the effort was incorporated not just in classroom practice but also in the expectations of district design teams on the way the components of personalized, competency-based learning would be implemented. Design teams "personalized" implementation within their schools and districts by allowing educators their own voice and choice in how they were adopting personalized competency-based learning in the classroom.

In most cases, teachers were expected to participate in personalized, competency-based learning, but were given considerable flexibility in how and to what degree they implemented the components of the approach. For the most part, districts fostered an organic

approach to expanding practices across classrooms. Personalized, competency-based learning implementation "at some level" was commonly expected across faculty. In one district, for example, it was explained that schools have "created space for people to find their niche" in the effort. In another, just as students were given agency, teachers also had agency to incorporate personalized, competency-based learning into their classroom practice at their own pace, leading to a gradual process of implementation over time. The elements implemented and the cadence of implementation commonly differed across teachers, based on the amount of time that educators have been involved and professional development they have received.

The level of implementation often varied across elementary, middle, and high school levels, based on a number of factors. In one district, the elementary school's experience with standards-based grading and related priority standards and progressions prior to the adoption of personalized, competency-based learning facilitated implementation in the elementary grades at a faster pace than in the secondary grades. In another, the middle schools are the furthest along in implementation, followed by the high schools due to the scaling strategy in the district; while all secondary principals were involved from the outset and met regularly to discuss personalized, competency-based learning, the district started implementing in just two elementary schools, then four, and now eight out of the 14 buildings.

Half of the study districts reported a continuing need to help teachers better understand what personalized, competency-based learning is and build a shared vision for the work. In both Arizona and South Carolina, respondents from at least one district explained that some teachers are "still trying to figure out what it is that we need to be doing within classrooms" in order to implement personalized, competency-based learning. While there may be a common vision among the leaders at the district and school levels engaged in personalized, competency-based learning, additional work is needed to ensure a shared vision across classroom teachers.

District Systems Change in support of Personalized, Competency-Based Learning

Along with classroom implementation, it is also critical to build district systems and policies that support the work. Several common system-level changes were found across multiple districts, including the following:

- **Learning Progressions and Priority Standards**: In three study districts, including both districts in South Carolina, educators are working on "unpacking the state academic standards" to identify priority standards and learning progressions so that they can better track student's progress against the standards.

- **Teacher Evaluation:** Both districts in Arizona and South Carolina reported revising their teacher evaluation systems to align with personalized, competency-based learning. North Dakota's Department of Public Instruction allows districts to customize their evaluation systems, so long as it is approved by the state. In one North Dakota district, they will be modifying their evaluation tool to reflect personalized, competency-based learning "look-fors" in the classroom. Two of the districts are implementing the Marzano Evaluation Method that is considered to be aligned with personalized, competency-based learning.

- **Standards-Based Grading:** All but one of the study districts are adopting standards-based grading. In some cases, this process had begun before implementing personalized, competency-based learning, but has since expanded to new grade levels.

Capacity Building

Personalized, competency-based learning is a complex instructional and systems approach that influences the roles of both teachers and students in the classroom by calling on teachers to facilitate a process through which students have agency and ownership for their own learning. In order for this level of instructional change to take place, educators need both increased knowledge of the approach and structures to support them in the work. The strategies to build this capacity across multiple districts included the following:

- **Share Learnings from Convenings:** Collaborative meetings focused on professional development and networking were the most common form of capacity building. A subset of school and district administrators and faculty often attended convenings hosted by KnowledgeWorks and state departments of education, as well as external organizations such as Marzano Research; they were then expected to share their learnings with colleagues in their home district. In other cases, the groups of educators representing the district at these convenings rotated so that a larger percentage of district educators would be able to attend over time. Individual districts also offered professional development convenings for their district staff.

- **Provide Opportunities for Internal or External Classroom Observations:** Also common and identified as particularly effective were classroom observations of other teachers implementing personalized, competency-based learning, whether inside or outside the home district or state. In some cases, study districts hosted opportunities for teachers from within their districts as well as other districts to come and observe their classrooms. For example, in one middle school teachers observed each other once a month to look for particular elements of personalized, competency-based learning covered in the previous professional development session and provide feedback with the goal of becoming more familiar with that element of personalized, competency-based learning. They also engaged in external sites visits in districts in other states.

- **Recruit Teacher Leaders:** Several districts used varying strategies to leverage teachers through a "train the trainer" approach. In one district, each school recruited a group of teachers who were respected by their peers so that they could lead the work with the help of the principal. This group attended professional development through the state and then provided professional development in small groups during planning periods for teachers who did not receive training at the state level. In another district, a cohort of secondary teachers participated in a book study in preparation for their role as personalized, competency-based learning leaders in their buildings. In a third, "teacher innovators" are leading efforts in their classrooms and organically recruiting additional teams of teachers.

- **Offer Problems of Practice and Study Sessions:** Two districts reported utilizing a book study approach to orient educators to personalized, competency-based learning. In one district, groups of principals and assistant principals met on a monthly basis to discuss the book, Tapping Into Personalized Learning, which has helped to define personalized learning and build their instructional leadership for the effort. In another, teachers voluntarily explored the resources available through the Students at the Center Hub on the pillars of personalized learning (https://studentsatthecenterhub.org/). In a third, sessions focused on problems of practice, including implementing personalized, competency-based learning in the classroom.

