Implementing Competency Education in K–12 Systems:

Insights from Local Leaders

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About CompetencyWorks

CompetencyWorks is a collaborative initiative drawing on the knowledge of its partners and advisory board. The International Association for K–12 Online Learning (iNACOL) is the lead organization with project management facilitated by MetisNet. We are deeply grateful for the leadership and support from the partner organizations American Youth Policy Forum, Jobs for the Future, and the National Governors Association. Their vision and creative partnership have been instrumental in the development of CompetencyWorks.

For more information on competency education, you can visit CompetencyWorks, read previous issue briefs on the topic, or visit the Competency-Based Pathways wiki for an in-depth look at the working definition.

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* These sections are available as individual focus publications.

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IMPLEMENTING COMPETENCY EDUCATION IN K–12 SYSTEMS: INSIGHTS FROM LOCAL LEADERS

I. Introduction

In order to truly transform education from an industrial-age model to a model of system-wide empowerment, organizations must be willing to go beyond second order change. They must be willing to remove and replace the status quo with a learning-centered culture of innovation and ownership. In doing so, leaders should expect some things to seem practically impossible... yet in the face of the impossible, leaders should never waiver from their strong beliefs and must always adhere to a future-focused mindset. The transformation of America's schools will require courageous leaders who can transform ambiguity and dissent into empowerment and commitment...our kids deserve nothing less.

— Tom Rooney, Superintendent, Lindsay Unified School District

Competency education, an educator-led reform, is taking root in schools and districts across the country. In some states, state leadership has cleared the path with policies to advance competency education. However, districts in Alaska, Arkansas, California, Florida, Georgia, Illinois, and South Carolina are transitioning to competency education with little or no supporting policy. Furthermore, innovative school models are popping up all over the United States, contributing to our knowledge of new ways to organize teaching and learning within a competency-based structure.

Nearly 90 percent of states have created some room for competency-based innovations. The leading states of New Hampshire, Maine, Vermont, and Colorado have started down the path to redesign personalized, competency-based policies and education by re-aligning their systems, creating proficiency-based diplomas, and converting credits to recognize skills learned rather than time in class. Arizona, Connecticut, Iowa, Kentucky, Ohio, Oregon, and Rhode Island have all established enabling policies to create space for districts to innovate.

You can learn more about competency education at CompetencyWorks.org, as well as find links and materials for all the resources mentioned in this paper on the CompetencyWorks wiki.

Delaware, Hawaii, and North Carolina are actively studying what it means to have a personalized, competency-based system. Others have created "seat-time waivers" that allow districts and schools to offer competency-based credits.[1]

Districts have been the driving force for the conversion to personalized, competency-based education.[2] Groups of visionary teacher-leaders may introduce competency education into a school, and individual schools within a district may incorporate standards-referenced grading or a competency-based program for over-age and under-credited students. However, there are limits to being able to fully implement a school-wide competency-based system without a district authorizing school autonomy regarding assessments, grading, promotion, staffing, budgeting, and teacher evaluation. It is when the district leadership team, in partnership with school leadership, is humble and brave enough to admit that the traditional system isn't working, that the foundation is laid for competency education. A systemic approach is the only way to ensure that students can fully advance upon mastery and for robust quality control measures to be established district-wide to calibrate rigor.

Exhibit 1: A Snapshot of Competency Education State Policy Across the United States
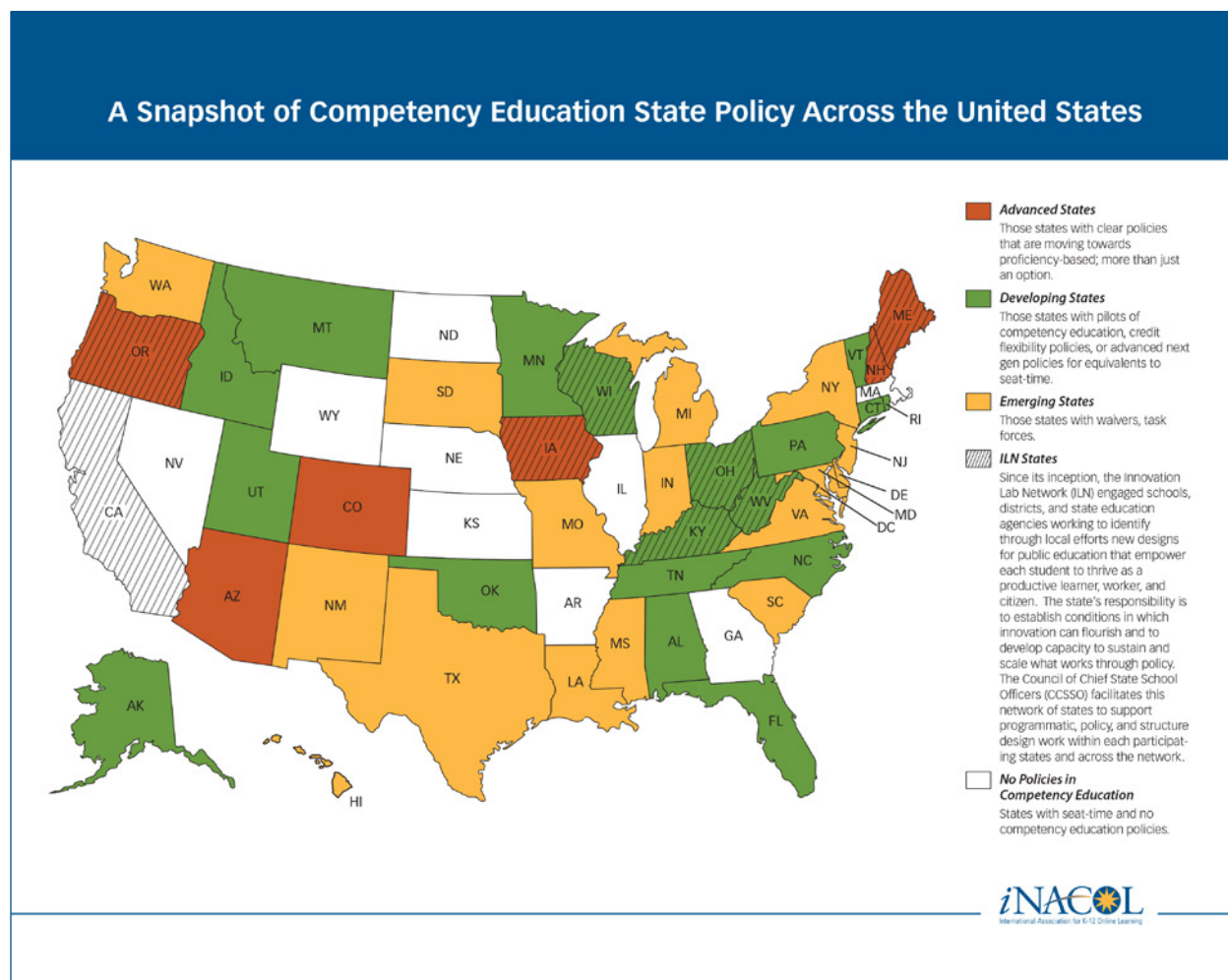
This paper seeks to map out the terrain of the district implementation strategies being used to convert traditional systems into personalized, competency-based ones.[i] Although not a detailed guide, the hope is that the discussion offered here will prepare you to begin the transformational process. Four stages of implementation are proposed in this paper: 1) Ramping Up for Transformation, 2) Designing the Infrastructure for Learning, 3) Transitioning to a Competency-Based System, and 4) Embracing Continuous Improvement and Innovation. Schools and their district offices work in partnership during this transformation, which means implementation issues at both levels will be discussed.

The findings in this paper are based on interviews and site visits conducted over the past five years as well as the knowledge shared by leaders in the field at CompetencyWorks. Because the field of competency education is relatively new, there are no comprehensive evaluations to help us identify promising practices. However, throughout this paper, we will highlight issues related to quality and equity that have been raised by those leading the way. These districts have been operating competency-based systems from anywhere between three and twenty years. Their timelines to making the transition from time-based to competency-based have varied depending on where they started, the urgency for change, and the time needed to lay the groundwork with their communities and educators. In general, most recommend anticipating the process of moving through the first three stages at a minimum of five years. All the districts highlighted here emphasize they are still involved in continually improving the design and implementation of the system.

As you read the insights from leaders offered in this paper, it is important to remember that the districts showcased here represent just a handful of all the districts converting to competency education. There are a hundred or more districts in the leading states that have begun the journey to competency education. They are true educational leaders willing to move beyond the traditional, time-based system to create a new system that ensures students learn what is needed to be successful in the next step of their lives.

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[i] States and districts use a variety of terms to discuss competency-based education, including proficiency-based, mastery-based, and performance-based. These terms may also be used to describe online learning. In this paper, we will use the term **competency education** to refer to the system-wide and/or school-wide structures.

Exhibit 2: Stages of Implementation

Embracing Continuous Improvement and Innovation
A. Improving Performance and Personalization through Powerful Data
B. Addressing the Needs of Struggling Students
C. Revisiting Shared Vision and Instructional Model
D. Staying the Course

Transitioning to a Competency-Based System
A. Preparing for the Leadership Lifts
B. Selecting a Rollout Strategy
C. Preparing Teachers for Personalized Classrooms
D. Planning for Leveling and Parent Conversations
E. Making Mid-Course Corrections
F. Refining the Instructional Model and Enhancing the Instructional Cycle
G. Preparing for the Implementation Dip

Designing the Infrastructure for Learning
A. Investing in Student Agency
B. Clarifying the Overall Pedagogical Approach
C. Configuring the Instruction and Assessment Model
D. Forging Policies and Operating Procedures for Personalization
E. Empowering Teachers

Ramping Up for Transformation
A. Investing in Shared Leadership
B. Constructing a Shared Journey of Inquiry
C. Creating Shared Vision and Shared Ownership

II. What Is Competency Education?

During the last year, the phrase competency education has come into vogue. You may have heard it being used to refer to self-paced online learning or to describe innovations in higher education. This paper is focused on the transformation of the time-based K–12 system where the focus is on inputs (seat-time, hours in the day, minutes in each class) to a system where the focus is on learning.

A. Understanding Competency Education

The power of competency education is in its system-wide infrastructure that creates the necessary feedback loops to ensure students are learning. The five-part working definition of competency education describes the elements that need to be put into place to re-engineer the education system to reliably produce student learning:

- Students advance upon demonstrated mastery;
- Competencies include explicit, measurable, transferable learning objectives that empower students;
- Assessment is meaningful and a positive learning experience for students;
- Students receive timely, differentiated support based on their individual learning needs; and
- Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

Competency education is often described with the phrase, "Learning is constant, and time is the variable." We know that students learn differently, requiring more or less time for different reasons. They may be at different

Learning is measured by mastery.

points along the learning continuum, each with a different set of skills.[ii] Students may have different approaches to learning, with some students preferring to take more time upfront to dive more deeply into learning to master new skills or content. Certainly the levels of academic support available outside of school differ. All of these dynamics lead to students learning at different paces. However, flexible pacing, or the concept that "students advance upon mastery," is only one of the five elements of the definition. In competency education, timely, differentiated support is equally important, as that is what allows students to continue progressing without being left behind. Teachers work with students to ensure they are filling any gaps in foundational skills, and schools provide timely support so students can get immediate help when they are struggling.

The traditional system produces gaps in learning because it is established around a time-based Carnegie Unit credit that guarantees a minimal exposure to content without a guarantee of learning.[3] In combination with an A–F grading system—which can be easily corrupted as a measure of learning by providing points for behavior, allowing for measurements based on assignments instead of learning, and masking student progress through the averaging of grades—accountability for learning is eroded. The accountability policies developed under No Child Left Behind have exposed the achievement gaps in this system, but are unable to lead to its elimination because of the inherent flaws in the time-based system. In competency education, the key to improving achievement for underserved student populations—racial/ethnic, language, income, and special education needs—depends on several factors and elements that keep equity at the core. These include: making learning expectations and the process of determining proficiency transparent; supporting students to build the habits of learning they need to be lifelong learners; monitoring student progress and pace to ensure the school is being responsive to student needs while also informing the professional development of teachers; and upholding strong continuous improvement efforts. In this way, accountability is embedded into the system itself.

We encourage you to take the time to look at the detailed definition available at the CompetencyWorks Wiki. CompetencyWorks.org also has a list of recommended reading and posts designed to help understand competency education.[4]

B. Why Do Educators Turn to Competency Education?

There are many reasons districts and communities turn to competency education: an economy where post-secondary education and training is needed to get on a career path to a family-wage job; a global economy expanding the playing field on which students will be competing for jobs; demographic changes that demand we eliminate patterns of inequity; and an ever-changing world that requires lifelong learning skills. Many districts turn to competency education with the growing realization that no matter what programs, instructional models, or curriculum they put into place, the best they can hope for in the traditional time-based, one-size-fits-all system are marginal improvements. That's because the design of the traditional system—with students advancing from grade to grade without successfully building the necessary skills—is getting in their way.

[ii]   Please note that the phrase **learning continuum** will be used to describe the standards or the expectations of what students should be able to do. The term **learning progression** is used to refer to the domain-specific, research-based instructional strategies that will help students move from one concept to the next (i.e., how to help students progress). One way to think about the difference is that the learning continuum is the "what," and the learning progression is the "how." For more information on learning progressions, see Learning Progressions: Supporting Instruction and Formative Assessment by Margaret Heritage.

Once they understand the design flaws of the traditional system, educators seek a system that is designed for success, not for sorting. They envision a system that is able to personalize learning while ensuring that all students will benefit. It only makes sense—we know students start with different sets of skills, learn in different ways, have different levels of support in their families and communities to help them with academic learning, and take different amounts of time and practice to master skills. Thus, the system needs to be designed to be more responsive to students' needs, as well as their strengths and interests. Learning is the constant; resources, learning experiences, instructional support, resources, effort, and time may vary.

As educators become familiar with the elements of competency education, they begin to see the power of developing clearly defined learning objectives and rubrics. The focus is now on what students are learning, not what activities they are doing. Student agency (the ability of students to own or manage their learning process), engagement, and motivation are increased when learning objectives are transparent. Students have more options about how they learn and how they demonstrate their learning. Teachers can become more creative in how they design curriculum and instruction. Access to data on student progress allows education leaders to manage continuous improvement.

III. Ramping Up for Transformation

A common driving force for superintendents and principles converting to competency education is the realization that any system that advances students even if they haven't learned the skills and content is going to produce gaps in learning. Many districts describe low academic achievement or intransigent inequity as their "burning platform"—the reasons that propel them forward and create urgency for their efforts. They describe a growing understanding among educators about the need to start focusing on what is "good for kids." Once this happens, it's as if a fog lifts and educators can suddenly see beyond the assumptions and traditions of the time-based system. They can begin to imagine what a system that is designed so all students are successful in school might look like.

Districts don't suddenly throw out the old system. New structures, cultures, and practices have to be put into place while dismantling the "load-bearing walls" of the traditional time-based system. The first step is laying the groundwork for transformation. There is no set process that every district follows, as the context and depth of leadership within the district will vary; however, beyond the development of a strategic process, there are three activities that almost all districts and schools undertake to prepare for the work of re-engineering the system around learning and teaching:

- Investing in shared leadership
- A shared journey of inquiry
- Creating shared vision and shared ownership

The emphasis on sharing denotes that these approaches differ from those commonly used in traditional systems. These are collaborative approaches that generate respect and trust. They contribute to the formation of a different type of school culture—one that is student-centered rather than system-centered, empowering rather than compliance-oriented, cooperative rather than dependent on individual leadership, and motivated by learning rather than by carrots or sticks.

A. Investing in Shared Leadership

As an instructional leader, I focus my job on three goals. First, my job is to keep the compelling purpose of supporting our students alive. It's easy to slip back into doing things just because that's the way we've always done them. Second, my job is to empower our staff. They need to have the freedom to do their jobs in supporting our students. Third, I operate from a position of service and collaboration. This is very important because if I used top-down leadership, I wouldn't be able to empower staff. These three elements go hand in hand.

The reason that Lindsay is able to make this transformation is because of the structure of shared leadership. The process we use to arrive at decisions reduces mistakes because we make sure to gather input and address all the issues. We seldom have to cut and recut because we are measuring every step of the way.

– Jaime Robles, Principal, Lindsay High School

This section starts with a focus on leadership because the shift to competency-based education requires a personal commitment from superintendents and principals to develop collaborative leadership and management styles. Changing personal leadership styles means these professionals must undertake extensive study, solicit feedback for reflecting on their leadership, engage in dialogue with peers and colleagues, and even seek out coaching. Each leader will have a different journey toward developing leadership/management strategies that are effective in creating and sustaining empowering, learning organizations. In the following discussion, three aspects of leadership are discussed: the call for a distributed leadership style, the role of a culture of learning, and empowering others.

1. Distributing Leadership

Superintendents and principals agree that top-down management doesn't work well in competency-based environments—or, for that matter, in any large district reform. The traditional education system operates on a set of rules for the delivery of education services that has tried to standardize the inputs so all students have the same exposure to the curriculum. In top-down systems, higher levels of governance set the conditions for each lower level, leaving schools and teachers with little autonomy or opportunity to inform decision-making at higher levels. Traditional leadership styles are often characterized by people turning to the managers above them to resolve issues or set the direction. Changes are often communicated through memo, where dialogue is limited, if not nonexistent.

The problems with this kind of compliance-oriented leadership style are three-fold. First, top-down approaches undermine any efforts to create an empowered staff who will take responsibility for ensuring students are learning. Top-down decision-making essentially undermines accountability. Second, when employees look to the next level up to answer questions and resolve issues, it undermines the culture of learning and is a lost opportunity for building problem-solving capacity within the organization. Third, no superintendent or principal can have all the knowledge or answers about how to best respond to students or address organizational issues. During periods of dramatic change, this becomes a risk, as the superintendent or principal is unlikely to be able to understand all the ramifications of every change. It requires collaborative, iterative processes to create the new operational policies and procedures needed to support a personalized, competency-based environment. Fueling a competency-based system requires the engagement and ownership of students, educators, and community members alike—an idea that will be explored in depth as the paper progresses.

In a personalized, competency-based education system, it is incumbent upon districts and schools to continuously improve at every level. Teachers support students to build the habits of learning they need to take ownership of their education. Teachers facilitate and guide learning through cycles of adaptive instruction in which students receive timely feedback. Professional learning communities offer embedded professional development so teachers are continually learning how to better support students, drawing on their colleagues' expertise when needed. Superintendents and principals play an instrumental role in managing decision-making processes, reminding their staff to turn to the guiding principles to solve problems and seek innovation. Throughout the transformation process, all these changes are continually informed by data on student progress and pace.

Virgel Hammonds, Superintendent of RSU2 in Maine, describes a common challenge in the old style of leadership. As administrators ascend the career ladder, they increasingly find themselves trapped by the expectation that they should have all the answers. The irony is that as authority and rank increase, the further administrators are from daily decision-making related to students. Hammonds points out that this kind of thinking places too much authority in one person's hands, and can also lead to the mistaken belief that one person has all the answers—when, in reality, all perspectives have critical insights into solving problems.[5]

A shared leadership style takes this all-knowing superintendent or principal position and transforms it to one of respect, trust, and collective intelligence. Also known as adaptive leadership, middle-up-down management, distributed leadership, or servant leadership, these approaches have several common attributes: investing in empowerment, seeking input, collective ownership, and transparent decision-making processes. These forms of leadership seek to move beyond the limits of the "dance floor and the balcony," in which hierarchical position defines perspective to create structures and approaches that build multi-dimensional understanding of problems as well as expanding possibilities.[6]

LESSON LEARNED AND LEADERSHIP OPPORTUNITY

■ Invest in building the leadership capacity of the district team and school leadership very early in the process. Ensuring that management staff have a chance to reflect on their leadership styles, engage in an inquiry process, and plan for the next stage of work is empowering. It is important to align the strategy for ramping up and transitioning to the capacity of the leadership team to manage inclusive decision-making processes and distributive leadership.

2. Creating a Culture of Learning

Culture. It is not part of the game. It is the game. Does your building believe all students can learn? Do the educators have a growth mindset or a fixed mindset? Do they believe they have a say in how the school operates?

I have too often listened to school administrators find every reason to explain away their poor culture. They blame the Department of Education, the parents, the central office, and even the students. I too blamed the external environment until I realized that the culture of my school is the one thing I can impact directly.

A leader must envision the culture he or she wants. To begin, ask yourself, "What do I want an outsider or a new parent to say when describing the culture of the school?" This vision will become the postcard destination, the perfect scenario. Analyzing the gap between the current and the envisioned will define the steps that need to be taken to create and then maintain the desired culture.

– Bill Zima, Principal, Mt. Ararat Middle School

Educators who have started down the road to competency education often discuss the fact that competency education is a second order change. Whereas first order change focuses on altering inputs and approaches, second order change is based on a different set of underlying beliefs and relationships. The culture of learning breathes life into the values and assumptions of competency education.