- **Develop Human and Material Resources:** Ongoing support through both human and material resources were identified as effective ways to build capacity for implementation as well:

  o **Human Resources:** In one district, employment of an instructional coach to provide support for and feedback on classroom implementation has been an effective strategy for building teacher capacity. Districts in North Dakota could also leverage an external education fellow who provided support and technical assistance. Similarly, another district is creating a project manager position for personalized, competency-based learning to support activities such as data collection.

  o **Material Resources:** District leaders are also developing instructional resources, such as a resource bank for personalized learning materials, and sharing training modules developed by KnowledgeWorks.

- **Leverage existing meeting structures:** Along with developing new professional development opportunities, districts also used existing meeting structures, such as common planning time, to build knowledge around personalized, competency-based learning. For example, in one district the curriculum coordinators share what they are learning during regular curriculum meetings, and then the teacher representatives share in their professional learning communities.

As mentioned previously, design teams were the most common leadership model across districts but varied in structure. All six districts developed district design teams, but the composition and role of the design teams varied and changed over time. For example, in one district the initial design team included instructional coaches and assistant principals, along with the chief academic officer, but later included more teachers. Another district also reported that the team initially focused on their own learning about personalized, competency-based learning and included a wide variety of members from the district and larger community, but has since decreased in size, focused more on disseminating information and giving principals a larger set of responsibilities for the effort. Similarly, the district design team in a third district included every principal at the six secondary (middle and high) schools, and eight elementary school principals, along with district administrators.

School Leadership has also been central to the work. As evidenced by the inclusion of principals in the district design teams, school leadership is also critical to the implementation of the effort. In one district, the secondary principals meet together twice a month to discuss, among other topics, how personalized, competency-based learning is rolling out in their buildings, as well as share information and strategies. In another district, along with the district design team there are also campus design teams for personalized, competency-based learning that identified teacher innovators who initially began exploring and adopting personalized, competency-based learning in their classrooms. The campus design teams focus on supporting school level practices and implementation, while the teacher innovators are leading efforts in their classrooms and organically recruiting their teams.

Classroom Implementation

Despite the variation in classroom implementation across teachers and educational levels, there are **several components of teaching and learning** aligned with personalized, competency-based learning that were commonly reported:

- **Focusing on student agency:** Across districts and states, we consistently heard that teachers were working to increase student agency or "voice and choice" in their classrooms.

Vehicles to allow for student agency often included **choice boards**, which allow students to decide how they will engage with the information they will be learning and then demonstrate their learning through a selection of assessment methods.

- **Empowering students to set their learning goals and monitor progress:** Educators in multiple districts reported that they were working with students in using assessment data to set their own learning goals and then continue to use data to monitor their progress on those goals.

Districts have also leveraged specific instructional practices to provide personalized learning opportunities for students. Interview respondents consistently reported using **pre-assessments** to better understand student needs, **small groups** to customize instruction based on the needs of a subgroup of students, and **learning stations** for different activities.

Short-Term Results, Long-Term Impact, and Continuous Improvement

It is critical to have clear goals for any effort, including the short-term milestones needed to meet those goals. In order to track progress on these milestones and achieve the desired long-term impact, indicators of both implementation and impact are also critical to ensuring continuous improvement.

Shared short-term results and long-term impacts have yet to be clearly defined within districts, but some of the individual goals identified by interview respondents have common characteristics. As was the case at the state level, districts are still in the process of determining their goals, whether short- or long-term, for the personalized, competency-based learning effort. However, there were some common characteristics to the goals that interview respondents shared during interviews. In both districts in Arizona, respondents identified the **development of their district portrait of a graduate** as a short-term goal. In several districts, respondents said that their goals included increased **student agency** (e.g., student choice on how their learning is assessed) and **student ownership** of their learning goals and the steps they need to take to make progress on those goals. Further, educators wanted to see the expansion of personalized, competency-based learning components in the district, such as the implementation of pre-assessments, the development and utilization of learning progressions, and standards-based learning overall. Respondents also expected to see **improved student engagement and achievement**, as evidenced by improved graduation rates and overall academic growth. Several of these goals are similar to those developed at the state level.

Districts are focusing on measuring levels of personalized, competency-based learning implementation. Due to the early phase of the work and the complexity of implementing personalized, competency-based learning, districts are focusing on identifying indicators to measure the level of implementation as opposed to student outcomes. Evidence of impact therefore has been somewhat anecdotal to date as specific goals related to the impact on student outcomes have yet to be fully developed.

Districts are utilizing two common methods to monitor the progress and quality of personalized, competency-based learning implementation: educator surveys and classroom observations. Both independent evaluators and districts have been administering surveys to teachers to collect data on their knowledge and implementation of personalized, competency-based learning in their classrooms. Districts have also commonly been conducting observations of "walk-throughs" to determine the level of personalized, competency-based learning implementation and variation across classrooms.

Personalized, Competency-Based Learning as an Approach to Addressing the Needs of Each Individual Student

The personalized, competency-based learning approach calls on districts to analyze their student outcomes data, practices, and beliefs to determine how they have impacted historically marginalized populations and how those issues can be better addressed to ensure equitable opportunities and outcomes for all students.[xxii] Mirroring this study's approach to exploring equity considerations within state level implementation, RFA asked district respondents to share their own definitions and considerations around equity as it relates to the personalized, competency-based learning initiative. Similar themes to the state level discussions surfaced:

1. Just as was the case at the state level, **districts often struggled to define** what they meant by equity.
2. The majority of district respondents involved in personalized, competency-based learning emphasized that the effort could help to address issues of equity by **helping to meet the needs of *each individual* student.** By personalizing instruction, educators explained that personalized, competency-based learning can help meet the needs of the "whole child," regardless of their achievement level.
3. While respondents did not commonly describe personalized, competency-based learning as an effort to address historically marginalized populations, the effort was identified as **giving teachers more tools to address inequities** broadly.

Influence of the COVID-19 Pandemic on Personalized, Competency-Based Learning

COVID-19 has significantly impacted teaching and learning across the country since 2020. The interaction between the pandemic and personalized, competency-based learning efforts also changed education in the study districts in several common ways:

- First, **there was broad consensus that personalized, competency-based learning helped implementing schools and districts adapt quickly during the pandemic.** Participation in the effort prepared educators for the changes needed in providing remote instruction and helped them pivot to provide personalized instruction to meet the individual needs of students. In one district, for example, the learning management system (LMS) was leveraged to support personalized learning efforts during the height of the pandemic and has continued to be utilized in new ways. For example, at one district middle school, the LMS is organized the same way across classrooms: 1) the why folder explains what students will learn, 2) the learn folder includes different ways for learners to engage in the content/standard; and 3) the show folder offers option on how students can demonstrate learning.

- Second, state level officials highlighted how the **pandemic sparked interest in personalized, competency-based learning due to the student-centered approach** in addressing learning needs and environments created by the pandemic. Indeed, the pandemic sparked a mindset shift in educators to reconsider how to best serve students. For example, the pandemic underscored the benefits of flipped classrooms and the use of recorded lessons to help students learn.

- Lastly, **the pandemic slowed implementation, professional development, and scaling.** While personalized, competency-based learning was elevated during the pandemic, the need to directly respond to the pandemic shifted the focus for school and districts already involved in the effort. For example, the need to keep students socially

distanced and monitor COVID-19 spread through contact tracing limited the ability of districts to allow students to meet in small groups and switch classrooms as they mastered new standards. Further, the pandemic limited professional development opportunities and teacher illness required colleagues to cover one another's classrooms instead of taking advantage of their preparation time; "people were in survival mode."

Lessons for the Field on Implementation at the District Level

Implementing personalized, competency-based learning is a complex process that is still in the initial stages in the study sites. Nonetheless, several common successes were reported across study districts and included:

- **Increased student engagement:** Nearly all districts reported that students are more engaged in the classroom as a result of personalized, competency-based learning. As a result, there was also anecdotal evidence that students are better behaved, in part through more "personalized" relationships with their teachers.

- **Greater student agency:** Through efforts to encourage student "voice and choice" in the ways that they learn and the ways that they demonstrate their learning, student agency has also increased across districts.

- **Student ownership of their own learning:** District respondents also reported that students are better aware of how they are performing against the standards and what they need to learn to make progress against the standards. Further, students are able to articulate their learning goals in clear and specific ways.

At the same time, one interview respondent described implementing personalized, competency-based learning as "building the airplane as you are flying it." Indeed, the adoption process was not uniform across study districts as they have been encouraged to "create [their] own system" for adopting personalized, competency-based learning based on the local own context. This "personalized" approach to onboarding study districts has created two dynamics:

- **Variation in the process of orientating educators at different levels within districts:** Due to the unique structure of each district, there has not been a common process across districts on how to scale personalized, competency-based learning across schools and disseminate information about how to provide classroom instruction aligned with the approach. District leaders are trying to determine the best cadence for rolling out personalized, competency-based learning to teachers, what content to share in the process, and when to share it. The types of educators (i.e., district administrators, principals, teachers) participating in professional development and district design teams has also varied, leading to differences in the level of knowledge about the effort across districts. For example, one district has limited teacher involvement in the design team to two faculty members per school, while other districts have involved larger cohorts of teachers from the outset.

- **Lack of consistency in the level of knowledge across classroom teachers:** Despite the professional development on personalized, competency-based learning provided from external organizations such as KnowledgeWorks, state-based resources such as the South Carolina Office of Personalized Learning, and district level coaches and teacher leaders, the breadth and depth of teacher training on personalized, competency-based learning has varied within and across districts, leading to inconsistency in faculty understanding of what the effort includes and how to incorporate it into classroom instruction.

The organic approach that districts have generally taken in implementing personalized, competency-based learning and the considerable flexibility teachers have been given has contributed to this dynamic. **There has also been, at both the state and district levels, a lack of clarity around a set of shared goals and milestones for the effort from the outset.** This ambiguity about the objectives for the effort may have contributed to the limited systematic dissemination of information across administrators and faculty in order to realize specific short-term results and long-term impacts.