Sanborn Regional School District in New Hampshire aspires for the district to operate as a professional learning community by emphasizing three pillars: collaboration, competency, and culture and climate. One of the early shifts Superintendent Brian Blake undertook was to take a hard look at the multitude of initiatives that were underway. "One of the big steps we took in moving from first order to second order change was to whittle down the ninety-plus programs and initiatives to a few that were highly aligned with our new direction. Now we

only focus on efforts that are absolutely aligned with our goal for the district to be a true professional learning community. We believe if it is worth doing, it is worth doing system-wide as part of our competency-based operations and practices."[7]

Although the language may vary, competency-based districts and schools tend to emphasize similar characteristics. For example, the culture of Mt. Ararat Middle School in Maine can be broken down into four main components: learner centered, clear expectations, continuous feedback, and valuing relationships. All four components relate to both students and the adults in the school. Bill Zima, Principal at Mt. Ararat Middle School, states that one of the key functions of principals is to be vigilant in nurturing the school culture. "School culture is created through what the leader creates and what the leader allows." He recounts that he had to develop his personal leadership by building a leadership team, implementing effective action planning, skillfully facilitating meetings, and nurturing a strong culture of learning. He paid particular attention to group norms, rituals, and protocols for meetings so that everyone could share ownership for nurturing the school culture.[8]

3. Empowering Others

When we started down the road to transformation, we had to deconstruct the systems that were in place. We redesigned with the goal of student ownership, involving them along the way. If students are going to be empowered, so must the workforce be empowered.

The only way to manage an empowered workforce with empowered students is through a middle-up-down management approach that constantly seeks input and opportunities to distribute leadership. Superintendents who separate leadership and management do so at their own peril.

– Dr. Bob Crumley, Superintendent, Chugach School District

The transparency of the competency-based infrastructure for learning—with explicit habits of learning, measurable learning objectives, rubrics, and calibrated understanding of proficiency—empowers students and teachers alike. Students have more agency in the learning process and teachers are more responsive because they know exactly how students are progressing in mastering learning objectives. Thus, the transparency that is required to make competency education work also requires empowered teachers and a high degree of school autonomy.

District and school leadership in competency-based systems are vigilant about nurturing empowerment. It begins by turning to research on motivating, engaging, and empowering adults. Bob Crumley, Superintendent at Chugach School District in Alaska, developed a leadership-management style based on three elements that motivate employees: being challenged, working within a social context, and having autonomy. "These three ingredients are the foundational building blocks I used with students in my classroom, and I also use them now with my staff. It is absolutely critical that this approach is used consistently. You need to make sure your teachers are empowered if you expect them to support empowered students. I always return to these three elements when we are starting a new initiative or addressing issues raised through continuous improvement."[9]

Creating a safe environment for employees to take risks is a key component of this process. Strong professional learning communities are essential for empowering teachers, and building respect and trust among teachers is important if they are to take risks in learning how to operate in a personalized, competency-based environment. However, creating a safe environment for learning begins with district and school leadership. Tobi Chassie, a project manager of the transformational process at Pittsfield School District in New Hampshire, emphasized, "Risk taking and valuing mistakes as learning opportunities are role modeled starting with the superintendent."[10]

Virgel Hammonds also considers creating an empowering culture as one of the essential tasks of his job. To this end, he makes it a point to hire principals with similar values and an approach that is cohesive with the current system. By looking for qualities like active learning, a collaborative work ethic, and humility in incorporating the thoughts and ideas of others, he has been able to create a team with a commitment to distributed leadership. He also looks for candidates who are committed to serving both children and the community in which they live, as well those who are able to lead and empower through empathy. Through this approach, it's not just the students who will be pushed to reach their full potential, but the entire staff, as well.

LESSON LEARNED AND LEADERSHIP OPPORTUNITY

- An important step in empowering the teaching workforce is to make sure they have the resources they need. This includes strong professional learning communities, time to plan and meet, and feedback on their teaching skills as well as their participation in developing a strong school culture and organization. This may seem obvious, but many schools try to move forward without having these elements in place, only to find that they are important ingredients.

B. Constructing a Shared Journey of Inquiry

I didn't know how important it was in the beginning, but we are now at the point where staff understand that students must have a growth mindset to take on ownership and for continuous learning to occur. The research on brain science and how the brain changes as you learn is fascinating to both students and teachers. In fact, learning about brain science and the growth mindset has been the catalyst for change for some teachers. It's now institutionalized in our work.

– Debbie Treece, Director of Special Education, Chugach School District

Transforming districts and schools starts by engaging in a period of study. The superintendent may engage the school board in a series of readings, discussions, retreats, and site visits. A leadership team involving key district personnel and principals will look more deeply at the issues to examine how other districts have proceeded and to reflect on options for designing a process for moving forward. Superintendents also begin to have initial conversations with stakeholders in the community to lay the groundwork for understanding why we need a more personalized system, the problems with the traditional system, and the benefits of redesigning to ensure students are learning. Principals will later engage educators in inquiry teams in a similar process and also begin to review research about how students learn, brain science, motivation theory, and grading practices.

District and school leadership will drive the study groups and conversation with a set of questions such as the ones below:

- Why do we exist as a school? What is our purpose?
- What do successful people have that we want our graduates to know and be able to do?
- How will our children support the future growth of our communities, state, and country?
- What are the values that will govern how we interact with each other?
- What are the principles by which we will make decisions?

RECOMMENDED READING

Districts and schools often use common readings as a way of beginning to build a new set of assumptions and reference points upon which to ground the new district culture. Tom Rooney recommends Inevitable, Mass Customized Learning by Bea McGarvey and Charles Schwahn as one of the most important books to help educators build a shared vision. Other books often used by districts include:
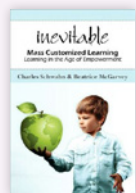
Inevitable, Mass Customized Learning by Charles Schwahn and Beatrice McGarvey

Total Leaders by Charles Schwahn and William Spady
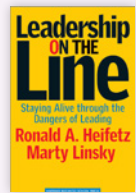
Leadership on the Line by Ronald A. Heifitz and Martin Linsky
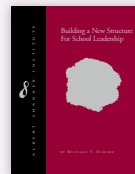
Building a New Structure for School Leadership by Richard F. Elmore
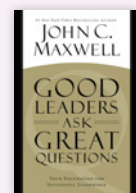
Good Leaders ask Great Questions by John Maxwell
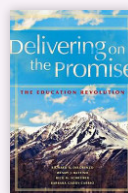
Delivering on the Promise by Richard A. DeLorenzo, Wendy J. Battino, Rick M. Schreiber, and Barbara B. Gaddy Carrio
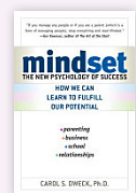
Mindset by Carol Dweck
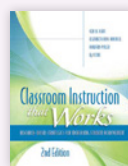
Classroom Instruction that Works by Robert Marzano[11]

It is through this process of studying together, of no one having all the answers, of listening and respecting each perspective, that district and school leadership can begin to introduce a different leadership approach as well as the roots of a student-centered, problem-solving culture.

Time will of course be a constraint, and the timeline for moving to the next stage of work will be dependent on the ability of the inquiry process to advance to the point where people are ready to begin shaping a shared purpose. Throughout this process, a sense of urgency develops as the traditional system becomes intolerable and a sense of "moral purpose" develops to transform the system to be student-centered. Virgel Hammonds describes how his district felt a great deal of urgency to get the system, structures, and processes right. "We have zero time to waste. We need to be relentless in that we need to figure things out. As a superintendent, I also need to be clear about when we need to slow things down in order to figure out complex problems. My job is to keep the pressure on without forcing staff to feel that they need to come up with a short-term fix."

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- As people have rich conversations around issues such as what they want students to know and be able to do upon graduation, the benefits of personalizing learning, and the principles of putting students first, they will also begin to understand many of their past struggles in a different way. These issues may include how previous decision-making has taken adult concerns into consideration more than student concerns, how a compliance culture undermines a sense of ownership and empowerment, and how current practices and structures undermine learning of educators and students. This can open the door to a wide range of emotions and finger-pointing. This moment is a key leadership opportunity to reinforce a school culture that accepts mistakes as part of the process of learning, begins to build collaborative problem-solving skills, and instills a sense of empowerment and accountability for going forward.

- District and school leadership will want to assess the degree of respect and trust that is in place. It is difficult to begin the actual transition if there is inadequate trust. Invest in building strong professional learning communities, seek out coaches to help build the leadership skills to manage more inclusive processes, and seek feedback from staff. Most importantly, take the time to listen.

Assessment is part of the learning cycle that creates a positive learning experience for students.

C. Creating Shared Vision and Shared Ownership

Creating a personalized, performance-based system starts with engaging the community in an authentic way. Our entire transformation started with the communities and school board challenging us—they wanted to know why their children were not reading at grade level. We were not effective in helping our children to learn the basics or preparing them for success in their lives, and we had to find a way to overcome that.

Twenty years later, we are thankful for how our community guided us in the right direction by asking difficult-to-answer common sense questions. Their description of what they wanted for their children helped us to understand we needed to approach students wholistically. We needed to be able to prepare students for being successful in their lives—whether that was to live in remote areas, live in urban areas, go to college, work in a business, or create their own methods of supporting themselves.

I think the biggest mistake that districts moving toward performance-based systems make is that they skip the community engagement piece. To community members, it quickly becomes "your system" and not "our system." Too many districts glance through that step, and it always comes back and bites them. When we transform our schools to a personalized system, we have to start with being community-based.

– Dr. Bob Crumley, Superintendent, Chugach School District

Creating a shared vision and using a process that develops shared ownership for ensuring that students learn is the heart and soul of competency education. It is also the heart and soul of mutual accountability between educators, students, parents, and the community.

It is through this process that districts become learner-centered, not just standards-driven. Community members, parents, students, and educators all come to terms with the fact that the traditional system was designed to sort students, and the goal now is to design a system to ensure students successfully learn. Standards are important to establish where we want students to go (i.e., what we want students to know and be able to do), but the important thing is focusing on what it will take to get students there. Without a vision and sense of ownership that is deeply shared, districts cannot put the new instructional model (described in the next section, *Designing the Infrastructure for Learning*) into place. Without the shared purpose, the result is likely to be a standards-based system, at best—and it is only by creating shared vision that the learning-centered spirit develops to inspire students, educators, leadership, and community members to collaborate, seek to build their capacity, search for new innovations, and discover new opportunities. Debbie Treece, Director of Special Education at Chugach School District, emphasized this point with, "The shared purpose and shared values help us to have a common way of talking about issues and solving problems."

For many districts, shared ownership can also change the nature of the relationships between the community and schools. Andrea Korbe, a Chugach School District board member and parent, told a story of how her community of Whittier has become so engaged in their students and schools that community members seek

out significant opportunities for students to enrich their education, including a waitress initiating a partnership with NASA when she learned her customer was an astronaut. They feel ownership around their schools and understand the many roles they can play.

1. Engaging the Community

We took direction from the community about the kind of graduates they wanted and the type of school they wanted. As we began the high school redesign process, we never backed off from engaging our community. Our community is in the driver's seat.

– John Freeman, Superintendent, Pittsfield School District

In order to establish a community engagement process, districts will need to invest in structuring and facilitating ongoing conversations. The community in Pittsfield, New Hampshire demands to be an active partner—not just in the initial conversations, but in a sustained way. Thus, Pittsfield School District offers a case study of a multi-pronged approach to community engagement that provides formal structures for ongoing conversations and continued learning and is prepared to engage around challenging issues when they arise.

Start with Questions, Not Solutions: Pittsfield recommends that districts and schools that are beginning the community engagement steps avoid declarative statements like, "We are going to become competency-based!" By starting the conversation with the solution instead of an honest discussion, schools undermine any chance for authentic dialogue. In addition, buy-in strategies do not solicit the invaluable input and ideas from the community.

Instead, the focus should be on what communities and parents want for their children upon graduation… and then the role of the school in fully preparing them for that goal. This is where the conversation begins about what it means to personalize the learning experience to ensure students reach proficiency on all the important skills they will need to be successful in the next stage of their learning. Is it misleading to have an idea where the conversation might end up? Not at all—because it is likely that your community will introduce ideas that expand beyond your own understanding and vision for a personalized, competency-based education system. For example, Tobi Chassie emphasizes that it was invaluable to have community members participate in the process, as they raised issues that educators might have skipped over. "We had not included anything to address unmotivated learners. It was a community member who pointed that out, raising the question about what was in place to support that set of students."

Structure Governance to Include Community and Students: At Pittsfield, a thirty-five-member Community Advisory Council was created with six sub-teams, which contributed to an overall logic model that was turned into a roadmap for implementation. The teams explored personalization that emphasized student-centered learning, an understanding of the learning process as a combination of habits of mind that supported inquiry-based learning, the goal of building the twenty-first century skills that would prepare students for college and career readiness, and an expectation that students would demonstrate their learning through authentic assessment.

The Council (renamed the Good to Great Team) continues to meet once a month as a full group and once a month in sub-teams that include talent management, community engagement, parent engagement, and student engagement. As Chassie explained, "Community engagement is the key to sustainability. If the district and school leaders fell off the face of the earth, the community would keep it going. They are creating the public demand."

Inform Design and Implementation from Multiple Perspectives: Pittsfield developed several approaches to engage the community and gather knowledge from different perspectives. They knew it was important to identify as many issues as early as possible and make sure they had been taken into account. To this end, they created a Competency Education Implementation Task Force of three students, five parents, three community members, and eight faculty members to ensure that all perspectives and concerns were addressed. The task force visited neighboring schools to learn more about the transition and to help identify potential implementation issues that might arise.

WHY ENGAGE THE COMMUNITY?

District leaders offer many reasons for engaging the community early on in the process of converting to competency education.

- **Nurturing Consensus and Leadership:** Communities need to be given time to understand the new structure and why it is important. The greater the number of people in the community who are knowledgeable about the process, the more they can help others to understand.

- **Contributing Valuable Perspectives:** Members of the community will bring ideas to the table that educators might not necessarily include. They will bring their values and perspectives to create a richer conversation.

- **Re-Aligning Roles:** Engaging community members will shake up the bureaucratic dynamics that have come to shape how educators often interact with families and community members.

- **Re-Building Respect and Trust:** Community engagement can help to overcome mistrust and build the mutual respect that is needed to create a culture of learning. In most districts, there are segments of the community that have either had bad experiences in school or have historically been underserved and disrespected by school systems. Districts must create a space for people to talk about what they want for their children, have honest conversations about the current academic achievement levels and graduation rates, and share their fears.

- **Sustaining Change:** Community engagement is an essential ingredient for staying the course when unanticipated consequences of implementation arise and when district leadership changes.

- **Unlearning Old Routines and Practices:** Districts and schools will receive feedback on what has not been working in their previous community engagement strategies and can begin to co-design new strategies with the community.

There is an additional reason that community engagement is needed in the process of converting to competency education: to build respectful relationships with students. In order to foster strong relationships, school personnel need to have a sense of the culture and experiences that shape their students' lives. In competency education, valuing the insight and perspectives of the community has to come first. In fact, the most successful district conversions to date begin the process with strong community involvement.

Pittsfield has also built the capacity to include student involvement in governance throughout the district. By turning to the Center for Secondary School Redesign, the adults in Pittsfield learned to engage with students on committees and task forces. One important step was to clarify the scope of the committees and the responsibility of members. Students continue to have a strong sense of ownership in the school and their education, and policies are more student-centered than they might have been otherwise.

Go into the Community: Pittsfield used a multi-pronged approach to engage the broader community as they moved into the transition stage. First, they worked with NH Listens to organize forums facilitated by community members. Then, in partnership with Pittsfield Youth Workshop and other local organizations, they held a pig roast in a downtown park to attract community members unlikely to come to the school. Computers were set up so teachers could show what competencies and reports cards would look like. They also invested in making sure students fully understood the new system and why it was important to make the transition. Lois Stevens, Director of Student Services and the Chair of the Competency Implementation Team, explained, "Students carry the burden of what is happening in the school. We wanted to make sure they understood it and could explain it from their firsthand experience."

At Pittsfield, the strategic focus is on student-centered learning, with the competency-based infrastructure operating as the backbone of the secondary school. The district has strengthened its strategic communication capacity to engage the community around student-centered learning and interacting with students. It is also in constant conversation with the community. Meetings are set up before reports are released and as new ideas are being developed. Superintendent John Freeman is constantly presenting to the Select Board, Rotary Clubs, churches, and other community organizations. Students are a part of the communication strategy, participating in presentations and helping to explain student-centered learning.

The communications demands will be heavy in the early stages of putting a competency-based structure into place. Thus, it is helpful to put the organizational structures and processes in place so that ongoing dialogue continues. Strategic communication should constantly reinforce the shared purpose and highlight why it is important to upgrade the design of the education system to better meet student needs.

In engaging with the initial phase of shaping a shared purpose—as well as the subsequent work to create an instructional structure and implement it—there will be a constant stream of questions. Districts will need to be prepared for some of these issues to be raised in the local media. Some may be easy to answer, but many will require creating mini-conversations that help people understand why the district is trying to change the education system they know so well. Instead of trying to answer each question separately, ask your own question that will open a conversation or prepare a story that will resonate.

Increasingly, there are resources available to help education leaders prepare a strong message. Achieve has created a communication tool kit that can help prepare for these kinds of conversations. Frameworks Institute offers a toolkit called Telling Stories Out of School: Reframing the Education Conversation through a Core Story Approach, which places the focus on our need to prepare our children for the future. Great Schools Partnership offers several resources, including Ten Principles of Proficiency-Based Learning. However, learning from peers will always be the most helpful in learning how to respond to the variety of questions that pop up. Brian Stack, Principal at Sanborn Regional High School, shared his answers to common questions, including, "Can you explain how competency-based grading practices will help prepare my child for college?" and "Is it true that deadlines don't matter in a competency education system?" Identify students, parents, teachers, and community members who are effective in communicating personalization and competency education, and ask them to help address questions as they arise.

To date, the districts that have begun the transition to a competency-based system contain fewer than 50,000 students. Larger districts will need to invest more in community engagement strategies and think through roll-out strategies that will build trust with the different sectors of their community. No matter the size of the district, leadership will need to demonstrate that community engagement is a priority and ensure that processes, structures, and timelines are built so that community members can be involved, not just informed.

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

■ Districts that want to engage their community change how they organize meetings. They stop having meetings only at the district office or school buildings and find places where community members feel comfortable, including work sites, faith-based institutions, and community centers. They stop having meetings only in the evenings and schedule a variety of different times, including the weekend. They offer daycare, food, and materials in the language of their community members. Most importantly, they structure the agenda so that dialogue is a priority.

■ Expect that students who perceive they are succeeding in the traditional system (and their parents) to have a lot of questions about competency education. Be prepared to talk about how students aren't competing against their peers but against students all around the world, and how the GPA can mislead students into thinking they have learned everything they need to know. Emphasize how expectations of learning have increased so students need to apply skills and content—not just recall them—and that applying skills often takes more effort on the part of students who are used to succeeding under the rules of the traditional system. Engage higher education admissions officers in conversations so parents know that competency education won't hurt their child's chances of getting into college.

2. Creating the Shared Purpose

Creating a shared purpose requires districts to develop their capacity for facilitated conversations (i.e., the ability to listen deeply to each other while driving for an agreed-upon vision, statement, or solution). Districts have used a simple set of questions that generate robust conversations. For example, Lindsay Unified School District in California invested in deep community engagement to launch their transformative process, beginning with the questions:

· Why do we exist?

· What are the values that will govern how we interact with each other?

· What are the principles by which we will make decisions?

· What is our vision for the future?

· What is the description of our graduates?

The result is a mission of "Empowering and Motivating for Today and Tomorrow," a set of core values and guiding principles that drive their instructional model. (See Exhibit 3.)

Exhibit 3: Lindsay Unified School District Core Values

Our Core Values:

*Guide our behavior; govern how we will work together
as we carry out the mission and vision.*

INTEGRITY – The embodiment of honesty, fairness, trustworthiness, honor, and consistent adherence to high-level moral principles

COMMITMENT – People's willingness to devote their full energies and talents to the successful completion of undertakings

EXCELLENCE – A desire for, and pursuit of, the highest quality in any undertaking, process, product, or result

RISK-TAKING – Taking initiative, innovating, breaking the mold, and speaking out in sincere attempts to support core values

TEAMWORK – Working collaboratively and cooperatively toward achieving a common recognized end

ACCOUNTABILITY – Taking responsibility for the content and process of decisions made, actions taken, and the resulting outcomes

IMPROVEMENT – A commitment to continuously enhance the quality of personal and organizational results, performances, and processes

OPENNESS – A willingness and desire to receive, consider, and act ethically on information and possibilities of all kinds

ALIGNMENT – The purposeful, direct matching of decisions, resources, and organizational structures with the organization's vision

COURAGE – The willingness of individuals and organizations to risk themselves despite the likelihood of negative consequences or fear

In developing a shared purpose, Chugach School District had to engage communities from three different areas as well as a statewide homeschool community based all across Alaska. The resulting mission statement emphasizes student agency, mutual accountability, and cultural respect.

Bob Crumley recounts using the following process in meetings to initiate the Chugach shared purpose.

1. Turn to a neighbor and tell each other your district's shared purpose. Now, by a show of hands, how many were able to articulate our shared purpose? (In the beginning, there were few hands.)

2. If, as leaders, teachers, and parents (depending on the group), we aren't able to articulate our shared purpose, how are we going to work together to clearly articulate expectations and provide a roadmap for our students to achieve success?

3. Ask students to think of a successful person (local, national, or international). Then begin a discussion on the following questions: What traits does that person have that helped them become successful? Which of those traits should we teach and assess to set all of our graduates up for success?

4. Use the input to form the backbone for developing a draft shared purpose as well as informing student performance standards at a later stage.

Currently, Chugach School District operates according to the following shared purpose:

The Chugach School District is committed to developing and supporting a partnership with students, parents, community and business which equally shares the responsibility of empowering students to meet the needs of the ever changing world in which they live. Students shall possess the academic and personal characteristics necessary to reach their full potential. Students will contribute to their community in a manner that displays respect for human dignity and validates the history and culture of all ethnic groups.