Nevertheless, district respondents identified a number of **effective resources to support implementation** that are already in place to varying degrees:

- **Classroom observations and reflection** was the frequently identified as the most effective professional development resource, whether the observation takes place in or outside the district. The opportunity to observe other teachers implementing personalized, competency-based learning and then discuss the practices provides teachers with clear examples of instructional practice and lessons learned from the field.

- **Ongoing technical assistance and instructional coaching,** whether provided by KnowledgeWorks staff, state-based resources, or a district level instructional coach, was reported to be an effective resource to support implementation. The support needs to be customized or "personalized" to the individual needs of the districts, schools, and teachers and provided in real time to address the challenges of implementation. KnowledgeWorks staff were commonly cited as valued resources for this ongoing support, as were state and regional technical assistance providers. In one district, an instructional coaching position was created to focus on supporting the implementation of personalized competency-based learning.

- **Concentrated time to focus on personalized, competency-based learning** is also critical to the work. While the pandemic required professional development to shift to remote platforms, in-person convenings were considered more effective because they allowed participants to set aside time to focus on personalized, competency-based learning in a concentrated way. Within the district setting, utilizing professional learning communities to focus on personalized, competency-based learning was also identified as a strategy.

Not surprisingly, **additional resources are still needed to support implementation**, and are aligned with the resources that were identified as most effective in supporting implementation:

- Across districts, **respondents reported that they need additional time,** both on a daily basis and in the long-term, to learn more about personalized, competency-based learning and prepare to teach using this approach. Educators emphasized that personalized, competency-based learning is "hard work" that needs more preparation time than traditional instruction and the opportunity for teachers to take "baby steps." Respondents also explained that teachers need "time to create, time for conversations, and time to observe" concrete examples of what personalized learning looks like in the classroom.

- This need for "concrete examples" of personalized, competency-based learning could be addressed through a **"toolbox" of instructional resources** with learning activities to implement in classrooms. While study districts have been encouraged to "create [their] own system" for adopting and implementing personalized, competency-based learning, educators also need tangible strategies on how to adopt this approach in the classroom.

This can be provided through both observations of classroom instruction and curricular materials that can easily be incorporated into lesson plans.

As the study districts continued to work on implementation, they were also willing to offer themselves as examples for other districts and schools in their own state and beyond. As planned through the development of "demonstration sites" in North Dakota and "Lighthouse" districts in South Carolina, the **study districts expressed a willingness to share their experiences and invite others to their sites to learn more about personalized, competency-based learning implementation.** While the COVID-19 pandemic has disrupted some district's efforts to host external visitors, they have found ways to use their experiences to help scale the work. For example, the "Lighthouse" districts in South Carolina created a virtual showcase that provided an opportunity for them to share their story of personalized, competency-based learning, and the state Office of Personalized Learning asked to share the showcase with other districts.

Recommendations for State and District Leaders and Next Steps

Based on both the state and district data collection and the analysis presented above, we provide the following recommendations to the field:

State Level

- **Establish a clear and shared vision and goals for personalized, competency-based learning from the outset.** At the state level, leaders in the effort continue to work on defining a shared vision for personalized, competency-based learning and the goals they wish to achieve. It is critical to establish strategic and measurable goals across a coalition of partners at the outset of any effort so that there is clear vision for the work.

- **Leverage catalysts to advance personalized, competency-based learning in the state.** In each of the study states, there were catalysts that helped to motivate policymakers and other state officials to adopt personalized, competency-based learning. It is critical to recognize and leverage those opportunities to build support for the work and create the conditions needed to adopt and sustain it.

- **Advocate for personalized, competency-based learning as a vehicle to achieve the state's larger vision for education.** Advocates for personalized, competency-based learning can identify the state's larger vision(s) for education and frame personalized, competency-based learning as a vehicle to meet that vision(s).

- **Develop state policy that supports the adoption and scale-up of the work and orient district leaders on how to leverage these policies in their local context.** Across all four study states, policymakers have supported the work through the creation of legislation, frameworks and commissions/task forces that created the policy landscapes in which personalized, competency-based learning could be adopted and implemented, while also increasing flexibility that allows for scale-up to additional districts and schools. At the same time, district leaders will need help to understand how to take advantage of these policies to adopt and implement personalized, competency-based learning in their local context.

- **Build a broad coalition at the state level to provide input in the effort and support the work.** In order to build, scale, and sustain support for the effort, policymakers, advocates, service providers and practitioners from across the state will need to be involved in adopting and supporting personalized, competency-based learning.

- **Leverage both internal and external partners to provide ongoing professional development and technical assistance for the work.** Due to the complexity and whole-school nature of personalized, competency-based learning, it is a demanding instructional shift that requires ongoing professional development and technical assistance to support the work. Both policymakers and practitioners will need resources to build teachers' capacity to make these shifts, and these resources can be found at state, regional and local levels, both inside and outside the state.

- **Provide technical assistance to districts on how to focus on both systems building and school level implementation from the outset of the work.** In the states that initially focused on creating the district systems change needed to support personalized, competency-based learning, it became clear that they also needed to include teachers in the discussions to better understand how the work would play out in the classroom. Similarly, districts that focused on classroom implementation without building policies and practices to support that implementation realized that district systems also need to be in place.