That shared purpose of "empowering student ownership of learning and success" is supported by eight values (or elements) of performance-based learning, valuing stakeholders, resiliency, agility, shared leadership and responsibility, open and honest communication, continuous improvement and innovation, and trust and teamwork.

Creating the shared purpose is important; however, the real value comes in making sure it is used consistently. District and school leaders who have developed shared purposes, shared values, and guiding beliefs use them frequently to make decisions big and small during the transition years. According to Jamie Robles, Principal of Lindsay High School, "My job as a principal is to make sure our decision-making processes are managed effectively. At times I may need to step in to remind the team of our compelling purpose—our learners. When we have a shared goal, it makes decisions a lot easier. Collaboration is also a lot easier."[12] As Bill Zima put it, "A process of facilitated conversations amongst all stakeholders led to the establishment of a philosophical lens through which all decisions pass."

In order to engage the full organization in working toward a shared purpose, leaders need to be skilled in tapping into what drives adults. Bill Bryan, Center for Secondary School Redesign and a coach to educational leaders, explains that most adults are driven by task accomplishment, influence, or relationship needs. Educators are also often driven by intellectual curiosity and altruism. In order for leaders to engage administrative staff and teachers to direct their energy toward creating a new personalized, competency-based system and move outside of their comfort zones, they will need to understand the motivational drivers. Furthermore, they will

need to develop a deep understanding of what underlying resistance is and employ the appropriate influence skills to help people overcome it. Thus, changing practices—introducing new ones and letting go of the old—is a leadership function, not management.[13]

Equally important to engaging community members is to make sure educators are also fully engaged. Inquiry teams are important for educators to take the time to understand personalization, why it is important, how the traditional system is undermining their efforts, the implications for moving to a personalized, competency-based system, and how they can assess the way the school operates with a growth mindset or a fixed mindset. Some districts do not move forward until a large majority of educators in a school indicate they are ready. A case study on RSU2's Hall-Dale describes in detail the process the district took in considering a proficiency-based system, including a vote in the second year of the process in which the educators decided to move forward.[14]

LESSON LEARNED AND LEADERSHIP OPPORTUNITY

- Ask a consultant to interview people in the organization (students, parents, teachers, principals, administrative staff) to help determine how consistently the new ideas are taking hold and identify patterns where there may be resistance, doubt, or confusion. This will provide invaluable insights into where superintendents and principals need to direct their leadership, engage others more deeply, support others in building their leadership skills, and reinforce the new culture of learning.

SEEKING ASSISTANCE

Just as students need support to learn and teachers need mentoring, coaching, and training to build their skills, so too do district and school leaders require help in moving through the process of converting to a competency-based structure. We asked the districts highlighted in this paper to share which organizations were most helpful to them in their journey towards personalized, competency education. Below are their organizational recommendations, followed by specific resources in parentheses that may be useful.

- Center for Collaborative Education, Quality Performance Assessment (QPA Guide)
- Center for Secondary School Redesign (What Top-Performing Leaders Think About)
- Great Schools Partnership (Proficiency-Based Learning Simplified)
- Marzano Research (Proficiency Scale Bank)
- QED Foundation (Transformational Change Model)
- Reinventing Schools Coalition (Individual Mastery Pathway and Organizational Change Pathway)
- 2Revolutions (Roadmap for Competency-Based Systems)

IV. Designing the Infrastructure for Learning

In the traditional system, a one-size-fit-all curriculum and instruction is emphasized—with one textbook and one method of instructional delivery. Competency education is constantly asking what kids are learning and adjusting across a more flexible instructional model to offer choices in content, learning experiences, differentiated instruction, and personalization for kids to learn and develop skills and demonstrate mastery, with assessment focused on students showing what they know. Competency-based schools use a model of instruction and assessment in which mistakes are part of the learning cycle and success is the only option.

– Susan Patrick, President and CEO, International Association for K–12 Online Learning (iNACOL);
Co-Founder, CompetencyWorks

After the ramping up efforts have been put into place, the next phase of implementation is to re-engineer the learning infrastructure. The traditional system is based on three elements: a) time (days per year, hours per day, the time-based credit, semesters, agrarian schedule, promotion based on age); b) focus on curriculum and instruction; and c) A–F grading based on assignments, assessments, homework, and behaviors. If this system has been producing low achievement and inequity, what type of infrastructure and operations can be put into place to produce learning consistently with all students?

The following steps in developing what will be referred to in this paper as the Instruction and Assessment model (I&A model) are not necessarily done in a linear fashion. They actually require an iterative approach so alignment can be developed within the learning infrastructure. Whether you start from scratch or draw from other districts, you will find that the discussion takes you deep into the core of learning. You may also find that once you remove the infrastructure of the traditional system, the experience is like trying to "organize spaghetti," as described by Ty Cesene from Bronx Arena.[15] The options will feel infinite as you begin to question the pillars, customs, and operational procedures that hold the traditional system in place.

Most districts focus on the core changes needed to create a transparent, coherent system that empowers students and teachers. They want to focus the attention on what is needed to ensure learning and progress, knowing that parents and communities are comfortable with the traditional understanding of how schools operate, and that some of the traditional structures still have meaning in today's world. For example, in many communities, the agrarian schedule is now a tourist schedule in which employers rely on teenagers to join the labor market in the summer. Although this sounds like an adult issue, work experience is also a valuable component of helping students become college and career ready. Because each operational or policy change requires substantial leadership attention from district and school leaders as well as teachers, most of the districts that have converted to competency education continue to operate within a relatively traditional schedule for the first several years. It is later that they begin to move beyond the trappings of the traditional system.

Before beginning to design the infrastructure that will support your instructional model, take the time to consider the supports, the implications for student agency, your district's overall pedagogical approach, and how you plan to support teachers through the transition.

A. Investing in Student Agency

In traditional schools, students are passive, and many only attend school because it is compulsory. Or they come with the expectation that the school delivers the knowledge. However, information is now so readily at hand, teachers can't be the disseminators of knowledge. Our community told us they wanted their children to be lifelong learners. We had to ask ourselves, what are we doing in our classrooms to help them be lifelong learners? What structures and supports do our teachers need to help develop lifelong learners? It came down to needing to have an active learning environment. Students need to be able to seek out things they are personally interested in, create a plan, and find the resources. We are always looking for ways for students to learn beyond the classroom.

– Doug Penn, District Principal, Chugach School District

Research on motivation and engagement has established that creating opportunities for students to shape their educational experience (i.e., agency) is an essential ingredient for improving academic achievement.[16] Doug Penn, District Principal of Chugach School District in Alaska, referred to a Ted Talk by Dan Meyer that has sharpened his thinking about the relationship between active learning, deeper learning, and empowering students to take ownership of their learning. In wanting students not to be helpless, teachers need to help less. To accomplish this, schools will need to invest more in developing critical thinking and the habits of learning so students can help themselves.

Engagement and student agency always start with respecting and listening to the different perspectives that each student brings to the school. That's why creating ways for students to express themselves and have voice is central to the work of student agency. Offering choice is equally important. It may start with curricular choice and expand to co-designing learning experiences as students become more adept at managing projects. Most importantly, it is the habits of learning that undergird student agency. Students are not given agency; they need to build the skills to become lifelong learners with the support of teachers and other adults in their lives.

1. Enabling Agency through Transparency

In designing the new infrastructure to support teaching and learning, it is imperative to understand the importance of transparency in enabling student agency. It is by having absolute transparency about what students are expected to know and do, the criteria by which proficiency will be assessed, and a strong understanding of what proficiency looks like that students can begin to have the information they need to take ownership of their learning. The system of grading in competency-based schools indicates to students how they are progressing toward proficiency. It is equally important to be explicit about the habits of learning (those behaviors that contribute to learning).

Brian Stack, Principal at Sanborn Regional High School in New Hampshire, explained, "Competency education has helped the entire school and students get on the same wavelength. With transparency in competencies, conversations focus in on learning. Transparency allows for an entirely different type of relationship between

students and their teachers to form." To this end, as Sanborn develops an increased understanding of the changing power dynamics, teachers begin to treat students as colleagues. "We are creating a culture of learning," said Stack, "by eliminating the punitive responses that are found in so many high schools." Another teacher at Sanborn added to this by stating, "When the competencies are laid out in front for you, you can just get on with the learning. Everyone has a shared vision of why we are in the classroom together."

2. Creating Classroom Structures that Enable Student Agency

The classroom structures of empowerment are relatively similar across competency-based schools regardless of grade level. At RSU2 in Maine, teachers begin the year by facilitating the development of a shared purpose statement and guiding principles for the classroom. A culture of cooperation develops among students as they take ownership for their education as well as their peers. Oftentimes, the walls contain reminders that mistakes are part of the learning process.

Students know exactly what they are learning and what proficiency looks like. Rubrics are readily available, and there is usually an example of proficient work. There may be posters on the wall for students to indicate where they are on their learning continuum. Students and parents often have access to an information management system that provides information on student progress and what they need to do next to continue advancing. Students should be able to tell you what they are learning, why it is important, how they know if they have learned, and what they will do to access supports as needed.

Providing timely feedback is an important element of creating student agency. If students have to wait a week or more to get feedback, they are more dependent on the teacher to advance, thereby lessening the drive to learn and undermining agency. Self-assessment and peer assessment can strengthen students' abilities to reflect and revise their own work. Adaptive software can be very helpful, especially for providing rapid feedback.

An emphasis on process skills and reflection helps students become aware of how they are learning. At Making Community Connections Charter School in New Hampshire, students do End-of-Day reflections on their progress in meeting their daily learning targets and developing their habits of learning.[17] At Chugach School District, reflections are part of the cumulative assessment used to determine if students are ready to move to the next level. Increasingly, schools are enhancing their approaches to building habits of learning.

In competency education, students are often provided opportunity in choosing how they will learn, the context of their learning, and/or how they will demonstrate their learning. Blended learning can provide even more transparency for students to move to the next level of study by creating access to the next unit or course. In both of these settings, there are often opportunities for students to co-design their projects based on high interest inquiry. At Chugach, students can choose to learn through individualized learning plans, described by Director of Special Education Debbie Treece as, "Scaffolding, and then stripping away a little bit of the safety net on the way to independent learning."

Teachers will recognize that the practices described here to develop student agency are the same as those used in managing personalized classrooms. They are in fact entirely interdependent—it is unlikely that a classroom can become highly personalized if every student has to turn to the teacher for every bit of instruction, support, and direction.

3. Embedding Student Voice in Governance and Operations

In Pittsfield School District in New Hampshire, students are considered important partners. Students hold the majority of the seats on the Pittsfield Middle High School Site Council and participate in the development of school policy. In order to ensure students can fully participate, they are given clearly mapped responsibilities and guidelines. In this way, the council is authorized to review and approve proposals related to issues like open campus guidelines, rules, handbook revisions, and class meetings, so that before anything goes to the school board, it goes through them first.

Tobi Chassie, a project manager of the transformational process at Pittsfield, pointed out that students are now considered invaluable partners in addressing issues. For example, student participation in the revision of the disciplinary policy led to a different outcome than if it had only been adults making the rules. Students challenged the idea that suspensions were meaningful for improving behavior, learning, safety, or school climate. After student-led research was completed, Pittsfield adopted restorative justice practices. Student participation in the school council and other school governing efforts gave voice to students and built confidence. That confidence quickly spread from the students on the site council to other students.

LESSON LEARNED AND LEADERSHIP OPPORTUNITY

■ Remember to prepare students for the transition. Provide training to teachers to facilitate conversations that compare the past traditional system and the new competency-based system so that students can articulate how the new system more effectively meets their needs and guides them toward success. For example, you can use the "grading cookies" exercise to engage students in why a different grading system is needed.

Grading Cookies: Have students all eat a specific kind of cookie, and grade the quality of the cookie on a traditional A–F scale. Then collaboratively develop a cookie quality scoring guide with the students, and have a second round of eating a cookie to score its quality. Teachers then guide the students through a reflection process to compare the scores from the two scoring processes. This leads to deeper understanding for all students regarding how the new scoring process provides far more consistent, clear, and accurate input about their performance in all content areas, so they can use that feedback to accelerate their learning. Once students are comfortable with such an activity, they are often excited to facilitate the same activity with parents and community members during public meetings about the transition.

B. Clarifying the Overall Pedagogical Approach

Sure, we could make it easier for teachers, but then our students don't succeed. The other option is to admit that teaching is a complex system, invest in the systems, nurture the culture to support professional teachers…and have the kids actually learn. It's obvious which one is the better choice.

– Jed Palmer, Head Teacher, Tatitlek Community School, Chugach School District

Some districts and schools may already have a strong pedagogical approach in place, while others may find they need to think more in-depth about motivation, engagement, instruction, assessment, and the role of grading. If there isn't an explicit pedagogical approach in place, it should begin with a review of research and lead to the development of guiding principles about learning and teaching (as discussed in the section on shared purpose).

What are the research, beliefs, and assumptions that guide your pedagogical approach? Having a strong pedagogical approach isn't the same as saying you want all teachers to teach in the same way. Instead, it is a set of general principles that help answer questions such as:

- What do we know about the different ways to motivate and engage students?
- Where does student agency fit in learning?
- What role do habits of learning play, and how can they be developed in students?
- What does the research tell us about effective instructional practices?
- What are the types of assessment, and what role do they play in achievement?
- What types of learning experiences are needed to help students reach graduation goals?
- Given your current student population, their academic needs, and their life and learning experiences, how might this inform your school design or pedagogical approach?
- What challenges and educational needs can online and blended learning help you address?
- How do parents and the community at large think about these questions?

In Exhibit 4, Lindsay Unified School District organizes beliefs and guiding principles to emphasize the growth of all learners, learning facilitators, and the overall culture of learning.

What is the role of the district in ensuring schools can offer a mix of instructional approaches and modalities? As you begin to think about the role and balance of direct instruction, practical application, group projects, project- and problem-based learning, independent learning, and real-life applications, you will find that school design and capacity issues begin to emerge, including those related to existing schedules, calendars, and partners for extended learning. This is the point where it may be worth spending the time to determine how blended and online learning can best support your students and teachers. Have you had difficulty serving some of your students? Are there some ways that blended and online education can help you strengthen the learning experience for them?[18]

Is your pedagogical approach standards-driven or student centered? Many districts take a wrong turn by trying to create a competency-based system that emphasizes the standards without first putting a personalized orientation in place. The result is that classrooms may be heavily teacher-driven, with students expected to do learning tasks at a teacher pace. Lindsay Unified School District has redesigned the role of teachers into learning facilitators. Rebecca Midles, Proficiency-Based Learning Specialist, explained, "Learning facilitators guide learners through a journey that leads to self-directed learning, advocacy, and agency. Only in this way does a learning environment become truly learner centered."

One way to determine the degree to which you have become student-centered is to ask the question of who is doing the bulk of the work in the classroom. "Teachers are often doing all the heavy lifting in a classroom to give bite-size pieces to students," said Jane Bryson of Education Elements. "The alternative is for teachers to put their

Exhibit 4: Lindsay Unified School district's Beliefs/Guiding Principles

LINDSAY UNIFIED SCHOOL DISTRICT'S BELIEFS/GUIDING PRINCIPLES

About LEARNERS & LEARNING	About LEARNING FACILITATORS & TEACHING	About LEARNING COMMUNITIES
1. All learners can learn	1. Learning Facilitators are models of continuous learning and improvement	1. All stakeholders in the community are partners in educating Lindsay's Learners
2. Learners acquire knowledge in different ways and timeframes	2. Learning Facilitators inspire, motivate & empower learners	2. Learning Communities (LCs) align all systems, policies, practices to support the principles that learners acquire knowledge in different ways and in different timeframes
3. Successful learning breeds continued success which influences esteem, attitude and motivation	3. Teaching is collaborative and involves on-going learning	3. LCs have high expectations for all learners and staff
4. Mistakes are inherent in the learning process	4. Learning Facilitators set the conditions for a safe, welcoming, joyful classroom environment	4. Learning communities embrace accountability and strive for continuous-improvement
5. Learning and curiosity are basic human drives	5. Learning Facilitators are knowledgeable and competent in pedagogy and human development	5. LCs encourages and supports risk taking and innovation
6. Learners require positive and validating relationships with learning facilitators	6. Teaching reflects the current research on learning and cognition	6. LCs have a clear, shared purpose and direction
7. Learner wisdom is enhanced by meaningful, real-life experiences requiring complex thinking	7. Learning Facilitators relate to & connect with learners	7. All members of the LC are committed to the mission and vision and are empowered to achieve it
8. Learning is fun	8. Teaching and learning are a cause and effect relationship	8. Communication in LCs is frequent, open, and transparent
9. Learning is fostered by frequent, formative feedback	9. Learning Facilitators are the single most important factor in learners understanding	9. LCs are inclusive and embrace diversity
10. Learning is future-focused	10. Learning Facilitators are future-focused	9. LCs are future-focused

effort toward creating the structures to allow students to move more fluidly through the coursework. The goal is to ensure that teachers aren't bottlenecks to learning, but instead facilitate the learning process."[19]

How is your pedagogical approach taking into consideration the academic equity challenges in your district? The first step is to review patterns of academic achievement and benchmark yourself against the districts doing the best in the country in serving low-income students, English language learners, and special education. Consider academic achievement of different racial and ethnic groups, including disciplinary patterns of suspension and expulsion. As a district, identify where and why students are disengaging from school based on attendance and failing grades, as well as the level of access for students to re-engage in school to complete their diploma. Given that high schools are still somewhat time-bound by the tradition of graduating with peers, look at how many students enter more than two years behind academically and how many students become over-age and under-credit by the end of ninth grade. Then return to your pedagogical approach and consider how it can be strengthened to ensure that it is addressing the needs of the students who are the most underserved.

Competency education is designed to address inequity and low achievement by enabling personalization through a transparent and calibrated I&A model. However, producing improvements in student engagement and achievement is dependent on the degree that a school's pedagogical approach meets the needs

of students. For example, Harvey Chism, Senior Director of School Design at EPIC Schools in New York City, points out that in a competency-based environment, culturally relevant material can be embedded to respond to diverse classrooms by offering opportunity for student choice and co-design within units.[20] The data about patterns of inequity in academic achievement should drive the development of the pedagogical approach and the continuous improvement processes that are discussed later.

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- As districts are guided by the beliefs and principles about teaching and learning, many find themselves turning to performance-tasks and assessments to help lift their instruction from the knowledge levels of recall and comprehension toward analysis, application, and evaluation. Several districts are now investing in strengthening their teaching capacity by providing training on learning progressions and formative assessment to better support students in mastering concepts.

- For districts operating in states that are implementing education policies, such as the Common Core and state accountability-driven assessments, without balancing them with an adequate investment in improving instruction, assessment for learning, and other capacity-building efforts, there will be substantial leadership demands to support teachers in reclaiming their role in teaching students (as compared to curriculum). District and school leadership will need to reinforce mutual accountability, the shared purpose, and collaboration at a time when state policies are emphasizing "blame and shame" accountability policies, narrow understanding of the purpose of schools, and individual teacher productivity.

- As districts establish information management systems to support student learning in competency-based environments, they will find they do not need elaborate tracking systems to monitor when students start to fall off-track. Management reports can be developed to provide nearly real-time data on how students are progressing and which students are not progressing as expected. Schools can respond in a matter of weeks to find more effective instructional strategies, offer coaching to build stronger habits of learning, and, if needed, engage parents and community resources.

C. Configuring the Instruction and Assessment Model

The minute we changed the equation of time and learning so that time became the variable and learning the constant, we immediately faced the question: "How do we manage when we are individualizing the educational experience for kids?" All the systems in the traditional system didn't help us anymore. We had to start from scratch.

– Dr. Bob Crumley, Superintendent, Chugach School District

There are several design decisions that need to be made to create a common language of learning, especially in the context of the district's overall pedagogical approach and belief about motivation and learning. In addition to

districts engaging the community in the process of developing a shared purpose and guiding principles, there are four core questions educators will need to drive the design and operations of any competency-based system:[21]

- What do you want students to know and be able to do?
- Why is this objective important?
- How are you going to know if students have learned it?
- What are you going to do if they don't (or they do)?

The following sections walk through the design decisions that will need to be made to answer the questions above. At this point in the development of competency education, there is no best model. Districts and schools are making decisions based on a number of considerations, including the availability of technology to support student learning.

1. Establishing Overarching Competencies and Proficiency-Based Graduation Requirements

What are the overall sets of skills, content, and traits you expect students to have upon graduation?

The initial work to determine the desired skills, content, and traits is done in partnership with community conversations. Later, districts facilitate conversations with their educators to further develop the goals for their students. Those districts that have fully engaged their communities often have shared purposes that are broader than the current policy of "college and career ready." The focus tends to be more on lifelong learners and

HOW ARE YOU DOING IN CREATING AN EQUITABLE COMPETENCY-BASED SYSTEM?

- Are students who need to strengthen foundational English language and mathematical skills, no matter what their grade level, offered a chance to fully develop their education with adequate instructional support and additional time to accelerate the annual pace of their learning?

- How rapidly are you identifying students who are struggling and providing them with additional support? Are you waiting for the end of the year? Semester? Month? Week? Day? Do you provide preparation time for students who may have gaps in skills before they start a course rather than waiting until they have troubles? Is online learning available to provide more efficient and differentiated support?

- Do students have to take assessments before they are ready, thereby increasing the likelihood of failure and the need for re-assessments, or are they expected to demonstrate proficiency before summative assessment? Are you offering "competency recovery" rather than expecting students to re-take entire courses?

- Are students who are academically behind or over-age and under-credit offered enriched educational experiences that help them build habits of learning, co-design their learning experiences, and apply skills, or are they being placed in front of a narrow online curriculum in order to complete a course?

- Do students have an opportunity for deeper learning and real-world application of skills no matter where they are on their learning continuum or how far they are behind or ahead of "grade level?"

- Most importantly, are you holding yourselves accountable by collecting data and developing management reports that can help you focus in on where groups of students may not be progressing by race, income, special education needs, language abilities, and gender?

preparing students for life. Thus, the set of learning continuums—the expectations for what students will be able to know and do—is much more comprehensive than just academic disciplines.

Determining what a proficiency-based diploma means as opposed to one founded on time-based credits that have little meaning (and that require so many students to take remediation once they start college) is not an easy process. Is it a floor that everyone reaches and can go beyond? Is it a ceiling at which you have completed high school? Is there a point that it becomes personalized based on student goals?

Determining this meaning and value will raise questions about what it means to be college-ready when the higher education sector offers little agreement or transparency. It will also raise questions about equity—do we expect 100 percent of students to meet 100 percent of standards at 100 percent levels? Given that high school continues to be time-bound because of the importance of graduation as a significant benchmark on the way to becoming an adult, it will raise questions about how to help students who either started with gaps, need greater flexibility, or need more time. Do you build in more time during the four years of high school, or do you begin to plan based on student performance at the end of ninth grade for extended graduation? More than anything, determining the meaning of a proficiency-based diploma will open the door for deep discussion among teachers about whether they and/or the school offers the capacity for the necessary instructional support, and, if not, what needs to happen to build capacity.

Some districts continue to use number of credits to determine graduation, with the understanding that competency-based credits indicate success in learning the skills. Assuming there are mechanisms to calibrate proficiency and maintain quality control in place, this indeed should be the case. Others create specific levels of proficiency to determine graduation. For example, Chugach School District created ten domains with ten levels to describe what they expect students to know and be able to do upon graduation. They developed the Performance Snapshot to show student progress toward achieving the minimum graduation levels in each domain. It's now a reporting tool generated by their AIMS information management system to indicate how students are progressing. The light shaded boxes show the minimum graduation level for each standard. The darker shaded boxes show advanced levels. The district credentials that students are proficient as they move from level to level toward graduation, with teachers determining proficiency within the levels. When they complete the graduation requirements, students then present their School To Life Transition Plan to the School Board prior to graduating. See Exhibit 5 for the Chugach School District Performance Snapshot.

2. Constructing a Common Language of Learning

What are the explicit and measureable learning objectives to describe what students need to learn on their way toward meeting the graduation goals?

Districts and schools start with a different mixture of concepts and create a variety of structures to define the learning continuum. It is important to take your overall pedagogical approach into consideration when shaping the overarching competencies. As Kim Carter, founder of Making Connections Charter School, explains, "Designing competency frameworks is a creative process. We gather together the tools we will need the same way a painter might choose brushes and paints." For ELA and mathematics, most turn to the well-developed Common Core continuum of learning or their state standards. Others will start or embed the essentials of a discipline, asking, "What does it mean to be a mathematician, a historian, a writer, a scientist?" Still others may be designed around themes or career pathways that rely on a structure that starts with the needs of industry.[22] In some cases, states may have even already set a broad framework within which districts and schools can further structure their learning.

Exhibit 5: Chugach School District Performance Snapshot

Name:
John A. Student

Curriculum Name :
CSD 08 standards

School Name :
FOCUS Homeschool Anchorage

Standard Area	1	2	3	4	5	6	7	8	9	10	11	12
Mathematics						+ 01/20/13	✓ 01/20/13					
Technology					+ 08/27/12	✓ 08/27/12						
Social Studies					✓ 03/10/11							
Reading					✓ 03/10/11							
Writing					✓ 03/10/11							
Culture and Communication				✓ 03/10/1								
Personal/Social/Service				+ 05/24/13	+ 05/24/13	✓ 05/24/13						
Career Development				+ 05/24/13	+ 05/24/13	✓ 05/24/13						
PE Health					✓ 03/10/11							
Science					✓ 03/10/11							
Early Childhood												

Key

	The level preceding the Advanced Level is the Graduation Level. Student must demonstrate proficiency in all the levels up to and including.
	Advanced Level. Student demonstrating advanced skills in that content Standard Area.
	No Chugach School District benchmarks have been identified for that level in that Standard Area.
−	Student is Emerging at that level. Emerging: Student is beginning to work on this level.
✓	Student is Developing at that level. Developing: Student is working on this level.
+	Student is Proficient at that level. Proficient: Student has met level expectations
✱	Student is Advanced at that level. Advanced: Student has exceeded level expectations.
PGP	Student has opted for Personal Graduation Program at that level.

There are five components that guide this work:

a. Knowledge Taxonomy

b. Structure and Characteristics

c. Developing the Continuum of Learning

d. Rubrics and Calibration

e. Habits of Learning

a. Knowledge Taxonomy: How do you know the depth of learning and that students are developing high order skills?

Knowledge taxonomies are a cornerstone of the learning infrastructure. If districts haven't already selected a knowledge taxonomy, it is important they do so in order to design their I&A model. There are a variety of taxonomies, each designed for different purposes and complexities, to choose from: Webb's, the New Taxonomy (often referred to as Marzano's), and Bloom's. (See Exhibit 6.) The knowledge taxonomy will provide teachers with a common vocabulary to talk about student work. It will also facilitate the introduction of higher order skills into conversation. Professional learning communities (PLCs) will be able to use the knowledge taxonomies to look closely at the level of instruction and assessments. In some cases, the decision about knowledge taxonomies may be considered a state decision. For example, in New Hampshire, the state selected Webb's and uses it as a foundation in creating a system of performance-based assessments.

As teachers become more comfortable with competency education, there will be more and more discussion about depth of knowledge. Rose Colby, a competency-based learning and assessment specialist, points out, "In many districts, teachers begin to realize they are not assessing at higher levels of knowledge. They begin to build their assessment literacy as well as create more performance tasks and assessments. Some realize that even though their assessments may be at higher levels of rigor, their instruction isn't. Thus the knowledge taxonomies create the conditions for a cycle of learning for teachers."[23]

With clear learning goals, teachers have flexibility in how they teach.

Exhibit 6: Knowledge Taxonomies

BLOOM'S TAXONOMY – Original (1956)

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation

REVISED BLOOM'S TAXONOMY – Anderson and Krathwohl (2000)

Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

WEBB'S DEPTH of KNOWLEDGE (1997)

Recall and Reproduction	Skill/Concept	Strategic Thinking	Extended Thinking

NEW TAXONOMY on EDUCATIONAL OBJECTIVES – Marzano and Kendall (2007)

Retrieval	Comprehension	Analysis	Knowledge Utilization

b. Structure and Characteristics: What are the units of learning and how are they organized?

The structure of the units of learning is the spine of the competency education system, enabling transparency and alignment between standards, instruction, and assessments. It has also been referred to as the "blueprint for personalized learning," as the explicitness and transparency of the learning objectives allow teachers and students to create highly personalized learning experiences. It is by having a unified, transparent system of what students are expected to demonstrate in order to advance that schools, teachers, and students can have the freedom to use different instructional approaches and ways to demonstrate learning. In competency education, with its emphasis on transparency, this becomes even more important. Students and parents are going to know when an assessment is assessing something beyond the standards and the curriculum. Some districts use the Common Core and state standards after rewriting them in user-friendly language. Some narrow the number of standards by focusing on the power standards, while others expand the structure to include bridging standards for even more specificity about what students will need to succeed in mastering a standard.

RSU2 and Lindsay have developed a three-level structure of overall competencies, measurable topics, and learning targets with the support of Marzano Research. Forming clusters of standards, or learning targets, into measurement topics focuses instruction and assessment and creates a "vehicle for learning" that teachers can use to keep track of the progress of individual learners.

Measurement topics clearly identify the level of knowledge that students need to be considered proficient. Students are expected to reach the designated level of knowledge to be determined proficient. Levels of knowledge are not synonymous with rigor. A student memorizing the alphabet is working hard at Level 1. However, as skills are developed, it is likely that the appropriate level of knowledge is Level 3 or above. Level 3 is what the New Taxonomy (Marzano & Kendall) would refer to as Analysis, including Matching, Classifying, Error

Analysis, Generalizing, and Specifying. Level 4 is considered to be Knowledge Utilization, in which students apply the skills in ways beyond what was taught in the classroom. All Level 3 knowledge and skills are formally assessed, scored, and reported, whereas Levels 1 and 2 may be tracked but not formally assessed when they are steps on the way to Level 3.

At this point in the development of competency education and the availability of technological tools to support it, there is little consensus about the level of granularity that should be used in organizing and assessing standards. Smaller learning targets may be easier to assess and provide students with a sense of progress. However, there is concern that the number of standards and the degree of granularity is unmanageable within the current budget and time designated for schooling. This line of thinking argues that teachers need to spend time on assessing at larger units of learning rather than every standard because it keeps the focus on the most important skills and creates the opportunity for deeper learning.[24] For example, at Sanborn Regional School District, competencies and essential standards are equal. Teachers design units based on Understanding by Design to identify the most important anchor standards and write them as "I can" statements. By focusing on the anchor standards in this way, they reduce the chance that the vast number of standards (kindergarten alone can have as many as 100) will become overwhelming.

Some suggest that it is the creative tension generated from holding ourselves accountable to teaching students the standards with greater granularity that will create the conditions for innovation, forcing us to seek other ways of organizing learning so students can learn more within the current frameworks, budgets, and timeframes. Certainly, with greater technological solutions designed for the competency-based classroom, we can imagine that one day teachers will be able to assess and track student progress in real-time.

A second decision related to the structure that districts make is how they are going to talk about academic levels as being different from grade levels. If you are going to break the link with advancing students in age-based cohorts, regardless of their level of learning, then what type of language and construct do you need to determine advancement upon mastery? Most districts retain age-based grades for a number of reasons—parents are used to it, there are developmental issues that are logically related to age regardless of academic learning, there are some disciplines in which students can work together without concern for their academic levels, and there is a social context to learning, with students eager for a sense of belonging. Certainly, in high school there are a number of developmental benchmarks (getting a car, prom, and graduation) that are traditionally based on age.

Districts have organized academic levels in a number of ways. Some have the same number of academic levels as grades. Some have tried to create approximately two academic levels for any grade level to differentiate between the two as well as provide a greater sense of progress for students. Some use the Common Core academic levels for ELA and mathematics but organize social studies and science in age-based grade levels. As described previously, Chugach School District created a unique set of ten levels with very specific determinations for graduation requirements. Adams 50 in Colorado tried organizing academic levels so there were two for each grade level, but returned to alignment of academic levels to grade levels after finding that a separate structure of academic levels created confusion among parents. Now if a sixth grade student is reading at level 7 but doing level 5 math, parents have a very clear sense of how their students are doing.[25]

✓ LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- If your culture of learning is strong, students will be comfortable talking about their grade levels and academic levels even if they are on academic levels below their grade level. Pay attention to language about progress—emphasize efficacy, depth of learning, and working harder to tackle challenging material rather than falling into the trap of referring to students as fast or slow.

- Create an innovation opportunity for your organization by engaging a discussion around the questions, "What would your school look like if you did away with grade levels? How might you organize and flexibly group students? How might you deploy teaching staff differently?"

c. Developing a Continuum of Learning: How will content be organized within the structure?

Once a district has established what the structure will be, the next step is to organize the content areas or domains into the structure or a continuum of learning. The task at hand is to create a learning continuum for each domain that has been determined as important to graduation expectations, stretching from K through 12, with a clear indication of what it means to advance upon mastery. In thinking about the definitional elements of competency education, this is where districts create a transparent set of explicit and measurable learning objectives and a system of assessments that are designed to advance student learning.

The process of developing the learning continuum, defined as an aligned set of standards and rubrics, can be designed as embedded professional development. Working in groups, teachers unpack standards, share student work, and write the standards in user-friendly language. While a vital step, this can also become an overly iterative process when the focus turns to getting every word right rather than building a shared understanding, holding deep conversations about learning progressions that describe how students move from one concept to the next, and building assessment literacy. Schools may develop and review rubrics simultaneously or as a subsequent step. (The topic of rubrics and calibrating the determination of proficiency is discussed separately below.)

Much of the conversation in preparing learning continuums will be in the context of the specific discipline. Jeni Gotto of Adams 50 explained that in a competency-based school, it makes a difference when teachers really understand the content discipline. They aren't teaching ninth-grade curriculum anymore, they are teaching teenagers who may be at different places along a learning continuum. Teachers who can teach students at their grade level and diagnose why students are struggling are going to see their students make progress. Teachers with deep content knowledge will be valuable in determining which standards are worth tracking because they are pre-requisite skills for more advanced learning, rather than trying to track student progress on every standard.

Danielle Harvey, Dean of Instruction at Pittsfield, believes that writing competencies is primarily about communication. The personalized learning structure they've implemented helps both teachers and students recognize when the student isn't "getting it," thereby opening the doors for next steps. This kind of transparency carries over to the competency-based structure itself. Harvey recommends that schools should have an implementation plan and not try to tackle everything at once. There will always be refinements in improving and aligning competencies, rubrics, and assessments. For example, Pittsfield started with the standards they had rather than trying to operate on a blank slate. They relied on the Understanding by Design model to support teaches in identifying the essential learning components and designing a structure that would help students learn. They also found it helpful to make a distinction between closed competencies that are more time-bound and open competencies that might require a year to develop.

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Districts should set the goal as creating continuums of learning across elementary and secondary schools, not just as segments for each grade level. It is important to think about vertical alignment. Once teachers have organized the learning continuums, be prepared for frustration that curriculum isn't designed well for the competency-based classroom. Publishers create curricular resources on specific grade levels, with different products for elementary, middle, and high school. Thus, a teacher in seventh grade trying to teach students with gaps at the fourth- or fifth-grade level may not have any resources within the middle school curriculum or be familiar with the elementary school curriculum. As a partial solution, Adams 50 turned to an open source curriculum, Progressive Math Initiative from the New Jersey Center for Teaching and Learning.

- Even though learning continuums may be organized in sequence, that doesn't mean students have to learn in a rigid linear fashion. There are some standards that are prerequisite for another and need to be taught sequentially. However, if teachers are using worksheet after worksheet in their first year of implementation, it is likely they need some help to transition to a personalized approach that creates more engaging learning experiences and embeds student choice into unit design. As teachers become more comfortable with the flexibility enabled by competency education, it is likely they will begin to use more creativity in how they design units.

d. Rubrics and Calibration: How will you know students are learning and what they need to reach proficiency?

As districts are designing the structure of learning, they are also thinking about assessment. Doug Penn points out, "We need to always know the purpose of assessment. It is to help students and the teacher understand what students know and what they don't know, and to provide insights into the steps that are needed to learn it. Too often, assessment is used as a hammer and a gateway. For us, we see it as a process of helping students get from don't know to knowing."

Thus, as teachers develop the learning objectives, they also consider how they will structure rubrics to provide meaningful feedback as well as determine that students have met appropriate levels of knowledge. The process of creating norms about what proficiency means at each unit of learning and determining when students should advance to the next academic level depends on four things: clear criteria or rubrics, calibration, assessment literacy, and quality control mechanisms. In the initial years, the primary focus tends to be on rubrics and calibration. Districts and schools invest in strengthening assessment literacy, specifically building capacity for formative and performance-based assessment, and design quality control mechanisms at a later date.

Rubrics

In the early days of the transition to competency-based education, many schools continue to rely on students taking tests and getting a number of the answers right. Over time, however, they increasingly turn to rubrics that provide more in-depth insight into how students are advancing toward proficiency. There are many ways these are structured—some indicate progress (emerging, proficient, beyond proficiency), while others are highly aligned with the knowledge taxonomy (recall, comprehension, analysis, knowledge utilization). Teachers may also take the language and create their own variations with student-friendly language or engage their students in creatively naming the levels of the rubric.

Given that grading systems are often developed on the backs of the rubrics, it is important to think about how parents will understand the language, as well. At Memorial Elementary School in the Sanborn Regional School District, they found the process of developing a system of grading and assessing was best described by the Goldilocks story, in which they had to search to find the perfect fit. At first, they moved from the 100-point scale to a four-point rubric, which included E (Exceeding), M (Meeting), IP (Inconsistent Progress), and LP (Limited Progress). However, some of the terms carried negative connotations, and most parents made a mental link between an E and the traditional A grade, even though the school considered M to be the goal and E to be a demonstration of rare and exceptional work. Over time, they had to adjust the letters to align better with what parents were able to understand and accept. They now rely on E (Exemplary), P (Proficient), IP (In Progress), and LP (Limited Progress).[26]

Calibration

Calibration is one of the core processes to ensure that competency education consistently produces higher achievement while also addressing achievement gaps. Without calibration, it is unlikely that your I&A model will be effective in ensuring all students are reaching proficiency.

The process of calibration (also referred to as norming, moderation, or tuning) is a conversation among teachers about student work and building agreement about proficiency. This is often done within PLCs. Over time, principals will want to organize opportunities for vertical and horizontal alignment within their schools while districts seek to build consistency across schools. This is an ongoing process, and larger districts will need to think more deeply about how to create ongoing mechanisms to ensure consistency and rigor across the district.

At Memorial Elementary School, a "writing wall" has been developed to enable teachers to develop a shared understanding of what grade-level writing looks like. Over a three-year process, the teachers at Memorial have devised a system to analyze student writing as a cohesive staff and with a focus on all grade levels at once. By making a large table that contains every student's writing and progress and placing it in a school-wide continuum, they are able to cluster data by grade level, by classroom, and by individual child growth. In this way, the entire staff can dissect results and come up with vertical teams to address strengths and weaknesses and share best practices. Currently, Memorial is also working to strengthen assessment literacy, specifically related to performance assessment, as part of its participation in New Hampshire's PACE initiative to design a statewide performance assessment system.

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

■ In the early stages of implementing competency education, teachers will begin to recognize that they are teaching and assessing at levels of recall and comprehension rather than higher levels. This may cause frustration, disappointment, and even a bit of shame. This is an important point to instill the culture of learning—helping teachers to recognize the value of a transparency system, collaboration, and learning from mistakes. This can also be a place to develop teacher leaders who embrace the mantra of "doing right for our kids" to help move past the frustration, turning it into a drive to do better.

■ Great professional development can take place when teachers talk about student learning, instruction, and assessment as they design and refine the learning continuum. However, watch out for constant re-writing of standards and rubrics. It is easy for this to become a bureaucratic process

rather than one focused on teaching and learning. Make sure teachers are spending time looking at student work, talking about what proficiency looks like, and building their assessment literacy. Manage refinements of documents on an annual basis so that it doesn't take up too much of teachers' precious time together.

e. Habits of Learning: What are the skills students need to manage their own learning, and how are they developed?

Creating empowered students isn't about moving them through a curriculum. It requires schools to organize their learning experiences to help students build all the skills (referred to by many terms, including habits of learning) to become independent learners ready to pursue college and careers.

In order to separate out academics from behavior in the grading system that indicates how students are progressing in reaching proficiency (i.e., a progress monitoring system), competency-based districts and schools must establish a set of skills or behaviors that are important for learning or are needed for college and career readiness. For example, at the Sanborn Regional School District, teachers have learned that assessing behaviors in elementary school students is an important step in helping students make academic progress. The Responsive Classroom CARES (Cooperation, Assertion, Responsibility, Empathy, and Self-Regulation) project focuses on developing work-study habits early on.

The most advanced competency-based districts have discovered that these skills and behaviors are in fact an essential element of creating student agency and improving academic achievement. They are beginning to think about what the habits should be developmentally and how they interact with efforts to address social-emotional learning and the school culture.

Helping students stay on a meaningful pace toward graduation goals, regardless of their grade and academic levels, requires attention to students' strengths in the habits of learning as well as adequate coaching from teachers. Jaime Robles explains Lindsay Unified School District's approach as, "Our lifelong learning competencies have been developed around our strategic design for graduate outcomes. We have created a school-wide focus on progress. This starts with frequent check-ins. We do not wait until the end of the semester; we are constantly checking. We review learner progress and indicate whether they are at a 3 (on pace), 2 (indicating they can catch up), or 1 (indicating that the student needs additional support). However, we do more than look at learner pace, we are also reviewing their scores in lifelong learning and seeing what areas need to be addressed and supported by learning facilitators or in advisories."

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Only after defining the knowledge taxonomy, structure, and continuum of learning should districts seek out the Learning Management Systems and digital infrastructure to support learning. Some districts make that decision too early and are then constrained by the existing product architecture. It will help to include the chief technology officers and/or technology department in the early conversation around structure and the learning continuum so they can understand the vision and begin to seek out potential technological solutions.

- Districts and schools can save time by adopting approaches developed by other schools or working with vendors. However, invest time and resources to support the process of calibrating the determination of proficiency, as it is part of the process for creating a competency-based system. The process of creating the I&A model can also help educators shake off the beliefs of the traditional education system and embrace the assumptions underlying competency education.

- Also remember that the work of developing the I&A model is never fully completed in the first attempt. Even the most developed competency-based districts tend to have some but not all of this in place, or they are continuing to refine. Thus, it's best to think of this as a work in progress. It's a meaningful process for educators to unpack the standards, think about the level of knowledge, turn it into user-friendly language, and discuss how they would know if a student had mastered the skill or content. Make sure that realistic goals are set. Learn as much as you can from other districts so that not everything is built from scratch.