- **Identify indicators to measure implementation and impact.** Due to the early phase of the work and the complexity of implementing personalized, competency-based learning, states, as well as districts, have been focusing on identifying indicators to measure the level of implementation; indicators of individual or aggregate student outcomes also remain unclear. In order to track the level of implementation and determine whether an initiative is ready to measure impact, clear and measurable indicators need to be defined.

- **Consider the state political and cultural context in determining scaling strategies.** Each of the study states have a culture in which local control is a dominant dynamic in education. As a result, the decision whether to adopt personalized, competency-based learning was a local decision; in South Carolina, those involved are considered a "coalition of the willing." Indeed, a top-down approach that required implementation would not have fit the context in the study states, and so it makes sense to consider the state context to determining the best scale-up strategy.

- **Develop a clear definition for equity as it relates to personalized competency-based learning.** For the most part, states have struggled to define equity as part of personalized, competency-based learning efforts, and in particular identifying the student populations for whom opportunities and outcomes are inequitable. It is critical for states to identify those populations and determine how personalized, competency-based learning can work toward addressing inequities.

District Level

- **Set clear goals for the work.** Just as clear goals are critical at the state level, they are also essential to district implementation. District respondents identified the lack of a shared set of short-term results and long-term impacts for the effort, as well as indicators to measure progress, as challenges in moving the work forward. District design teams should develop their goals for the work at the outset and revisit those goals regularly to determine their progress and continuously improve the work.

- **Include educators at all levels in the district design teams.** In some cases, district design teams initially did not include all levels of district stakeholders, such as administrators, support staff, principals, and teachers; this created a disconnect between schools and educators not included in the process and hindered implementation and scale-up in those schools and grades or subject areas.

- **Develop district policy and practice that supports the work and removes barriers.** Study districts recognized that they needed to build systems in which personalized, competency-based learning could implemented. District systems change in areas such as teacher evaluation is essential to ensure alignment between local policy and classroom instruction.

- **Allow time for teacher orientation and implementation.** Personalized, competency-based learning is an ambitious approach to education that changes the roles of both teachers and students in the classroom. That level of implementation reform requires time for teachers to prepare for instruction on a weekly basis, and over the long-term through ongoing professional development, implementation, and continuous improvement.

- **Provide opportunities for classroom observations and reflections.** Observations were consistently identified as an effective way to build teacher capacity, whether in the district or outside. Allowing for peer reflection afterwards is also essential to help teachers process what they saw and clarify what they learned and can take back to their own classroom.

- **Offer both human and material resources to provide ongoing support.** Teachers will not have all the capacity they need to implement personalized, competency-based learning after a single professional development session; this approach requires ongoing technical assistance. Some districts utilized instructional coaches to provide customized, district-based supports that were considered effective. At the same time, providing lesson plans and templates for instructional strategies that can be modified to fit individual classrooms were also identified as valuable resources.

- **Determine a strategy for dissemination of information that fits existing district structures.** Educators at all levels need to have a clear understanding of what personalized, competency-based learning involves and how to implement it in the classroom. In some cases, information was housed primarily at the district level and was not shared with school administrators and teachers. Districts should identify existing resources (e.g., curriculum coordinators) and structures (e.g., professional learning

communities) through which professional development and ongoing support can be shared across educators at all levels.

- **Define equity and how personalized, competency-based learning will support equitable student outcomes**. The majority of district respondents emphasized that the effort could address issues of equity by helping to meet the needs of each individual student. While focusing on the needs of every individual student speaks to equity, student outcomes vary by student subgroup and reflect inequitable opportunities for traditionally underrepresented student populations. To that end, districts should consider identifying student achievement gaps and focus their efforts on equity by addressing the needs of student subgroups experiencing those gaps.

While the scope of this research developed critical information on *how* personalized, competency-based learning is being implemented across study states to inform the study states themselves and the broader field, future research that expands the scope to determine *which types of strategies are most effective* and *under which conditions and contexts* would be a valuable next step to guide future implementation and scaling efforts. This follow-up research could focus on two areas:

1) Improving **equitable opportunities and outcomes** for traditionally underserved students, and

2) **Scaling efforts** both within schools (increasing the number of classrooms implementing personalized, competency-based learning) and districts (increased in the number of schools in a district implementing personalized, competency-based learning) and to other districts within the state.

In order to explore the effectiveness of different types of adoption and implementation strategies in each state in improving equity and increasing scale, a mixed-methods study, using qualitative interviews, document review, survey data and student outcomes analyses could develop further lessons for the field.

Appendix A: State Logic Models for Personalized, Competency-Based Learning Efforts in Arizona, Nevada, North Dakota, and South Carolina

ARIZONA July 2021	BUILDING CAPACITY	CULTIVATING SYSTEMS CHANGE	ENSURING QUALITY	EMPOWERING STUDENT LEARNING
RESOURCES TO ADOPT, IMPLEMENT, AND SUPPORT PERSONALIZED, COMPETENCY-BASED LEARNING	• KnowledgeWorks • Center for the Future of Arizona • Transform District Leaders/District Design Teams • Teachers and Staff • Personalized Learning Network	• KnowledgeWorks • Center for Future of Arizona • Personalized Learning Network • A for Arizona • Mary Lou Fulton Teachers College • Legislature • Governor's Office	• KnowledgeWorks • Center for Future of Arizona • Personalized Learning Network • District Design Teams • Teachers and Staff	• KnowledgeWorks • Personalized Learning Network • Transform District and School Leaders • Teachers and Staff
CROSS-COHORT ACTIVITIES	• Bi-annual Personalized Learning Network convenings. • Center for the Future of Arizona led monthly progress checks and KnowledgeWorks coaching for Transform district leaders and design teams. • Access to online learning modules for individual professional development. • Technical assistance on district level profile of a graduate creation.	• Conduct on-going policy landscape analysis. • Advocate for continued district and state policies that support or reduce barriers to Personalized, Competency-Based Learning • Utilize adjustments from aligned policy changes to support Personalized, Competency-Based Learning.	• Transform leaders engage in guided decision-making and reflection on Personalized, Competency-Based Learning practices with Personalized Learning Network. • Baseline survey distributed and analyzed for Transform districts and focus groups conducted to inform quality and alter support. • Time and funding utilized for teachers/entire school staff to engage in • Personalized, Competency-Based Learning Training.	• Translate theory into classroom practices in all four transform districts. • Leverage learner-centered practices. • Foster the implementation of 7 components of competency-based learning from Aurora Institute.
SHORT-TERM RESULTS (<5 YEARS)	• Integration of Profile of a Graduate into practice in Transform districts. • Local partners and stakeholders show increased knowledge of personalized, competency-based learning in Transform districts.	• Personalized, competency-based policy inventory complete. • Additional policies conducive to personalized, competency-based learning implemented at state level and within Transform districts.	• Metrics identified to measure the impact and effectiveness of the Personalized Learning Network. • Dissemination of lessons learned on improved implementation through evaluation and reporting	• Increased student agency. • Improved attendance and decreased behavioral referrals in Transform districts. • Deeper learning and equity of learning in Transform districts.
LONG TERM IMPACT	Educators, the philanthropy community, and policymakers statewide show increased knowledge of Personalized, Competency-Based Learning.	• Districts fully leverage new policies and changes to incorporate more elements of Personalized, Competency-Based Learning. • Increased number of districts engaged in Personalized, Competency-Based Learning through explore, launch, and transform pathways.	Evidence developed on public support for Personalized, Competency-Based Learning and impact of Personalized, Competency-Based Learning on systems/students	• Increased postsecondary enrollment and completion. • Achievement gaps between subpopulations in Transform schools decrease. • Increased teacher efficacy.

NEVADA January 2022	BUILDING CAPACITY	CULTIVATING SYSTEMS CHANGE	ENSURING QUALITY	EMPOWERING STUDENT LEARNING
RESOURCES TO ADOPT, IMPLEMENT, AND SUPPORT PERSONALIZED, COMPETENCY-BASED LEARNING	• Nevada Department of Education • KnowledgeWorks • Regional Professional Development Programs • Schools Districts/ State Public Charter School Authority	• Nevada Department of Education • KnowledgeWorks • State Legislature/Board of Education • School Districts/State Public Charter School Authority	• Research and Evaluation Partner (Yet to be Selected) • School District/ State Public Charter School Authority Leaders • Educators	• Administration and educator commitment • Time for educators to learn about and implement Personalized, Competency-Based Learning • Supportive District and School Leadership
CROSS-COHORT ACTIVITIES	• Visioning/action planning process with Nevada Department of Education and KnowledgeWorks on the state Personalized, Competency-Based Learning effort • Awareness campaign and recruitment of initial cohort of Personalized, Competency-Based Learning Launch Districts • Professional development convenings and technical assistance for districts/schools on implementing/supporting Personalized, Competency-Based Learning • Peer-to-peer network in which districts/ educators build and implement Personalized, Competency-Based Learning together • Development of Launch District Personalized, Competency-Based Learning leadership team	• Opportunity analysis on whether/ how state policy supports Personalized, Competency-Based Learning • Convening Nevada Department of Education staff to explore how different offices and internal policies can support Personalized, Competency-Based Learning • Creation or refinement of state policy to better support Personalized, Competency-Based Learning • Development of new and/or utilization of existing infrastructures to support Personalized, Competency-Based Learning • Development of state Portrait of a Graduate • Creation of blueprint for systemic implementation of Personalized, Competency-Based Learning based on work done in the Competency Based Education Pilot, including the Churchill County School District, Clark County School District, and Washoe County School District	• Selection of research and evaluation partner led by KnowledgeWorks • Partnership with research and evaluation organization on the implementation and impact of the Personalized, Competency-Based Learning effort • Creation of metrics to measure progress on Personalized, Competency-Based Learning action planning process • Monitoring implementation against metrics based on action planning process • Monitoring student outcomes against state-developed competencies	• Refinement of competencies at the state level • Implementation of more relevant learning experiences through competency-based education and personalized learning at the school level • Classroom instruction based on standards aligned with state Portrait of a Graduate • Implementation of student agency strategies • Implementation of a balanced assessment system
SHORT-TERM RESULTS (<5 YEARS)	• Creation of cohort of Launch Districts implementing Personalized, Competency-Based Learning • Formal and informal collaboration across peer-to-peer network in support of Personalized, Competency-Based Learning • Increased capacity at district and school levels to implement Personalized, Competency-Based Learning • Increased capacity at the state and regional levels to support Personalized, Competency-Based Learning	• Policy landscape at the state and district levels aligned with Personalized, Competency-Based Learning • Infrastructure at the state and regional levels to support Personalized, Competency-Based Learning • Internal Nevada Department of Education systems and structures support personalized, competency-based learning • Completion of state Portrait of a Graduate	• Evidence of implementation based on action planning metrics • Dissemination of lessons learned on improved implementation through evaluation and reporting	• Increased teacher and student satisfaction around teaching and learning • Successful implementation of standards aligned with state Portrait of a Graduate • Increased student agency and variation in assessment options
LONG TERM IMPACT	• Not Applicable	• Personalized, Competency-Based Learning implementation within and beyond the initial cohort of Launch Districts	• Strong implementation of Personalized, Competency-Based Learning and clear evidence of positive impacts on student outcomes	• Increased proficiency, growth, and mastery of competency standards across all students so they are globally prepared for college and career