D. Forging Policies and Operating Procedures for Personalization

Our goal at Making Community Connections Charter School is to develop graduates who are empowered with the knowledge and skills to use their unique voices effectively and with integrity in co-creating their public global world. This is, in effect, our One Big Competency.

– Kim Carter, QED Foundation

If a district puts into place all the pieces described above, they will be well on their way to creating a strong standards-referenced system—but not a student-centered one. The new value proposition is based on an integration of personalized learning that takes into consideration students' needs, interests, and aspirations along with a competency-based infrastructure focused on proficiency, pace, and progress.

The following discussion is on the policies and procedures that need to be in place to ensure that the system you are implementing has students and their academic success—not the standards themselves—at the center.

1. Student Agency

Personalization and student agency go hand in hand—it is nearly impossible for teachers to manage a personalized classroom if students are constantly turning to them for direction. Thus, as schools move toward personalized, competency-based education, they will also want to create the conditions for students to take ownership over their education (i.e., student agency). There are a number of essential ingredients required to create an environment and learning experiences that help students build the skills they need to have agency: a school culture that is grounded in a growth mindset, strategies to help build habits of learning, opportunities for choice and co-design, transparency of learning objectives with well-developed assessments, and high levels of teacher autonomy.

As schools commence on the journey toward competency education, they are likely to find themselves thinking more and more deeply about the implications of student agency in practice, operations, school design, and policy. Below are three areas that schools will encounter and want to begin to create policies, guidelines, or operating procedures for.

How are you going to develop habits of learning? Habits of learning are an important ingredient in building student agency. Habits of learning cannot be taught only by talking about the habits—students must have the opportunity to develop, practice, and reflect upon them. Thus, districts will need to think about offering a mix of developmentally appropriate project-based and experiential learning opportunities. This may require thinking about the school calendar, changing the schedule, and/or committing resources to develop and sustain partnerships in the community.

Pittsfield School District has created a dynamic extended learning program that enables students to build skills, demonstrate competencies, earn credit from experiences gained outside of the school environment, and even partner with higher education institutions to gain college credits. These Extended Learning Opportunities (ELOs) integrate with the competency-based structure by connecting the learning experience to core content areas. Each ELO is different based on student interest and the skills they are developing, but shares a commonality of involving research, reflection, and a presentation or project that links to the Common Core standards.

In what way will you offer students voice, choice, and opportunities to co-design their learning experiences? The transparency of the learning expectations enables teachers to create choice about how students learn, the context of their learning, and how to demonstrate learning. It may be a discrete choice, such as selecting which animal to investigate when looking at an aspect of biology or selecting which poet to learn about in English. In many cases, teachers provide options with the caveat that students may suggest alternatives. Choice in how to demonstrate learning will require schools to have well-developed rubrics that focus solely on the specific skills to be assessed so that students may submit written materials, presentations, or more creative products such as a play or 3-D model to demonstrate their learning.

Rose Colby has observed that teachers are changing some of their practices for unit planning to provide more of this kind of choice. In the teacher- and time-driven practices of the traditional education system, teachers often spend Fridays going over their plans for the next week's curriculum. In a personalized, competency-based environment, this curriculum serves as a basic roadmap, but teachers make room for flexibility. This way, when students raise unexpected issues, want to explore an area more deeply, or simply need additional learning support, there is room already built in. As Colby explains it, "There is a resiliency that develops in order for educators and administrators to respond to student agency in the moment."

Transparency empowers students to have voice and choice.

Schools are also creating opportunities for students to co-design their learning with teachers. This entails creating the structures for students to identify areas of inquiry and then organize the learning goals as defined by the standards and habits they intend to fulfill. The I&A model becomes a common language that allows students, teachers, and any partners in the community to discuss the projects and learning expectations.

What are the skills and autonomies teachers need to nurture student agency? Teacher autonomy and student agency go hand-in-hand. In order for teachers to be able to be responsive to students' learning, they need to be able to have some degree of autonomy in terms of pacing and their professional judgment. Kim Carter notes, "Teachers need to know how to manage motivation—when to push, when to pull, when to pause. They need to know how to give feedback that helps students navigate the gaps between where they are and where they are going in terms of their learning targets. Equally importantly, teachers need to know how to solicit and receive feedback *from* students about which instructional practices are helpful and which aren't. One of the most important skills for teachers to nurture in themselves and in their students is metacognition."

Don Siviski, previously the superintendent of RSU2 and the Maine Department of Education's Superintendent of Instruction, currently at the Center for Secondary School Redesign, spoke on this point with, "Everyone in the education system has to model 'agency' and the empowerment of others. The superintendent has to honor agency with principals, principals with teachers, and teachers with kids. Remember—kids learn from what we do, not from what we say."

Most importantly, districts and schools need to think strategically about what supports teachers need to help build student agency. Most teachers have not received training about assessing or helping students to build strong habits of learning. They will need support in learning how to manage a personalized classroom rather than a teacher-driven one. Some teachers may find themselves outside their comfort zones when trying to empower students or discover they don't possess adequate assessment literacy needed to manage a wide range of choice in how students demonstrate learning.

2. Levels, Pace, and Progress

Districts will need to develop a set of policies or guidelines regarding pace. The function of keeping students learning at a meaningful pace (as compared to delivering curriculum) is one of the most important and challenging aspects of the conversion to competency education. As a field, we have yet to create new language, concepts, or metrics that help us understand pace and progress. As you consider the following questions, understand that you are on the edges of the frontier.

What academic level are students? As students enter a competency-based school, teachers will need to know their academic levels. Some schools do formal assessments using an array of formats. Some turn to one assessment system, such as NWEA Map or Scantron. Others have found that this can be off-putting for students, and look to teachers to use their professional judgment in leveling students. Teachers continue seeking understanding of the skills and knowledge students bring into the classroom by using pre-assessments to assess what students know or don't know so they can respond more quickly to students who need extra help.

What is a meaningful pace? Flexibility in pace and pacing is one of the most important concepts in competency education and also one of the most challenging. Kim Carter explains, "One of the most significant distinct aspects of a personalized competency-based system is the ability to adjust pacing to meet every learner's needs. This shouldn't be construed to mean that each learner gets to set his or her own pace. At MC^2 we rely on

'negotiated pacing with gradual release.' This is an integral aspect of developing student agency and the central role of managing motivation in an educational system designed to create proficiency not just in facts and skills, but in habits and dispositions to be critical thinkers and lifelong learners. Determining progress is very clear in a competency-based system because of the transparency of the learning objectives. Pace is the progress (amount of learning) divided by an amount of time. Depending how a district has developed their academic levels, competency-based schools can determine the expected annual rate of learning."

The term *pacing* is sometimes used to talk about the planning and supports needed to help students make progress. When learning is a constant and time is a variable, more instructional supports and more time on the part of the student and teachers will be needed when students are not "keeping pace." If pacing is not adequate, schools need to engage students and their families, seek out additional resources, or plan for more time for the students to make adequate progress. If there is an issue at play that is preventing the student from advancing at an adequate pace, then individual plans can be created.

The issue of pace, progress, and pacing is made more complex by the fact that students in the same grade may enroll in school with a difference of two, three, or even more academic levels in their skills. Thus, one student may not yet be proficient but learning at a more rapid pace than the student who entered on academic/grade level. Schools develop individual plans to support students who are substantially behind academically, setting a path to keep them on a pace that makes sense for them.

How will you ensure consistency in determining students have acquired the level of proficiency to advance to the next level (i.e., quality control)? Districts will need to decide how students are determined to be ready to "advance upon mastery." Is it based on units, courses, academic levels, or major benchmarks such as the transition into high school? In many cases, the authority to credential students rests with teachers. The performance-based system at Chugach School District has developed over time, with the district taking responsibility for ensuring students are proficient before advancing to the next level by relying on cumulative assessments. Teachers have autonomy and use their professional judgment to determine proficiency within levels. At Making Community Connections Charter School, teachers and students determine when students are ready for the four gateway performance assessments of which the last one is graduation. Students prepare a portfolio and present to a review panel that includes community members.

Some schools that convert to competency education find that after leveling, they have many secondary school students who are two or more academic levels behind their grade levels. This same situation exists in the traditional system, but competency education makes it explicit and demands a response. Schools are using a variety of techniques, including ninth grade academies, creating a schedule where students spend time building their foundational skills, after-school tutoring, and adaptive learning that provides rapid feedback. Adaptive software can be very helpful when students have foundational skills but lack fluency. Teachers can then focus their attention on working with students on higher level thinking skills while students continue to strengthen their skills with digital support. Schools may also set the expectation that middle school students will need to strengthen reading, writing, and mathematics before entering high school, assuming it makes sense developmentally. In partnership with students and parents, plans may be developed for how students will advance on an individualized plan that may depend on a steep learning trajectory to graduate with their cohort or plan for an extended graduation date.

How will you monitor and communicate student progress? Transitioning from traditional A–F grading and the 100-point system to monitoring and communicating student progress is one of most important implementation

steps—and one that is loaded with pitfalls.[27] Many districts start off with a hybrid model, attempting to join a standards-referenced system with the elements of the grading system that are most well-known by teachers and students. Over time, however, this can cause ongoing headaches. One teacher at Sanborn High School described this dilemma, "If you are going to be rubric-based, then you have to have a rubric grade. Trying to marry the 100-point scale to rubrics doesn't work. The 100-point scale just has to go away. It's a hindrance."

At the high school level, it may be harder to break away from traditional grading because the point system is the basis of the GPA. Using a hybrid grading system may make it even more difficult to create a shared focus on learning, as some students will be more focused on how points are distributed than learning. Be prepared to engage educators, students, and families about the limitations of the traditional grading system for "college-bound" students, in that they may have a high GPA within their own school but still not be college-ready or competitive on a national or international level.[iii] Make sure you offer ways for students to advance beyond twelfth grade skills and build an academic résumé through deeper learning projects that will help them in the college admissions process.

Even with these precautions in place, parents and students will naturally worry about competency-based grading and college admissions. Thus far, this has not been a problem, as colleges are used to receiving a wide variety of transcripts. In general, schools should prepare an attachment that explains the school and its grading process. Great Schools Partnership has engaged college admission officers in the New England region to ensure that there are no obstacles. To date, fifty-five colleges, including the public university and community college systems, have agreed to accept proficiency-based transcripts.[28] Worst case scenario, schools can translate back into the point system if needed.

✔ LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Conversations about grading among educators are an opportunity to look at the underlying assumptions of the traditional system and how it compares to research on teaching and learning. Is competition really motivational? What are the implications of adding or deducting points for behavior? What are the implications and reasoning for advancing students to the next course or grade level without adequate skills?

- Once districts establish the level of proficiency for learning objectives based on a knowledge taxonomy, the question arises of what "beyond proficiency" means. It doesn't mean advancing to the next standard, as a separate rubric would be used. It doesn't mean extra credit or extra points. So what does it mean? This can lead to a rich conversation about what happens when students reach proficiency: creating opportunities for working on further application, creating capacity to advance to the next level, or going deeper.

- Guard against language of students being "fast learners." It is a red flag for two different reasons. First, it is possible that students are not being offered enough opportunities for deeper learning, which generally takes more time. They may be fast only because the level of knowledge is closer to recall and comprehension than it is to knowledge utilization. Second, the term "fast learner" implies a fixed mindset—you are or you aren't. To keep your culture of learning robust, focus on effort rather than comparison.

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iii   According to an [international study by the Education Testing Service](#), American millennials (those born between the 1980s and early 2000s) are lacking literacy, math, and problem-solving skills.

3. Not Yet Proficient

The phrase "not yet proficient" illustrates how competency education shifts the focus to students and their needs. Students are not going to be passed along without adequate skills. Instead, schools will continue the instructional cycle with students who are not yet proficient until they are successful. Brian Stack reflected on the experience in Sanborn by stating, "In a competency-based school, the bar is getting raised. For the first time, we expect students to understand and be able to apply the curriculum. At first, teachers were worried about a higher failure rate. But that doesn't happen because of our design to provide intensive support to students during the ninth grade, the combination of students taking more responsibility for their learning, and structuring adequate level of supports into the school day and year."

When and where will students be able to access additional supports? All students, whether in AP physics or at an academic level lower than their grade level, will struggle with material at some time or another. The most important thing schools can do is offer daily flex time for students to get the help they need, when they need it. It is not sufficient to rely solely on after-school or lunch periods—dedicating time for getting help reinforces a school culture that sometimes it takes extra effort and asking for help to be successful.

At Memorial Elementary School, teachers found that they had to build greater flexibility into their lessons and units to respond to students who needed more time. The school created LEAP (Learning for Each And every Person), a time scheduled each day for students to get help through re-teaching, reinforcement, or enrichment. As they realized the amount of extra support students needed, they began to use student data as a starting point to search out root causes. For example, teachers realized that they had a curriculum problem in fourth grade that was creating a wider skills gap. In the short run they strengthened word study, and in the long run began the ongoing conversation that revolved around, "What do you do when students aren't reading well?" This conversation opened the door for collaborative efforts to better serve students needing help with phonics.

The common language of the I&A model can improve the effectiveness of systems of support as well. Teachers at Gonic Elementary School in New Hampshire's Rochester School District found that their tutoring program was greatly enhanced by being able to use the standards to focus in on specifically where students needed help. When tutors felt that students had become proficient, students were able to bring back evidence of their learning to their teachers.

Online curriculum that can be designed to be highly modularized can be very helpful in helping students target specific areas of weakness. New Hampshire's open-enrollment online school, Virtual Learning Academy Charter School, offers competency recovery that can be made available to students the minute they are having difficulty. Jane Bryson of Education Elements suggests selecting a portfolio of two to three types of providers that students can turn to when they need support based on what works best for them. Students should know that when they are struggling with a concept, they can turn to a provider like Khan Academy for a quick tutorial video or a more interactive step-by-step provider like I-Ready. Another useful strategy is the flipped classroom approach of teachers recording themselves giving a mini-lesson using videos that students can watch as needed. Bryson goes on to recommend that students be offered choices to come at concepts from different angles. It may be that they find one tool more effective than another, which builds awareness about their learning process and increases their ability to make better choices for themselves as learners. However, it's important to note that, to date, there are more digital content options in math and literacy than in other subjects that support this type of student usage. When selecting digital content, it's imperative to understand how students can navigate material in competency-based environments before making final selections.

How can districts support the transition to high school for students who may be behind? Some schools are beginning to invest in time upfront rather than waiting for students to have troubles. At EPIC Schools, an

initiative of the New York City Department of Education, ninth grade students participate in a three-week session before school starts to address habits of learning, build a sense of community, and brush up on basic academic skills. Harvey Chism explains, "We wanted to help students prepare for taking ownership of their education. Unfortunately, many have been used to a culture of compliance and were subject to punitive disciplinary policies that undermine their motivation, engagement, and learning. We wanted to work with our students closely to build their self-awareness, ownership, and efficacy as learners. Relationships are invaluable to the risk-taking and persistence involved in competency-based learning environments. Therefore trust, confidence, curiosity, and belonging must be called out and valued as factors that inspire and support learning."

Sanborn High School created a transition year for ninth graders, assigning them to an interdisciplinary [Freshman Learning Community (FLC)](#) of five teachers, a literacy coach, and a special education teacher. Teams of teachers operate as a PLC, with a great deal of autonomy to respond to the needs of their students in their learning community. They focus on data about student progress to make sure students are getting what they need to be prepared for the transition into high school. When students aren't making progress, teachers immediately intervene to find out what is happening. Essentially, Sanborn has created a structure in which a team of teachers is responsible for ensuring that each and every student gets off to a good start when they enroll.

✓ LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Schools will find that the areas in which students struggle also provide feedback about where educators can build up their instructional skills. In some schools, teachers are turning to the research based on learning progressions "rooted in coherent and well specified conceptions of how students' knowledge and skill in particular subjects should develop over the school years"[29] to help them better understand how students move from one conceptual idea to another.[30]

- District and school leaders should pay close attention to the language and procedures used to describe what happens when a student doesn't reach proficiency. Educators use a variety of terms, including re-teaching, re-assessment, re-take, and competency recovery, while others see it as a continued cycle of instruction that doesn't end until the student reaches proficiency. Some of the differences in terminology are based on whether teachers are giving scheduled assessments, such as a test to the entire class all at the same time (thus some students need to have a re-assessment), or if the classroom is more personalized with just-in-time assessment when students have shown evidence that they have reached proficiency.

4. Advancing Upon Mastery

Eventually competency-based schools will want to create the capacity for students to able to immediately advance upon mastery. Although most schools aren't ready to address this in their first year, this will be an eventual point along the path. It may start by enabling students to move onto units within a course, the next level of study, or to the next grade level. Online and blended learning can be invaluable for creating just-in-time learning so that students can advance beyond the "teacher pace."

Issues may develop if students are learning at levels beyond their grade level and the expertise of the teacher. Schools find that frequent grouping/regrouping can be beneficial for students to advance beyond their grade level. The A La Carte model of blended learning can be particularly helpful for students who are advancing well beyond their grade level but want to stay with their peers. Finally, dual enrollment college courses allow students to remain with their peers in high school while advancing academically.

E. Empowering Teachers

At Sanborn, we believe that great leaders are not great because of their power but because of their ability to empower others. Administrators at the district and school level worked shoulder to shoulder with teachers as we became a competency-based district. Our students have benefited as well as our teachers. We have developed a cadre of teachers who are always seeking to build their expertise in instruction, assessment, grading, and technology. We are drawing on the collective expertise across the district as we constantly improve our ability to support our students.

– Ellen Hume-Howard, Director of Curriculum, Sanborn Regional School District

In competency-based schools, a collaborative and empowered cadre of teachers is the engine that drives learning. Student learning depends on a strong adaptive instructional cycle that, in turn, depends on skilled teachers using their professional judgment that, also in turn, depends on the structures and cultures of the organization. Missy DeRivera, a homeschool teacher at Chugach, explained, "The leadership question is always central to our work. Is this best for kids? That is at the core of our entire district. We identify what is best for kids and then we figure out how to make it happen."

1. Strong Professional Learning Communities

It is difficult, if not impossible, to build the calibration mechanism that is essential for competency education to be effectively implemented without strong professional learning communities. It is also an ingredient for an empowered cadre of teachers. Sanborn Regional School District placed PLCs as core to operations right from the start. Their administrative team recognized that reorganizing in the district would require an investment of time, and opted for Professional Learning Community meetings over weekly informational staff meetings. As Ellen Hume-Howard, Director of Curriculum and Instruction, stated, "Doing this has been challenging and the administrators have worked hard at communicating to staff in other ways, but we believe PLC time is important and our calendar reflects this belief."

Jonathan Vander Els, Principal of Memorial Elementary, emphasized that one of the principal's most important leadership functions is to support PLCs, making sure they have the time to meet and are staying true to the norms that allow them to be a source of collaborative, professional development. "Principals and district leaders have the power to make sure there is freedom to have hard conversations in safety," he said. "It starts with distributed leadership models that understand and value teacher leadership in creating a dynamic learning culture within the school."

2. Aligned Human Resources System

Soon after converting to competency education, many districts find that they need to modify their human resources operations, including hiring, orientation, professional development, and evaluation.

a. Hiring and Orientation

Competency education is changing the way districts think about hiring. In the traditional model, they searched for teachers who had experience in teaching the curriculum for a specific grade. "Now we look for teachers

who are interested in teaching students and know the discipline so they can help students who are in different places along their learning progressions," explained Ellen Hume-Howard. Doug Penn, Districtwide Principal at Chugach, emphasized this with, "We don't hire teachers, we hire members of a team. We don't want people to compartmentalize."

At Lindsay Unified School District, the hiring process is more robust now than it has been in years past. Prospective employees are introduced to the model ahead of time to gauge their interest, and the final step is an in-depth conversation with the principal regarding the district philosophy. "We always empower our staff," said Jaime Robles, "so we need to make sure we hire individuals who share our belief systems on how students learn and what motivates them." At Sanborn, much of the orientation takes places within PLCs, while new teachers at Pittsfield are assigned a mentor to help them align competencies, rubrics, and assessments, as well as learn how to manage a personalized classroom.

b. Professional Development

In the well-developed competency-based districts, student learning is the driving force behind professional development. Teachers pursue opportunities that build the skills they need to be more effective in helping students to learn and to pinpoint those areas where learning isn't yet taking place. Professional development takes place within the classroom as teachers use formative assessment to inform their own instruction. It takes place within PLCs and in designing individual professional development plans. When teachers work together collaboratively, knowledge is constantly being exchanged. The ongoing process of calibration and discussion of student work builds assessment literacy so teachers are better able to provide feedback to students. According to Doug Penn, "Performance-based approaches encourage collaboration. Once we became performance-based, the teacher retention rates shot up. It helped us to create the conditions to pursue professional development."

At Lindsay Unified School District, attention is also paid to educator learning through the development of a set of adult competencies. Rebecca Midles explained it as, "At Lindsay, we are growing mastery at all levels, supporting adults in the system as respectfully and as meaningfully as we support our learners in the K12 system." The district's work on adult learning is considered part of a continuum, not a static curriculum. The topics covered include focus areas such as leadership (purpose, vision, mindset, capacity building, and relationships), personalized mastery, instructional and assessment strategies, and data driven cycles of improvement. These adult learning opportunities are role-specific so principals can use this information to determine needs of their staff and highlight strengths."