NORTH DAKOTA July 2021	BUILDING CAPACITY	CULTIVATING SYSTEMS CHANGE	ENSURING QUALITY	EMPOWERING STUDENT LEARNING
RESOURCES TO ADOPT, IMPLEMENT, AND SUPPORT PERSONALIZED, COMPETENCY-BASED LEARNING	• KnowledgeWorks • North Dakota Department of Public Instruction • District Design Teams and Education Fellows • Teachers and Staff • Center for Collaborative Education • Battelle for Kids	• KnowledgeWorks • Governor's Office • State Legislature • K12 Coordination Council • Education Unions • District Leaders and School Board	• KnowledgeWorks • WestEd • District Design Teams • Teachers and Staff	• Administration, faculty, and staff commitment to Personalized, Competency-Based Learning • Time for educators to learn about and implement Personalized, Competency-Based Learning • Supportive District and School Leadership
CROSS-COHORT ACTIVITIES	• Convenings, progress checks/coaching, and cross-cohort collaboration • Online learning, intra-district dissemination of lessons learned, and support for classroom instruction • Technical assistance on profile of a graduate and performance assessment	• Identification of opportunities to strengthen state policy to support Personalized, Competency-Based Learning • Advocacy by multiple stakeholdergroups for state policy that supports Personalized, Competency-Based Learning • Development of new district policy and practice aligned with Personalized, Competency-Based Learning components • Demonstration of Personalized, Competency-Based Learning for other interested schools and districts	• Development of action plans with goals and steps for Personalized, Competency-Based Learning implementation and progress monitoring • Dissemination of materials such as the District Conditions Navigation Tool to guide implementation • Evaluation and reporting activities to monitor implementation and provide external feedback	• Integration of Personalized, Competency-Based Learning into classroom instruction • Adoption of systems to plan, implement, and assess learning processes
SHORT-TERM RESULTS (<5 YEARS)	• Engagement in professional development by educators at all levels (administrators, teachers) • Increase in district capacity for 1) leadership inside and outside the state, and 2) Personalized, Competency-Based Learning demonstration • Increased knowledge of Personalized, Competency-Based Learning • District ownership for Personalized, Competency-Based Learning implementation • Integration of performance assessment and expectations in profile of a graduate	• Flexible state policies are adopted that facilitate Personalized, Competency-Based Learning • District level policy and practice are developed to support Personalized, Competency-Based Learning and create positive and equitable learning environments • Increased number of districts exploring/launching Personalized, Competency-Based Learning	• Implementation of district action plans • Integration of best practices based on KnowledgeWorks materials • Dissemination of lessons learned on improved implementation through evaluation and reporting	• Classroom practices that use a student-centered approach are in place • Increased learner voice and choice
LONG TERM IMPACT	Not Applicable	State and district policy supports Personalized, Competency-Based Learning and Personalized, Competency-Based Learning is scaled to additional districts	Evidence developed on public support for Personalized, Competency-Based Learning and impact of Personalized, Competency-Based Learning on systems/students	Students graduate college and career ready