Exhibit 7 provides a quick look at the types of rubrics Lindsay is developing to support the development of the adults in the system—especially as it pertains to developing a learner-centered environment.

c. Evaluation

Chugach has developed an evaluation system that reflects the organization-wide focus on learning. The staff development and evaluation process is remarkably similar to how students are assessed, in that it's all about learning. It's based on standards wherein staff provide evidence of their learning. The evaluation has several components, including self-evaluation; comments and observations from students, parents, coworkers, and community members; individual meetings with the administrative supervisor; development of individual goals and action plans; collection and presentation of artifacts to support self-evaluation; and assistance in meeting district goals.

Exhibit 7: Lindsay Unified Adult Learning Continuum

LINDSAY UNIFIED ADULT LEARNING CONTINUUM
LEARNING FACILITATOR

		Target 1: Empower learners to develop a learner centered environment.			
		1	**2**	**3**	**4**
Building Capacity: Quality Leadership	**Terminology**	**Know and use the terms**: shared vision, Code of Cooperation (Code), standard operating procedures (SOP), learner centered, learning environment			
	Physical Environment	Establish a physical learning environment that is organized and **supports learning potential** (learners are able to see, hear and participate in learning opportunities on their own or with groups).	Establish a physical learning environment that **optimizes learning potential** (flexible seating for individual, small group, and whole group instruction, and well organized learner resources).		
	Standard Operating Procedures	**Establishes** standard operating procedures for routine procedures. Demonstrates **awareness** for the need for SOPs to support self-directed learning.	**Co-create** standard operating procedures to **guide learners in navigating** the learning environment (flowcharts, steps, pictures).	Co-create with learners, standard operating procedures that support a **learner centered and learner directed** environment.	**Empower** learners to initiate or assist with the creation of SOPs in the learning environment that **support self-directed learning.**
	Vision	**Publish** a vision for learners in the learning environment. Demonstrate **awareness** of the need for a shared vision.	**Directs** a vision for how learners will be defined as a group.	**Unpack** the site/district shared vision **or co-create** a shared vision for how learners wish to **define** their learning environment.	**Empower** learners to lead the creation of a shared vision.
	Code of Cooperation	**Direct and post** the Code in the learning environment. Through monitoring, guide learners to think about their use of the posted Code.	**Unpack the Code** for the learning environment expectations that is clear and user friendly. **Create opportunities for learners to reflect** on their behavior in class.	**Create a learner friendly tool** (rubric, pictures) that unpacks expectations in the Code of Cooperation and supports learner self-evaluation and goal setting.	**Empower** learners to lead the creation of a Code to support the achievement of a shared vision. **Empower** learners to create an assessment tool that unpacks the Code of Cooperation to support self-evaluation and goal setting.
	Goal Setting and Data	**Demonstrate awareness** for learners to self-reflect on personal behavior using collected data points.	**Guide learners** to review data from self-reflections of the Code and guide them to create a group goal for improvement.	**Support and monitor** learners using data from SV/Code self-assessments to **set SMART goals for personal growth**.	**Empower** learners to use data from SV/Code self-assessments to set **short and long term SMART goals** for personal stretch goals and refinement.
	Culture	**Manage** the classroom culture to support a cooperative climate.	**Monitor and adjust** the learning environment culture to **align** with a shared vision and the code of cooperation (realization of purpose, cooperative climate, and learner voice).	**Continuously monitor and adjust** the learning environment culture to **ensure** alignment with the shared vision and the Code of Cooperation.	**Empower learners to continuously monitor and adjust** the learning environment culture to ensure alignment with the shared vision.

The evaluation process feeds directly into a performance pay policy structured in alignment with the district's shared purpose and team spirit. The individual evaluation scores are averaged across the workgroup each year, and the average score is used as the multiplier for performance pay. Bob Crumley notes, "We've balanced individual improvement with incentives to support each other. While the score and the performance pay are significant, even more significant is the process of holding deep reflection-based discussions about our work; what is going well and what are our individual and organizational opportunities for improvement."

At Sanborn Regional School District, Superintendent Brian Blake expanded the evaluation system to focus on the domains of learning communities, student engagement, and climate and culture as well as classroom competencies focused on instruction. They continue to explore how to build in more formative assessment that can help improve practice and what it means for teachers to become master teachers when they exceed the standards of the evaluation system.

LESSON LEARNED AND LEADERSHIP OPPORTUNITY

- More advanced competency-based districts find they need to rethink teacher evaluation to be consistent with the organizational culture and guiding beliefs about learning and motivation. There are likely to be inconsistencies between the values and beliefs undergirding the personalized, competency-based approach and those informing the state teacher evaluation systems and state professional teaching standards. These are opportunities to engage state leadership as well as reflect more deeply upon and re-commit to the shared purpose and guiding principles focused on helping students learn.

d. Autonomy and Creativity

Doug Penn suggests understanding the role of educators by thinking about "a triangle surrounded by an enormous circle of students' ever-changing interests and passions." In his description, the triangle sides are made up of a) the standards that define what students need to know, b) how they consider the assessment in the design process, and c) instruction that identifies how the students are going to learn it. There is ample room for creativity in this model, as it can be co-designed with students and act as an iterative process that takes time to fully align. "The opportunity for creativity can be intimidating," Jed Palmer, head teacher at Tatitlek Community School, adds. "We are open about it—it can be scary when you know you need to do better, but it's not exactly clear how... It may feel like a teacher is walking on a tight wire without a net, but our job is to not let each other fall off. It can be really rewarding." Thus, supporting teachers requires conditions that provide collaboration, coaching, and supporting professional development as educators.

Teachers in competency-based environments have significantly more autonomy than those in traditional schools to be creative in how they engage and design learning experiences for students. In return, they have the responsibility for helping students reach proficiency. Teachers often have the primary responsibility of credentialing students based on the demonstration of mastery of the learning objectives, although districts may have other mechanisms in place to manage quality assurance. Thus, teachers are often asked to use their professional judgment in facilitating student learning and progress, providing additional instructional support when needed, and credentialing that students have reached proficiency.

In describing how Chugach provides autonomy for teachers, Doug Penn explained it as, "You can't empower people by just saying it. We have to create the conditions for our teachers to succeed. We foster a culture where

teachers can find success through networks and structures, and where they have the freedom to work together to find solutions and make decisions. We also have systems in place. You need both a strong culture of learning and the systems to support it."

MANAGING THE PROCESS OF TRANSFORMATION

Any district involved in large-scale transformation needs to build its capacity to manage the change process. Several aspects of the change process that districts will want to consider in preparing for the transformation to competency education include:

1. **Decentralize District Operations:** In order to respond to the changing needs of students, schools require greater school autonomy. Increased access to data and responsibility in the hands of teachers means they must be able to use their professional judgment, and schools must have the flexibility to quickly respond to the needs of their students. In turn, this requires districts to shift their culture from compliance to support.

   Structural changes within districts can clarify autonomy and accountability between districts, schools, and teachers. With well-defined competencies, learning progressions, and systems of assessments, there is greater autonomy on the part of schools, teachers, and students. It also makes sense at this time to explore changes in the structures and policies of finance, human resources, procurement, technology, building design, calendars, scheduling, and professional development around designing new school models. By maintaining open processes for identifying barriers and supports, school-level leadership can better manage school cultures in which both students and teachers are empowered.

2. **Define District Staff Roles:** As the locus of control shifts toward schools, teachers, and students, district staff will find themselves wondering what their new roles should be. In general, the shift will be one that moves from compliance to problem-solving, which will include listening to what the needs are, identifying common issues, engaging the appropriate stakeholders, providing differentiated support, and facilitating the development of competency frameworks and systems of assessments.

3. **Create an Overall Transition Strategy:** Leaders who have advanced through the transformation to a personalized, competency-based system describe the importance of starting with commitment first. This differs significantly from a pilot-first program begun with the hope that it will eventually scale. Districts commit to competency education with the understanding that they will have to make many mid-course corrections along the way.

   Within the transition strategy, districts will also need to clarify accountability for managing change. Districts invest in a leadership team, building their capacity for project management, familiarity with how other districts are implementing competency-based models, and distributed leadership approaches. The team creates timelines, benchmarks, and metrics to hold themselves accountable. Embedding an iterative planning process so that problems can be quickly identified and resolved can be helpful in managing the change process.

   Adapted from Maximizing Competency Education and Blended Learning: Insights from Experts.[31]

v. Transitioning to a Competency-Based System

The transition year(s) is the period of time when people use the phrases "building the ship in the water" and "constructing the plane in the air." Educators are doing double-duty setting up the new system while also educating students within the traditional system, which makes this a time of excitement, nervousness, challenge, and frustration. Below are a few of the major activities that districts undertake during the transition year(s).

A. Preparing for the Leadership Lifts

The scary part of this style of teaching and managing is that to empower someone you must give away your own power. Once we had a shared purpose of what we wanted to accomplish, I gave the power to the kids. Everything went smoother, and discipline problems went away. Of course, as an administrator, it's even scarier to give up power to teachers. When I first started to develop this management style, I was afraid I might lose all my credibility and authority. Then I realized I was just changing the source of my credibility and authority. And once again, everything went smoother.

– Dr. Bob Crumley, Superintendent, Chugach School District

The leadership demands are high during the transition years—it is crucial that the culture of learning is reinforced, as teachers may feel that they aren't succeeding in either the traditional system or the new one being put into place. Moreover, as teachers begin to focus more sharply on helping students learn rather than delivering a curriculum, their own gaps in skills will become evident. Leadership will find that the shared purpose and guiding principles emphasizing learning and collaboration can become a shield to minimize the disruption caused by top-down policies that emphasize evaluations of individual teachers.

Oliver Grenham and Jeni Gotto of Adams 50 in Colorado warn that districts converting to competency education need to be ready for a "bumpy journey," as it is impossible for everything to be perfectly designed. Their advice is for educators to:

- Start from where they are and prepare to learn and improve along the way,
- Think differently and help others think differently regarding student learning,
- Seek ways to better align the system as it progresses, and
- Remember the compelling purpose and the learners, and focus on the shared goal.

District leaders and principals will need to turn to the shared purpose and guiding principles to help make decisions both during the transition year and in the years to come. Virgel Hammonds, Superintendent of RSU2 in Maine, states that he is often asked about the Lindsay story (he was a high school principal in that California district) or the RSU2 story, as if there is a step-by-step process that other districts can follow. "It's not about one method," he says. "Every district and school has its own history and culture. They need to be able to tap into the assets of their communities and schools to develop the vision, guiding principles, and process that is right for them."

One thing superintendents have to ensure is that decisions are being made in the best interests of students. Adult issues or traditional ways of doing things—contracts, bus schedules, and athletics—can easily drive decision-making if superintendents, districts, and school leaders aren't vigilant. With all the complexity of how schools operate and the incredible number of small decisions that need to be made daily, Hammonds warns that leaders can get stuck being a manager rather than a leader. Leadership is needed to take a step back and ask, "How is this moving our kids along their learning progressions? How is this providing learning opportunities that are meaningful to our kids?" Hammonds emphasizes that superintendents have to consistently role model how to make decisions in the best interest of learners.

In a culture of compliance, leaders rarely talk about courage. After all, educators don't need to if they are only following directives from above. In competency education, leaders often talk about their fears and the need to overcome them (i.e., courage). Leaders will describe the courage it took to give up power within a distributed leadership model. They describe turning to a burning desire to do better for children as the force that lifted them over the fear of failure.

It also takes courage to be honest about how students are achieving. In his presentations about the transformational process that Lindsay Unified School District has undertaken, Superintendent Tom Rooney found that district leadership had to have the courage to recognize that they'd betrayed students, parents, and the community by graduating students who did not have the skills to go to college. District leaders need to nurture courage in their teacher workforce, as well, as they will be the ones who will need to have honest talks with parents, often for the first time, about where their students are in terms of academic levels rather than in terms of completing assignments or behaviors.

✅ LESSON LEARNED AND LEADERSHIP OPPORTUNITY

- Transition time is one of substantial discovery for the adults in the system—keep the focus on the growth mindset and celebrate learning. Teachers will often need time to unlearn practices before they can integrate new ones.

  Meetings are the most important way to bring people together to discuss issues arising in implementation. Invest in building up the capacity of the organization to use effective facilitation strategies. Build a tool kit to create structures for process, input, and decisions depending on the purpose of your meeting—problem-solving, continuous improvement, or reflection.[32]

  Consider placing a poster of the shared purpose on the wall of the conference room used for school board meetings and other decision-making groups. Point to the poster at critical decision-making points to ask how the shared purpose impacts the decision being considered. The practice will eventually transfer to other members of the school community and help you remain grounded in your shared purpose.

  Meetings are also important in developing ownership for the new system. Make sure that input is acknowledged, addressed, and used. If leaders don't routinely ask for input and deliberately use it, it is easy for stakeholders to become discouraged. Each interaction is an opportunity for building trust...or not. Strategically communicate about who has offered input and how it has been used to build the new system. Share the credit.

B. Selecting a Rollout Strategy

We discovered that in our rollout of performance-based systems, that although many of our learning facilitators were having rich conversations in small collaborative groups, we were struggling with systemic application. Learning Facilitators wanted instructional strategies, exemplars, and opportunities to observe one another. In response to this, we developed an instructional design and delivery coaching team to be at the site level to support and guide the work. This involves critical data based discussions, planning, role modeling, and goal setting, as well as feedback loops.

– Lana Brown, Assistant Superintendent, Curriculum and Instruction, Lindsay Unified School District

To date, there is no magic formula for how to roll out the conversion to competency education. Districts consider where leadership and enthusiasm is in place, where faculty is ready for the change, and where the most urgent need is based on academic scores. Adams 50 started with elementary schools, Lindsay started with the high school and has now rolled all the way back to elementary school, Pittsfield School District started with their Middle High School, and Charleston has started with a few of their elementary schools. At Sanborn Regional School District, significant elements of the effort began at the elementary and middle school levels and eventually progressed to the high school level. RSU2 asked faculty to vote whether they wanted to go forward before moving toward the transition after a year of inquiry and research. They then developed a rollout strategy to implement their learner-centered instructional strategies throughout the entire K–12 system.

In Chugach School District, district leadership clearly and publicly announced the direction, then each school developed their individual timeline. Some schools jumped in headfirst, while others phased in the new system over time, content area by content area. Along the way, each school shared successes and challenges, learning from each other, and eventually all realized they successfully achieved the same transition.

Fulton School District, neighboring Atlanta, Georgia, is using a multi-pronged rollout. They started by transitioning their summer school sites for middle and high school students from a traditional model to a competency-based model. This year, all K–12 summer school programming will be competency-based. In addition to being a cost-effective use of resources, teachers had the opportunity to see competency-based learning up close. They've also partnered with Marzano Research Labs and are developing and implementing proficiency scales, starting with K–12 Social Studies teachers. An additional partnership with New Classrooms brings the Teach for One math model to three middle schools within the district, which is already seeing positive results in improving progress and pace of students.[iv]

Districts and schools may want to have an even more discrete rollout strategy by beginning with a pilot. This can be helpful in identifying where capacity will need to be developed and anticipating issues. Jim Rickabaugh, Director of the Institute @ CESA #1, describes a piloting process used by some of the schools in their Wisconsin network. When initiating a new practice, schools use a prototyping cycle within a finite period of time. If the benefits are significant, then a planning process begins to implement the practice school-wide.[33]

[iv]   To learn more about information management systems, see Re-Engineering Information Technology: Design Considerations for Competency Education and Roadmap for Competency-based Systems: Leveraging Next Generation Technologies.

Based on the choice of rollout strategy, districts will need to think about the types and amount of support that will be needed. This may include training, coaching, and data collection to create a feedback loop to guide refinements. Students, parents, and teachers will all need to be prepared for the rollout.

✅ LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Consider the capacity of the district and school leadership to continue to use shared leadership strategies during implementation. Once the rollout begins and the school moves into the transition stage, the leadership demands will only increase. Determine what types of supports will be helpful for district and school leadership during this period.

- Teachers need time to work with each other. As students build agency and teachers gain more authority and accountability, it is essential that they be treated with respect as professionals and have time to meet and plan. If a school can't find time for PLCs and common planning, then it isn't ready for the transition.

- When designing pilots, be sure to include some of the high leverage elements of competency education, including transparent learning targets, calibration among teachers, and ensuring adequate supports. Very small pilots that focus on a few discrete elements of competency education such as personalized pacing may not generate results, as teachers are using lower levels of depth of knowledge, operating in isolation without adequate peer support, or unable to meet all the needs of students for instructional support without an organizational commitment of resources.

C. Preparing Teachers for Personalized Classrooms

As the navigators of learning, our role isn't to march students to their destinations, but to provide the feedback they need to get there themselves. While we try to keep them all on the path, we know that we will have some who will want to stop to smell the flowers, those who want to go the other way because they hate always being behind the pack, and those who try to convince the group to stop because it is a conspiracy launched by the adults to control their minds. Nothing works for all students. But if we know where we need to get them, it makes it easier to guide them.

– Bill Zima, Principal, Mt. Ararat Middle School

One of the necessary steps to ensure a district is creating a student-centered culture rather than one solely driven by standards is to prepare teachers for managing personalized classrooms. Pittsfield School District provided professional coaching courses for all their teachers. Don Siviski, former Superintendent of RSU2, describes eliminating all travel and non-related professional development in order to stop doing what wasn't working and marshalling all resources to supporting teachers to prepare for the transition to proficiency-based learning. Maine districts, in partnership with the Reinventing Schools Coalition, offered training on classroom design to help teachers look at their own beliefs about learning, examine tenets of personalizing learning,

build student agency by creating classroom codes of collaboration, introduce new operating procedures, enhance formative assessment, develop and take advantage of transparency of learning targets, and plan for a competency-based instructional model that emphasizes higher order skills.[34]

Teachers can begin to use a variety of ways to manage their personalized classroom, including creating a shared purpose with their students, standard operating procedures that emphasize how students can get help (re-read the directions, ask a peer, then ask the teacher), visuals with the standards to indicate how students are progressing, posters that emphasize a culture of learning and the idea that mistakes are simply part of that process, examples of student work that are considered proficient, parking lots, and planning tools to guide students in thinking through what they will need to be successful.[35]

Many schools fall into a trap in the first years in that they teach learning continuum in a rigid, linear fashion because they have been written that way. Brian Stack, Principal at Sanborn Regional High School, explained that the very opposite should be happening. "The competencies target our learning for us and help us see how we can connect learning." For example, one team in the Sophomore Experience created a unit on epidemics. They read The Hot Zone as part of their English Language Arts, looked at the government's role in crisis for social studies, and built knowledge on viruses for science. They then tied it all together by producing and presenting an emergency response plan.

✅ LESSON LEARNED AND LEADERSHIP OPPORTUNITY

- Many schools encounter unintended consequences during the transition from a time-based, one-size-fits-all culture to a personalized culture invested around intrinsic motivation and student agency. Teachers may find that some students fall behind when they are given too much leeway in moving along at their own pace. Other students may not submit homework because there are no longer points attached to it, or fail to study for tests because they can count on taking a re-assessment later on.

  To prevent this, educators must make sure that each class develops a strong code of collaboration or shared purpose to help shift the ownership of learning to the students. A meaningful set of habits of learning is also important so that teachers can use them to reflect with students on their behavior and the consequences. Teachers can negotiate how much independence students have based on their demonstration of the habits. When students do try to take advantage of the greater flexibility to do less, teachers can engage them on their habits and the impact they will have on their future lives in college and careers.

  Beware of how "time is a variable" can be interpreted. Emphasize that pace matters and turn to the idea of the growth mindset to put the focus on effort. The variable of time doesn't mean that students can lag behind—it is that students may need more time during the day or week to work on the concepts with the necessary instructional support. Make sure that students know they need to demonstrate proficiency before they take an assessment—thus assignments may be opportunities for practice and to demonstrate learning. Re-assessments cannot be taken until additional work is done to demonstrate their learning—thus students will have to do more work, not less, if they choose not to study for exams.

D. Planning for Leveling and Parent Conversations

First, we need to make sure the system is transparent about where students are on their learning progression and how they are progressing. And we need to have honest conversations about it without blaming the child, educator, or system. We can't hide behind any excuses. We need to have the courage to act in the best interest of our kids.

– Virgel Hammonds, Superintendent, RSU2

As described previously, schools will need to determine students' academic levels as distinct from their grade levels (often referred to as leveling). It will be important to help teachers prepare for engaging parents in the initial conversation about where students are on their learning progression. Anticipate questions such as, "Why is my child not at grade level? Why are you starting him on an academic performance level rather than on grade level? Why is my child's target for growth an academic level or two rather than their grade level?" (Listen between the lines, as what they are really asking is, "Will my child ever catch up?")

According to Copper Stoll, formerly Chief Academic Officer at Adams 50, the district dedicated a day to meet with every parent to inform them of their child's placement in ELA and math the spring before they began their K-8 competency-based system. Teachers had talking points to help create a consistent message. They personalized the conversation by providing folders that included information on the standards their child would be learning based on the student's academic placement as well as brochures that explained the personalized mastery system. This laid the groundwork so parents wouldn't be surprised if their child was placed in an academic performance level below their chronological grade level in the coming year. They continued to use a quarterly reporting system that parents were used to while introducing the standards-based progress reports. They also offered parents access to the electronic information system so they could monitor progress independently. According to Stoll, "Parents didn't express any concerns, as they knew their kids were behind and they were grateful that we were finally doing something to address it!"[36]

Ephraim Weisstein, founder of Schools for the Future, recommends expanding the conversation. The discussion with parents and students about learning, progress, and pace should be followed by conversations about the bigger picture—the development of their child, their habits of learning, and their path toward graduation and beyond.

Creating access for parents and students to the digital information system is a powerful step for reinforcing student ownership and a culture of learning. At Chugach, the initial discussions were centered on the students who performed below their "age level," and eventually moved to areas where they might already be ahead. The result was a series of productive conversations about student strengths and interests as well as areas for improvement. As Superintendent Bob Crumley put it, "Adults had the most concern about student performance placing them in levels below their perceived 'age level.' Students had less concern about this because it was information they already knew. The new system seemed like common sense to them, as they intuitively knew that all students were different and performed at varying levels across the content areas. This dynamic led to students increasing their likelihood of providing peer help and asking for peer help. Over time, the conversation changed. Rather than focusing on students who were 'behind,' the light began to shine upon where students were actually performing and what strategies and resources were going to help them advance."

✓ **LESSON LEARNED AND LEADERSHIP OPPORTUNITY**

■ One of the big shifts of culture in a competency-based system is that the idea of being "fair" to students and their families is no longer about giving them a higher grade or points for good behavior. Instead, educators are honest about where students are on learning progressions and ensure they have adequate supports in place so that students are not academically behind indefinitely. Because a competency-based system is transparent and honest about where students are on the progression, it gives them the chance to build their skills—an opportunity that is denied them when we say students are getting an A, B, or C but are not actually learning the skills they need.

E. Making Mid-Course Corrections

We need to have honest conversations about when a process or approach isn't working. Adjust it now if you know it's not working. It can be difficult because everyone is working so hard, and they might have spent months trying to develop a new process. But if it isn't working, they need to deal with it, not wait until the end of the school year. We have to be courageous to confront activities that aren't moving kids in their learning. We can't be afraid to confront the truth. If a process isn't working, either refine it or scrap it.

– Virgel Hammonds, Superintendent, RSU2

Bob Crumley explained that in the early years of the transition at Chugach School District, he felt like he was "pulling weeds." As the team implemented the new instructional models, they kept stumbling over practices and operational issues that were rooted in the traditional, time-based system. For example, students were learning through extra-curricular activities, but CSD wasn't including that performance data within their system. They turned extra-curricular activities into co-curricular activities by building in processes, students, and stakeholders until they began to see that learning occurs anywhere and at any time. Expanding the walls of the classroom to include athletics, student government, field trips, the arts, and career development created opportunities for students to pursue high interest learning opportunities.

Both Brian Stack, Principal at Sanborn Regional High school, and Jonathan Vander Els, Principal at Memorial Elementary, have described having to refine their grading and scoring systems after the first year of implementation. Stack pointed out, "As a leader, what stood out for me as an example of resolute leadership was when my fellow administrators and I had the courage to recognize that a decision we made was not working, and we were able to make a change mid-year. It would have been very easy to use that mistake as an excuse to go back to our old system, but we managed to stay true to our vision for competency education and find a way to overcome the hurdles and roadblocks that were put before us."

Keeping the community engaged throughout implementation is critical. As Pittsfield School District began implementation, they alerted their Community Advisory Council (now called the Good to Great Team) as they hit implementation issues to engage them in problem solving around mid-course corrections. Rick Schreiber of the Reinventing Schools Coalition cautions, "Often a district will establish a strong shared vision but fails to implement regular communication with stakeholders to seek out further input. In the beginning, stakeholders

are building trust, and there is excitement about the upcoming changes. The second and third years are critical for leaders to continue the shared vision process to address the social, emotional, and logistical issues that arise from second order change."[37]

Principals will find that as teachers stretch themselves to meet the needs of students, there will be significant demands to increase the responsiveness and flexibility of the school to provide resources. If schools didn't organize a flextime for instructional support, they will want to do so immediately. There will also be demands for more modular calendars so that frequent regrouping can happen to help students who need additional support advance to where their academic and grade levels are closely aligned (i.e., staying on track).

Memorial Elementary School found that their competency-based approach "fit flawlessly into our tiered-response model." Still, creating a schedule wasn't easy. Team leaders worked together to devise a schedule that provided time for intervention and extension, the LEAP block, for every grade level. There were varying points of views and considerations about how to do this, and they ultimately designed a schedule that took into account the developmental needs of students. The result is that every student can get extra help on whatever is most challenging to them every day. Similarly, Pittsfield School District had to go through several iterations before landing on a fairly traditional schedule four days of the week, with Wednesdays having a late start and shorter classes to create time for teachers to meet and pursue professional development, to have a block of time to support students academically and in leadership development, and to offer the high interest, project-based learning in Studios.

✅ LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Practices that need to be discarded or refined are often related to the master schedule; assessment, grading, and reporting; honor roll and valedictorians; competency recovery; athletic eligibility; and transcripts and college and career planning. Some of the mid-course corrections will be easy to facilitate, while others will have much more complexity, challenge deeply held belief systems, and may even feel counter-intuitive.

- Culture change is slow and needs constant reinforcement. Fidelity of implementation will be dependent on the ability of district and school leadership to tap into the motivational drivers of educators and engage with skeptics to overcome their resistance. Leadership attention is needed to fully integrate new practices.

F. Refining the Instructional Model and Enhancing the Instructional Cycle

Is it just enough for us to say that in education we are standards-based? Does that result in students who are competent? Not necessarily so. We do need to have students learning what they should know and be able to do within a discipline. However, competency really speaks to a depth of knowledge that is beyond knowledge of content and skills. Competency requires that students acquire, make meaning of, and also transfer their content and skills.

– Rose Colby, Consultant on Competency Education

The instructional infrastructure and its focused attention on student learning, the instructional cycle, and teacher skill-building will be a work in progress for several years. The first year, teachers will offer a flurry of ideas about problems, refinements, and innovations. It is important to create a strategy for managing the revision process. Summit Public Schools has a lean start-up model that quickly tests out ideas to see if they are valuable before implementing them school-wide.[38] Many districts engage educators in dialogue to determine which items are critical to change and which can be addressed later on, which helps to prevent the new system from imploding under the weight of its own potential.

Many issues are likely to emerge at this time: how to improve consistency on assessing student work, how to lift up both assessment and instruction to higher levels of learning, how to better support students who have difficulties with subject matter, how to provide more opportunities for students to personalize their learning experiences, and more. It is likely that the misalignment between the desired depth of knowledge, assessment, and instruction will emerge as a healthy tension as educators recognize that it is an obstacle to ensuring students are attaining higher levels of learning. Based on the feedback from educators, principals can co-design a strategy to strengthen assessment literacy, deepening their knowledge of teaching disciplines through the work on learning trajectories (now referred to as learning progressions), and building performance assessment capacity. It's not all going to happen in the first year.

In the third year of implementation, Memorial Elementary School began to focus on strengthening their instructional capacity in math. They turned to the Ongoing Assessment Project (OGAP) that is based on research on learning progressions and cultivates the use of formative assessment in the instructional cycle. Teachers worked together on learning progressions to more deeply understand the reasoning behind major concepts, such as multiplicative reasoning, and expanded their instructional strategies to help students learn. For example, students were expected to explain their reasoning and unpack how they were solving problems so teachers could have more data on where to provide formative feedback. Teachers began to build up item banks that provided substantial information on how students approach math problems. They also developed additional assessments of major concepts to ensure students understand the fundamentals they will need for later courses.

Chugach made three significant enhancements to their instructional framework. First, they focused on "inter-rater reliability" or calibrating assessment of performance-based assessments. Dedicated time for staff development and the opportunity to score the same student work led to discussions about the assessment tools and processes. Over time, this expanded to include refinement of the tools, instructional alignment, and more meaningful feedback for students and parents. Second, they introduced process standards in all content areas to better prepare students to be lifelong learners. Beginning with the scientific method and later including others such as writing processes, math problem-solving processes, and conflict resolution, staff worked together to build their skills at teaching processes. Eventually the process standards were embedded into the performance-based assessment structure. Older students now use the process standards in developing their individual learning plans. Third, the teacher evaluation system at Chugach was upgraded to reflect the same values and principles. Today, all staff are involved in a year-round Performance Evaluation Process (PEP) that is part of the pay for performance system. Teacher scores are averaged across the district so that Performance Pay is equal for all teachers. This has led to teachers who are scoring higher to be more likely to reach out to assist those who are new to the profession and those in need of assistance. All of this is done in a collaborative spirit where teachers understand that they are all in this together, and ultimately for the good of the students.

G. Preparing for the Implementation Dip

There is likely to be an implementation dip during transition years. After the initial work is done, confusion tends to rise and achievement scores may go down. The question is, how fast can districts get beyond the dip and embrace the new practices?

Pittsfield invested heavily in preparation and engaging the community, and then implemented the redesign in one year. It was a challenging year of "ripping off the Band-Aid." But when they came back in September of the next school year, they were all going in the same direction and were ready to begin refining and enhancing their student-centered approach. Building in a late start Wednesday for teachers to meet made the implementation year manageable.

Chugach solidified the school board and district leadership commitment to a long-term strategy and created an intentional communication strategy that reinforced the idea that the system transformation will take several years. They also used data to intensify the sense of urgency by reminding people of the poor results in the traditional system as well as celebrating small steps of progress. Most importantly, they kept their community engaged so members could continue to deepen their understanding and celebrate alongside the students who were beginning to thrive and enjoy coming to school.

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

- Remember to use the shared purpose and guiding principles when doubts arise during difficult times in the first years of implementation. There may be times when it feels best to create hybrid models that maintain parts of the traditional system. Test those ideas out with your guiding principles to ensure they won't undermine the commitment to learning and supporting all students to reach proficiency.

- Districts converting to competency education know they need to invest in organizational learning in order to fully integrate the new infrastructure. Learning means mistakes are going to happen. Just as competency-based schools need to create a safe place for students to make mistakes, those districts converting to competency education need to create safe environments for educators. This means district leadership will need to engage state leadership with the institutional power to create room for innovation. Invite policy leaders to site visits with you to more developed competency-based schools. Encourage them to read Necessary for Success about how other states are creating innovation space. Most importantly, recognize their leadership when they take risks themselves to change the top-down compliance culture of state-level organizations.

THREE WAYS DISTRICTS STUMBLE IN IMPLEMENTATION[39]

In interviews, district and school leadership have shared the ways they learned from their mistakes when they stumbled or the ways their neighboring districts have encountered troubles.

A. Are Your Shared Values and Shared Purpose Alive?

If districts and schools do not have a clear, shared purpose or do not consistently use their shared values in daily decision-making, it is difficult to develop or maintain the desired culture. To ensure that shared values are embedded within the fabric of the schools, create a shared purpose for the entire district, with schools developing a variation for themselves and with each teacher developing a "code of cooperation" with their students to ensure ownership of the commitment to learning.

At RSU2, complex problems are addressed using the school's set of guiding principles such as, "Students learn in different ways and in different timeframes" and "mistakes are inherent in the learning process." For example, by using the guiding principles at public discussions on the budget, RSU2 has been able to resolve issues and reinforce the shared purpose of the school system.

B. How Distributed is Your Leadership?

When processes are inadequately inclusive or shared leadership is in name only, schools will quickly revert to turning to higher levels of governance, the district, or school leadership to make decisions. This can also open the door to mistrust if people are invited to participate in processes only to find that top management makes decisions through separate processes. Educators need to understand the decision-making processes, their role in it, and when they will have opportunity to have input. District and school leadership will need to take the responsibility to design, get feedback, and then implement decision-making processes with integrity.

There are several ways districts can invest in distributed leadership to ensure it is sustainable. First, create organizational structures that ensure participation, be clear about responsibilities, and encourage membership. Second, leadership needs to ensure that processes are clear and that there is someone to check that they are implemented with integrity. Third, the focus should remain on the shared purpose. Distributed leadership can create difficulties when individuals take ownership but are more enthusiastic about their own ideas or only consider their team rather than the whole. District and school leadership may need to make interventions to help people see how ideas might work for them but not for everyone else.

C. How Strong is the Ownership?

Districts have often relied on marketing or buy-in methods to introduce new initiatives. However, community members or educators may accept the initiative without ever having a sense of ownership and can begin to blame the district when implementation doesn't run smoothly. Superintendents who have converted to competency education suggest engaging community members and students in developing and periodically revising the shared purpose so that new community members have a chance to have ownership. Internally, you may wish to develop processes that take into consideration motivational theory and clear decision-making processes so that staff understand the scope of their autonomy. Consider making the process of creating shared values and a code of cooperation a non-negotiable for educators. Perhaps, as Pittsfield School District has done, students can become part of policymaking processes. Embed reflection by all stakeholders to think about their contribution and ownership into operations.

vi. Embracing Continuous Improvement and Innovation

We aren't done innovating until 100 percent of our students are graduating.

— Ty Cesene, Co-Director, Bronx Arena

It is no surprise that Chugach School District received the Malcom Baldridge National Quality Award in its seventh year after creating a performance-based system. Competency education creates the conditions for continuous improvement and mutual accountability in managing school operations. When the only data is attendance and A–F grading scales, districts do not have access to data that allows them to track student progress in learning. With the rich data produced in competency education, schools can drive towards what Marzano Research refers as "high reliability" schools—schools that are able to continue to reflect upon their own performance and adjust to better meet the needs of students.[40]

There is a tremendous shift for leaders to move from compliance to continuous improvement. Compliance has an inherent element of fulfilling specific requirements where continuous improvement reaches for the stars. Oliver Grenham explained that at Adams 50, they discovered there was no middle ground. They were "all-in or nothing" because the shift to competency education requires a totally different paradigm. He compared it to that visual game in which you can see an old woman or you can see a young woman, but you can't see both at the same time. For district and school leaders, this means having to learn about continuous improvement management techniques early in the transition, even before the data may be fully available. There is simply no way to revert back to compliance management strategies after a second order change. The culture of learning expands to become a culture of continuous improvement with a focus on results.

Continuous improvement in this context is a formal methodology or a system to improve performance through reflecting upon data, engaging stakeholders in discussions about variation or low performance, planning for targeted improvements, and then repeating the cycle. Many districts use an easy to use process of Plan-Check-Act-Do to manage improvements. There are other techniques, as well, such as implementing quality controls or benchmarking against other organizations to seek out and adopt best practices.

At times, continuous improvement activities may be an internal process with educators fine-tuning the operations and practices within a school. For example, at Sanborn Regional High School, the ninth grade is organized into five academies, each with a team of teachers. The teachers, working as a PLC, use data to help students boost their skills, develop habits of learning, and successfully transition into high school. However, if the focus of the continuous improvement process has wider implications, a broader set of perspectives including students and community members will be brought into the process. Larger issues and more inclusive processes will of course affect the timeline. Over time, management teams will build the capacity to develop insightful management and exception reports that allow them to monitor performance (quality) and seek improvements to better serve targeted populations as students and as system-wide breakthrough innovations.[41]

New Hampshire's Virtual Learning Academy Charter School (VLACS) has embraced continuous improvement driven by a focus on student-centered learning. Already offering highly individualized, open-entry, competency-based online courses and competency recovery, VLACS began to seek ways to create greater personalization in which students could have more opportunity for learning experiences based on their interests and wider selection in how they learned and demonstrated their learning. VLACS is creating a variety of options for students to learn through projects and through experiences such as internships and college courses. Thus, students will have the opportunity to co-design their learning to a much higher degree as they select the mix of instructional approaches that are right for them.

✅ LESSON LEARNED AND LEADERSHIP OPPORTUNITY

■ As districts build the capacity for continuous improvement, they find they need a more agile organizational capacity—they need an adaptive district. They may start by thinking about the organization differently by placing students at the top of the organizational chart rather than the superintendent or school board. Then they will begin, as Pittsfield School District and Chugach School District have done, to develop a flatter district organizational structure. Job descriptions are revisited, success measures put into place, and structures established to emphasize the knowledge, skills, and talents the adults need to succeed.

A. Improving Performance and Personalization through Powerful Data

We've learned that in order to manage in a performance-based system, we need to start with a balanced scorecard. When doctors do a check-up, they look at your heart, lungs, and weight. They consider it in terms of your height, gender, age, and your previous health status. We know that to have an accurate portrayal of our health, we need a balanced scorecard of indicators. The same goes for education. We need to have a balanced scorecard of indicators for our students, staff, and stakeholders to use to make decisions.

– Dr. Bob Crumley, Superintendent, Chugach School District

Timely, relevant data plays an important role in the transition to student-centered learning. In the process of the transition to competency education, school leadership, educators, and students will want, or even demand, an integrated information system to take advantage of the increased data on student learning. The drive toward improved student performance will increase the demand for data to guide greater personalization. Teachers who recognize the value of tracking student progress based on standards will not be content with the modifications allowed in most traditional student information systems or learning management platforms organized around semesters and courses. They will want to be able to monitor, support, and credential learning on standards regardless of if students are working below or beyond their grade levels. This requires organizing standards in a learning continuum beyond the course structure and displaying data in a way that gives a picture of the student profile—an entire student's body of work and mastery, not just grading assignments and assessments within a course.

An integrated learning system to support competency-based environments starts with student profiles and standards-based learning continuums. Indicators of a student's progress on each standard across content areas are key. Many vendors are offering standards-based or competency-based grading, but don't provide the student-centered approach to managing progress along a learning continuum in all the significant domains. The student information systems that support traditional time-based schools are organized by courses or classes—not students—thus it is very difficult to generate a picture of how students are advancing across disciplines and over the years.

In early stages of the transition, most districts collect data on how students are progressing within the academic disciplines. As the competency-based system is further implemented, tracking of data on student learning often expands to include habits of learning, the type of learning experiences to ensure students are having adequate opportunities to apply learning in real-world settings or projects, and a broader set of domains. Bob Crumley explains, "It's important to send a message that the state testing indicators aren't the end all, even if that's the focus of state legislators. It sends a powerful message when the state only tests reading, writing, and math but not social studies or employability skills. As a district, we had to put into place a system that created a meaningful and balanced way to talk about student progress and our effectiveness in all areas. We believe all content areas are equally important. We dedicate staff development and resources on all ten content areas. We monitor progress and celebrate growth in all ten areas."

While stitching and patching together systems that require teachers to enter information into two systems can serve as a stop gap fix in the short run, this is absolutely unsustainable in the long run. New options for next generation learning platforms that are taking into consideration the needs of competency-based schools are beginning to emerge. Some districts are creating customized systems in partnership with vendors. Schools purchasing new products or working with small vendors may be frustrated with inadequate product support, and creating customized systems will raise issues of its own. It is best if a district takes the time, as Fulton County Schools is doing, to develop an enterprise architecture to guide decision making. The process of designing a full enterprise architecture requires districts to clarify—and, if need be, redefine—the core functions of district and school operations and the data needed to support it. The bottom line is that districts will make decisions based on local considerations and the urgency of their need to create transparency for teachers and students to track progress and help focus instructional support to ensure students are continuing to advance.

In addition to developing integrated management systems, districts will need to nurture the culture and capacity for data-driven learning. The student data for personalizing learning with a culture of continuous improvement can be deeply empowering to all the members of a school community. Students and parents can monitor progress in close to real-time. Teachers can more easily personalize education for students' needs, monitor progress, and see where they need to improve their skills. Principals can identify early on when there are students struggling in a number of disciplines or transitioning from steady progress to a slower rate of learning.

Integrated information management systems and blended learning can power personalized models and help bring them to scale. Data-driven instruction will require that teachers expand their skills. As reported by iNACOL, teachers will need to build their technical skills, competencies, and capacity to use data, including the ability to:

- Use qualitative and quantitative data to understand individual skills, gaps, strengths, weaknesses, interests, and aspirations of each student, and use that information to personalize learning experiences;
- Use data from multiple sources to inform and adjust individual student instruction and groupings; and

- Create ways to move ownership and analysis of data to students to promote independent learning. Continually evaluate technologies, tools, and instructional strategies to ensure their effectiveness.[42]

As districts and schools begin the process of designing information systems, it is important to keep the decisions about operations and data-driven instruction in balance with the availability and capacity of the technology. For example, as teachers build their capacity to manage flexible personalized learning environments, they will be generating data on student learning through direct observation, formative assessments, and in dialogue with students. It is important to consider in advance how much assessment data teachers are going to need to track, analyze, and adjust for instruction in relation to student progress—and then look at the degree of ease in digitally managing this information. Districts have learned to stay focused on the most important items to track so teachers can concentrate on providing responsive instructional support.

In developing an integrated learning system, districts will also want to consider how it enhances student ownership of how, when, where, and what they are learning. In making design choices about the information systems, districts have an expanded understanding of end users and are thinking about how students, parents, teachers, PLCs or departments, principals, and district staff can use data to enhance learning and increase the agility of the system. For example, dashboards can be created that facilitate the use of data from different stakeholder perspectives, thereby empowering teachers and students and helping to inform conversations about instruction and daily operations.

As districts continue to deepen their implementation of competency education, it is anticipated that a deeper understanding of the system requirements and capabilities for a comprehensive integrated learning system will be developed. Such a system provides the platform for a school's learning environment by enabling the management, delivery, and tracking of student-centered learning, and includes robust reporting and analytics capabilities. An effective and well-designed information system is an important tool for educators to input and analyze data about their students; to curate instructional materials; to track student mastery; to support students in documenting their work and progress toward mastery; and to communicate with students and their families about their progress. An integrated learning information system could also provide data to school and district staff on the use of instructional materials and their impact on student performance.[43]

LESSONS LEARNED AND LEADERSHIP OPPORTUNITIES

■ When writing requests for proposals (RFPs) for an information management system, start with describing the desired functionality (the ability of the system to accomplish a goal) rather than a list of features (tools or features). An RFP that is a long shopping list of features can cause difficulty in implementation later on. When using functionality, district and school leaders will need to describe use cases that can help them think through how single or multiple products will help meet their goals. This is particularly important for competency-based districts, as there are new functions being developed such as monitoring the level of the depth of knowledge students are demonstrating.