SOUTH CAROLINA July 2021	BUILDING CAPACITY	CULTIVATING SYSTEMS CHANGE	ENSURING QUALITY	EMPOWERING STUDENT LEARNING
RESOURCES TO ADOPT, IMPLEMENT, AND SUPPORT PERSONALIZED, COMPETENCY-BASED LEARNING	• KnowledgeWorks • South Carolina Department of Education's Offices of Personalized Learning, School Transformation and Educator Effectiveness • Partners (e.g., reDesign, Transform SC) • Lighthouse districts • District and school administrators • Educators • Learning Management Systems	• KnowledgeWorks • South Carolina Department of Education, including the Office of Personalized Learning and the Superintendent of Education • The Commission on Higher Education and state colleges and university partners • South Carolina School Boards' Association, Association of School Administrators, and Council on Competitiveness • District and school administrators	• KnowledgeWorks • South Carolina Department of Education's Office of Personalized Learning • Riley Institute at Furman University • District and school administrators • Educators	• KnowledgeWorks • Lighthouse districts • District and school administrators • Educators • Learning Management Systems
CROSS-COHORT ACTIVITIES	• Host convenings for professional development and networking • Host state convenings of legislators and business leaders to build awareness/engagement with Personalized, Competency-Based Learning • Launch and maintain PersonalizeSC, an online repository of self-paced professional development resources • Facilitate Inquiry Labs as an opportunity for educators to observe personalized learning	• Align district policy with the Profile of the South Carolina Graduate and the South Carolina Framework for Personalized Learning • Partner with schools and districts that have identified an interest in adopting Personalized, Competency-Based Learning • Engage and align the Offices of School Transformation and Educator Effectiveness, and other offices at the South Carolina Department of Education	• Conduct evaluation of Personalized, Competency-Based Learning implementation and impact • Leverage coaches from the Office of Personalized Learning and KnowledgeWorks • Conduct asset mapping between districts/schools and the Office of Personalized Learning that identify needs and map how the Office of Personalized Learning can support meeting those needs • Determine what evidence constitutes proficiency or mastery within competencies	• Apply the Profile of the South Carolina Graduation and the South Carolina Framework for Personalized Learning • Shift to student-centered practices • Use student portfolios to provide evidence of learning • Use competencies as a tool for teachers to support students in a more dynamic way across content areas
SHORT-TERM RESULTS (<5 YEARS)	• Engagement in professional development by educators at all levels (administrators, teachers) • Increase in district capacity for offering Inquiry Labs • Increased knowledge on Personalized, Competency-Based Learning • District ownership for Personalized, Competency-Based Learning implementation	• Increased number of: Lighthouse Districts; Inquiry Labs; and teachers, schools, and districts involved in Personalized, Competency-Based Learning • Increased diversity of Personalized, Competency-Based Learning schools/districts • Alignment of classroom practices with Personalized, Competency-Based Learning	• Dissemination of lessons learned on improved implementation through evaluation and reporting	• Student ownership for their learning • Creation of learning profiles • Personalized learning pathway implementation • Flexible learning environments • Flexibility in student pacing
LONG TERM IMPACT	Not Applicable	• Transform education into an equitable Personalized, Competency-Based Learning system • All districts engage in Personalized, Competency-Based Learning • Expansion of the Office of Personalized Learning	Evidence developed on the implementation and impact of Personalized, Competency-Based Learning on systems/students	• Increase in students achieving the Profile of the South Carolina Graduate • Improved performance for all students and elimination of achievement gaps

Appendix B. Research Questions

1. What is the state's overall vision for the adoption, implementation, and scaling of personalized, competency-based learning? How is equity embedded (both explicitly and implicitly) into this vision?

2. What is the planned impact of the initiative, as well as necessary resources, core components at the initiative and district levels, and intended outcomes? How and to what degree do the core components align with the four Strategies of System Design (i.e., Building Capacity, Empowering Student Learning, Ensuring Quality, Cultivating Systems Change)?

3. What was the impetus or catalyst for this initiative at the state level, and what stakeholders have been the primary drivers? How have these aspects of the initiative influenced 1) the overall adoption of the initiative in the state and 2) the mechanisms that have been used to support the work (e.g., legislation, funding, piloting/scaling)? What, if any, barriers have come as a result this type of adoption?

4. What are the basic assumptions or theories behind the initiative in the state? To what degree have they changed over the life of the initiative so far?

5. How do state stakeholders assess their "tier of implementation" (i.e., exploration, replication, statewide transformation) for each of the Four Strategies for System Design outlined in the State Policy Framework for Personalized Learning?

6. How and to what degree have the states addressed the Core Commitments for Quality Transformation outlined in the State Policy Framework for Personalized Learning? To what degree and in what ways have those conditions influenced the initiative?

7. How have different stakeholders influenced initiative design? How has the state prioritized equity through stakeholder engagement? What roles do different stakeholders have in supporting policy adoption aligned with the initiative?

8. To what degree is there shared vision, culture, agency, and accountability for the initiative across state stakeholder groups? How has that influenced state adoption of the initiative?

9. How has COVID-19 impacted the initiative overall? How has the initiative responded to COVID-19?

10. Aside from COVID-19, what other external contextual factors (e.g., competing state policy, state agency structures, state culture, student demographics), influence the initiative, and in what ways?

Endnotes

[i] https://www.arizonafuture.org/programs/education-programs/move-on-when-ready/

[ii] https://doe.nv.gov/Programs/Competency-Based_Education/

[iii] https://personalizesc.ed.sc.gov/pd/district-innovation-flexibility-waivers/sc-education-flexibility-guide/

[iv] https://doe.nv.gov/Boards_Commissions_Councils/Blue_Ribbon_Commission_for_a_Globally_Prepared_Nevada/

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[vi] https://www.azleg.gov/legtext/55leg/1R/laws/0299.pdf

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[x] https://www.arizonafuture.org/media/bw4dtjvi/move-on-when-ready-in-arizona-state-statute_2010.pdf

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[xii] https://www.scstatehouse.gov/sess124_2021-2022/prever/3589_20210421.htm

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