■ Districts will want to begin to build their analytical capacity to better support principals in designing and using management and exception reports as well as rethinking performance metrics for the system, such as doing cost-benefit analyses. How much learning is happening per unit of time? What strategies are working to address the needs of students not yet proficient? What are the most effective approaches? What is the most cost-effective use of resources?

■ Be careful of expecting a one-solution approach and, alternatively, cobbling together systems that don't integrate well. Begin with an enterprise architecture approach. New platforms and technology tools are emerging that will better help meet district need expectations for data and information management, as well as content and learning management.

B. Addressing the Needs of Struggling Students

After the first few years of transition, districts begin to have the bandwidth to look more deeply at where students are not advancing or are at a lower level academically than their age-based grade. Although not necessarily done in a linear fashion, there are three ways that districts and schools begin to respond to struggling students. First, they create strategies and direct more resources to struggling students. Second, they begin to explore more deeply how habits of learning impact student achievement, building out their capacity to nurture students. Third, they seek out ways to improve instruction overall so that more teachers within the school have the disciplinary knowledge to help students advance.

At Sanborn Regional High School, the Freshmen Learning Communities are designed to help ninth graders build the skills they need for success and identify where students need additional support. They are finding that the conversations about students with special education needs are more focused on learning and progress than behaviors. The understanding of standards, differentiated instruction, and accommodations for assessments has become much more clear and intentional.

Pittsfield Middle and High School (PMHS) is exploring different ways to respond to the needs of students who are struggling or enter school more than one year behind in grade level. They've developed a strong intervention system, with an emphasis on reaching students in middle school. They have reading and math specialists and are providing double doses of reading and math. They also are reaching into elementary school with a special education teacher at every grade level, working to help students learn foundational skills.

Students receive more time, support, and instruction until they succeed.

High school is harder, as many of the students who are struggling have given up and don't want to be in school at all. PMHS worked with the Virtual Learning Academy Charter School to provide competency recovery for students. They then began to build the capacity for competency recovery into Pittsfield, with resources set aside to support students during the summer. They also are exploring ways to use personalized learning to respond to the needs of struggling students, creating opportunities to build their skills through areas of interest instead of just repeating courses.

Lindsay Unified School District continues to innovate to better support students who don't have the skills they need. They have expanded the capacity of teachers to support literacy across the curriculum to better respond to English language learner students at the bridging level. They have added special programming for incoming freshmen who have weak foundational skills, and they offer online learning to fill gaps and build fluency. They have expanded their emphasis on habits of learning, what they refer to as lifelong learning skills, to be more powerful in engaging students and asking them to reflect on the skills they need to succeed. They are now beginning to think about ways they can better serve the group of students that are disengaging from high school by offering more flexibility, opportunities to work and take college courses, and support to address issues in their lives that may be getting in the way of school.

C. Revisiting Shared Vision and Instructional Model

Districts can keep the shared vision alive by periodically revisiting it in partnership with their communities. This provides an opportunity for district and school leadership to engage new members of the community in the vision, continue to address the concerns of skeptics, and, if the demographics of the community are changing, revise the vision to encompass their vision for their children.

Similarly, engaging educators in revising the instructional model periodically is important. Rick Schreiber from the Reinventing Schools Coalition advises districts to strive to develop regular cycles for making adjustments. This allows schools to collect input over time and to consider that input and the reasoning behind the suggestions in a cohesive process.

Schools will vary in how much time they need to become comfortable with the new instructional design and when they are ready to begin a revision process. Depending on the rollout strategy used within a school, principals and district leaders will need to determine when is the best time to engage in revision based on the progress of their schools.

As teachers revisit the instructional model, it is likely that they will want to touch on the overall pedagogical approach, as well. Their understanding of motivating students and instruction and assessment will be growing, and they will likely want to enhance the description of the school's approach as well as the I&A model. For example, after a few years of implementation, Chugach began to monitor the instructional approach that students were using to learn. Based on a belief that it is important for students to have varied learning experiences (including direct instruction, interdisciplinary units, performance tasks, and independent learning), the schools and district staff use their AIMS web-based information management system to ensure that students are receiving a balanced approach to learning.

In Pittsfield, teachers have engaged in rich conversation about the implications of student voice and choice within the learning process. Former Dean of Instruction Sue Graham explained that as teachers unpack the

standards and competencies to identify the enduring questions, they begin to ask, "What are the different ways students can get to those competencies?" She pointed out that the depth of knowledge teachers have in their content area makes a difference. The more knowledgeable teachers are of the discipline and the competencies, the more comfortable they are in offering flexibility to their students. Increasingly, teachers are starting to understand that if they don't know where students struggle and where the misconceptions are occurring, they are limited in how they can help students overcome them.

Other areas where districts are strengthening their approach include investing in knowledge on learning progressions, building systems of performance-based assessments that lift the level of knowledge to ensure students are able to apply skills, and developing a cohesive approach to helping students build habits of learning.

D. Staying the Course

I don't manage through memorandum. I don't know the last time I made a district-wide mandate. They just don't work because there is no ownership. Practices are likely to be implemented at a minimal level and may slip away under new leadership. By having the chance to be part of the process, our team sees the value in decisions regarding district operations and the instructional model. By having a chance to do their own inquiry, they are developing their own understanding about the instructional approaches they can fully integrate into their own practice. It may take longer, but the investment in the process is well worth it.

– Dr. Bob Crumley, Superintendent, Chugach School District

Many districts are converting to competency education in states that have not yet begun to take the steps toward creating the vision and policies to support competency education. Even in states that have embraced competency education, leaders may need to respond to policies that have not yet been re-aligned. Thus, leaders must learn to stay true to their vision and purpose in navigating state policy. They may turn mandates into opportunities or actively work in partnership to co-create the new policy infrastructure. Essentially, they operate beyond the boundaries of the policies so that decision-making continues to be student-centered.

One of the leadership functions needed to stay the course is being able to turn top-down compliance requirements into opportunities to reinforce the empowered culture of learning and improvement. Bob Crumley talks about how he manages mandates by stating, "I've learned to see mandates from the state as opportunities. We will meet the letter of the law, but we aren't going to let the tail wag the dog. For example, we have a state mandate about including state assessment scores in teacher evaluations. We have a great teacher evaluation tool developed by teachers and our administrative team. I'm not going to make any changes to the evaluation tool that causes a loss of ownership. Instead, I'm going to tell our teachers that there are state requirements we need to meet, and we'll take this opportunity to see if we can improve the evaluation tool to help us get better at serving our kids. If we said that we were doing it only because the state required us to, it would send the wrong message to teachers and students. We look to see the value and opportunities that develop when outside forces require us to change and adapt. Continuous improvement is a core value and process at Chugach School District."

States and districts are also finding ways to work together to advance competency education. For example, four districts in New Hampshire are partnering with the Department of Education to pilot the development of local performance-based assessments that will eventually lead to a state-wide system. These assessments, known as Performance Assessment for Competency Education or PACE, are designed to provide richer feedback to teachers and students in a much more timely fashion than state assessment systems.

Brian Stack advises school and district leaders that, "Making the transition from traditional to competency-based grading is messy. No matter how much you plan for it, administrators and teachers will feel a sense of building the plane while flying it in those first few years of implementation. Stay the course in the face of adversity. Stay true to yourself and to the model. Trust that your teachers will stand with you, and together you will face the challenges that will lie ahead and find a way to work through them as a school community. Your patience and persistence will be rewarded."

Bottom line, leaders will need to turn to shared leadership strategies to empower educators and engage the community through the ups and downs of the change process, even though there will be pressure to become the sole decision-maker.

Students show what they know.

VII. Concluding Comments

During our research over the last five years, we have had powerful conversations with extraordinary educators leading the transformation to competency-based education. The conversations with district and school leaders have provided the insights and lessons learned throughout this paper.

The paper has explored four stages of the process of converting a district or school to competency education, emphasizing leadership strategies, community engagement, development of a culture of learning, and design decisions for creating an instruction and assessment model. The insights provided by innovators offer a shared recognition of opportunities and challenges encountered in the transition. The evolution to a district-wide competency-based system will not be easy, yet the strategic recommendations from cutting-edge leaders provide a basis to develop strategies to ease and accelerate the transition.

It is important to note that this journey requires a shift in paradigm from a system-centered approach to one that is learner-centered. Leaders and educators must understand the research on teaching and how students learn. They will need to redesign their instruction and practices based on these understandings, placing students at the center. Teachers have described their transition year to competency education as the most challenging year of their professional lives, the most reflective, and also the most meaningful. They have also emphasized that they cannot imagine going back to the old way of doing things.

As your district or school transitions toward competency education, don't expect to immediately observe wholesale changes in the classroom. Jonathan Vander Els and Ellen Hume-Howard both note, "A visitor checking out classrooms at the Memorial Elementary School might be surprised at how traditional everything looks. It's the little things that might catch your eye, however: the charts and graphs on the walls depicting student learning targets, the student work displayed with the standards identifying the learning outcomes, and the conversations students have identifying precisely what they are working on." In these early stages, teachers are busy collaborating with their peers and building new skills. In later stages, as teachers become comfortable in a competency-based learning environment, they will begin bringing new ideas to their leaders and pushing the concepts of what learning looks like as they co-design learning experiences with students that blur the boundaries of school walls, geography, and time, using technology and expanding opportunity for anywhere learning.

It is our hope that the discussion offered here will prepare you to begin the transformational process to design schools where success is the only option for students. As you enter this new phase and develop your own strategies and lessons learned, we hope you share them with your fellow innovators and peers on CompetencyWorks.

Again, thank you to these leaders for their commitment to share their experiences, their creativity in redesigning the system, and their continued vision of transforming the education system into a platform for student empowerment, equity, and success.

Endnotes

1 White, Taylor. *Giving Credit Where Credit's Due: A 50-State Scan of Course Credit Policies*, Carnegie Foundation (August 5, 2013). Retrieved from: http://www.carnegiefoundation.org/blog/giving-credit-where-credits-due-a-50-state-scan-of-course-credit-policies/. *Note: Since the preparation of this report, the District of Columbia, Virginia, and Illinois have taken some steps towards opening up their policies.*

2 To understand the distinction and relationship between personalized learning, competency education, and blended learning, see *Maximizing Competency Education and Blended Learning: Insights from Experts*, CompetencyWorks Issue Brief (March 2015) by Susan Patrick and Chris Sturgis.

3 For an explanation of how the time-based system was developed, see *The Carnegie Unit: A Century-Old Standard in a Changing Education Landscape*, Carnegie Foundation (January 2015) by Elena Silva, Taylor White, and Thomas Toch.

4 There are several sources of introductory materials. The CompetencyWorks list of Briefing Papers offers introductory materials, including those for state and federal policymakers. Great Schools Partnership offers Proficiency-Based Learning Simplified. Achieve has created a Competency-Based Pathways Communications Toolkit that provides key messages and talking points about competency education. Jobs for the Future's The Past and the Promise: Today's Competency Education Movement offers insights into the research-based underlying competency education.

5 All references to Virgel Hammonds are based on an interview that was published as *Virgel Hammonds' Six Insights into Leadership*, CompetencyWorks (October 8, 2014).

6 The reference to understanding leadership through the metaphor of dance floor and balcony was suggested in an email exchange with Don Siviski, previously the superintendent of RSU2 and the Maine Department of Education's Superintendent of Instruction, currently at the Center for Secondary School Redesign. The metaphor was developed in *Leadership on the Line* by Heifitz and Linsky.

7 All references to Sanborn Regional School District, Sanborn Regional High School, Memorial Elementary School, and the leadership team of Brian Blake, Ellen-Hume Howard, Brian Stack, and Jonathan Vander Els are based on site visit in February 2014 and their publications of their insights on CompetencyWorks. Please see *Sanborn Regional School District Flips District Reform* for the summary of the site visit. You can also find resources explaining the Sanborn Regional School District on the CompetencyWorks wiki.

8 Please visit Bill Zima's contributing author posts on CompetencyWorks to find the entire series on leadership and leading a proficiency-based school on which his insights in this paper are based.

9 All references to Bob Crumley, Debbie Treece, Andrea Korbe, Jed Palmer, and Doug Penn are based on interviews conducted on October 8-22, 2014 during a Chugach School District site visit. Read the entire site visit overview starting with *Driven by Student Empowerment: Chugach School District*, CompetencyWorks (January 6, 2015).

10 All references to John Freeman, Tobi Chassie, Susan Bradley, Danielle Harvey, and Lois Stevens are based on an interview conducted on January 31, 2014 during a site visit to Pittsfield School District. Access the full site visit overview starting with *Redesign at Pittsfield School District*, CompetencyWorks (February 21, 2014).

[11] Other suggestions for reading that can help build the new vision, catalyze a deeper understanding of leadership, and develop new capacity include: *Our Iceberg is Melting* by John Kotter; *Blended* by Michael Horn and Heather Staker; *Good to Great* by Jim Collins; *Drive: The Surprising Truth About What Motivates Us* by Daniel Pink; *The Human Side of School Change* by Robert Evans; *Visible Learning* by John Hattie; *Management of Organizational Behavior* by Paul Hersey, Kenneth Blanchard, and Dewey Johnson; *Learning and Leading with Habits of Mind* by Arthur Costa and Bena Kallick; *Scrum: The Art of Doing Twice the Work in Half the Time* by Jeff Sutherland; and *Learning for All* by Lawrence Lezotte.

[12] All references to Tom Rooney, Jaime Robles, Lana Brown, and Rebecca Midles are based on the October 2, 2014 Lindsay Unified School District site visit. Read about this site visit at *Six Trends at Lindsay Unified School District*, CompetencyWorks (March 2, 2015).

[13] Interview with William Bryan, Center for Secondary School Redesign, March 10, 2015.

[14] *The Long Conversation*, or, *"It's hard, but worth it. Did I mention that it's hard?"*, Maine Department of Education. Retrieved from: http://maine.gov/doe/cbp/case-studies/rsu2-case-study.html.

[15] *Bronx Arena: Organizing Spaghetti*, CompetencyWorks (December 10, 2014). Retrieved from: http://www.competencyworks.org/case-study/bronx-arena-organizing-spaghetti-part-1/.

[16] In the paper *Motivation, Engagement, and Student Voice*, the authors find that "Providing opportunities for choice, control, and collaboration are potent strategies for increasing academic achievement. Young people are likely to be more motivated and engaged in an activity when they feel they have a voice in how it is conducted and can affect how it concludes." Retrieved from: http://www.studentsatthecenter.org/topics/motivation-engagement-and-student-voice.

[17] Insight from Making Community Connections Charter School and references to Kim Carter were provided by a site visit in February 2014. For more information, see the site visit overview beginning with *Igniting Learning at the Making Community Connections Charter School*, CompetencyWorks (April 1, 2014).

[18] The following resources can be helpful in beginning to develop a strategy for leveraging blended learning to improve and expand learning experiences for students:

Allison Powell, Beth Rabbitt, and Kathryn Kennedy. *Blended Learning Teacher Competency Framework*, iNACOL (October 2014).

Rob Darrow, Bruce Friend, and Allison Powell. *A Roadmap for Implementation of Blended Learning at the School Level: A Case Study of the iLearnNYC Lab Schools*, iNACOL (October 2013).

John Bailey, Carri Schneider, and Tom Vander Ark. *Navigating the Digital Shift: Implementation Strategies for Blended and Online Learning*, Digital Learning Now! (2013).

[19] All references to Jane Bryson of Education Elements are based on an email exchange that occurred in March 2015.

[20] All references to Harvey Chism, Senior Director of School Design at EPIC Schools, are based on an email exchange that occurred in March 2015.

21 The four questions are based on the work of Richard and Rebecca DuFour, with adjustments made for the emphasis on competency or the application of skills to new contexts.

22 Sturgis, Chris. *The Art and Science of Designing Competencies*, CompetencyWorks Issue Brief (July 2012). Retrieved from: http://www.competencyworks.org/wp-content/uploads/2012/08/CompetencyWorks_IssueBrief_Design Competencies-Aug-2012.pdf.

23 Please visit Rose Colby's contributing author posts on CompetencyWorks to find the insights and blog posts on which all references to her in this paper are based.

24 Ruff, David. *Thoughts on Grain Size*, CompetencyWorks (May 27, 2014). Retrieved from: http://www.competencyworks.org/analysis/thoughts-on-grain-size/.

25 All Adams 50 quotes are based on an interview with Oliver Grenham and Jeni Gotto, found in *A Conversation with Adams 50*, CompetencyWorks (March 12, 2014). Retrieved from: http://www.competencyworks.org/uncategorized/a-conversation-with-adams-50/.

26 Please visit Jonathan Vander Els' contributing posts on CompetencyWorks to access his experiences and insights at Sanborn Regional School District and Memorial Elementary.

27 For resources on why the traditional grading system is ineffective and how to develop standards-referenced and standards-based grading, see *Progress and Proficiency: Redesigning Grading for Competency Education*, CompetencyWorks Issue Brief (January 2014). Retrieved from: http://www.competencyworks.org/wp-content/uploads/2014/01/CW-Progress-and-Proficiency-January-2014.pdf.

28 All the public institutions of higher education in Connecticut, Maine, New Hampshire, Rhode Island, and Vermont and three private institutions have endorsed proficiency-based learning in partnership with the have joined the New England Secondary School Consortium. See http://www.greatschoolspartnership.org/55-new-england-colleges-and-universities-support-stronger-student-preparation/ for more information.

29 *Center on Continuous Instructional Improvement*, Consortium for Policy Research in Education. Retrieved from: http://www.cpre.org/center-continuous-instructional-improvement.

30 Heritage, Margaret. *Learning Progressions: Supporting Instruction and Formative Assessment*, National Center for Research on Evaluation, Standards, and Student Testing (2008). Retrieved from: http://www.ccsso.org/Documents/2008/Learning_Progressions_Supporting_2008.pdf.

31 Susan Patrick and Chris Sturgis. *Maximizing Competency Education and Blended Learning: Insights from Experts*, International Association for K–12 Online Learning (March 2015) Retrieved from: http://www.competencyworks.org/wp-content/uploads/2015/03/CompetencyWorks-Maximizing-Competency-Education-and-Blended-Learning.pdf.

32 Zima, Bill. *Lens 3: Meeting Facilitation*, CompetencyWorks (August 1, 2013). Retrieved from http://www.competencyworks.org/reflections/lens-3-meeting-facilitation/.

[33] Interview with Jim Rickabaugh, Director of the Institute @ CESA #1, November 6, 2014.

[34] See *The Long Conversation (RSU 2 – Kennebec Intra-District Schools)* and other case studies on implementation of proficiency-based learning in Maine at the Maine Department of Education Center for Best Practices, http://maine.gov/doe/cbp/case-studies/rsu2.html.

[35] Courtney Belolan, an instructional coach at Mt. Ararat Middle School in Maine, has written extensively at CompetencyWorks on how to personalize classrooms in a proficiency-based environment, http://www.competencyworks.org/author/courtney-belolan/.

[36] *Preparing for Conversations with Parents*, CompetencyWorks (September 29, 2014). Retrieved from: http://www.competencyworks.org/analysis/preparing-for-conversations-with-parents/.

[37] From an email exchange with Rick Schreiber, Reinventing Schools Coalition, March 16, 2015.

[38] Gomes, Patricia. *The 'Lean Startup' Model Goes to School*, edSurge (March 26, 2013). Retrieved from: https://www.edsurge.com/n/2013-03-26-the-lean-startup-model-goes-to-school.

[39] *Juggling Frogs*, CompetencyWorks (May 10, 2012). Retrieved from: http://www.competencyworks.org/uncategorized/juggling-frogs/.

[40] Marzano High Reliability Schools, Marzano Research. See http://www.marzanoresearch.com/hrs/high-reliability-schools.

[41] See the American Society for Quality for more information on continuous improvement.

[42] Allison Powell, Beth Rabbitt, and Kathryn Kennedy. Blended Learning Teacher Competency Framework, iNACOL (October 2014).

[43] In 2015, iNACOL will launch a structured effort with districts to examine the specific set of system requirements and functional capabilities for an integrated learning system to manage student-centered learning.

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Other Issue Briefs Available at CompetencyWorks

- Maximizing Competency Education and Blended Learning: Insights from Experts by Susan Patrick and Chris Sturgis, March 2015

- A K–12 Federal Policy Framework for Competency Education: Building Capacity for Systems Change by Maria Worthen and Lillian Pace, February 2014

- Progress and Proficiency: Redesigning Grading for Competency Education by Chris Sturgis, January 2014

- Necessary for Success: Building Mastery of World-Class Skills – A State Policymakers Guide to Competency Education by Susan Patrick and Chris Sturgis, February 2013

- Re-Engineering Information Technology: Design Considerations for Competency Education by Liz Glowa, February 2013

- The Learning Edge: Supporting Student Success in a Competency-Based Learning Environment by Laura Shubilla and Chris Sturgis, December 2012

- The Art and Science of Designing Competencies by Chris Sturgis, August 2012

- It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit by Chris Sturgis, Susan Patrick and Linda Pittenger, July 2011

- Cracking the Code: Synchronizing Policy and Practice for Performance-Based Learning by Susan Patrick and Chris Sturgis, July 2011

- Clearing the Path: Creating Innovation Space for Serving Over-age, Under-credited Students in Competency-Based Pathways by Chris Sturgis, Bob Rath, Ephraim Weisstein and Susan Patrick, December 2010

- When Success is the Only Option: Designing Competency-Based Pathways for Next Generation Learning by Chris Sturgis and Susan Patrick, November 2010