Cracking the Code:

Synchronizing Policy and Practice for Performance-Based Learning



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Table of Contents

Introduction	4
Defining Performance-Based Learning	6
Working Definition	6
The Need for Performance-Based Learning	8
State Policy Exemplars	9
Seat-Time Waivers	9
Credit Flexibility A Closer Look: Alabama	9 10
Advanced Competency-Based Policy A Closer Look: New Hampshire A Closer Look: Oregon A Closer Look: Florida	10 11 12 13
A Policy Framework for Advancing A Performance-Based Education System	14
Synchronizing Policy and Practice	15
Integrating Next Generation Learning with Efforts to Improve Current Systems	16
Collaborative State Leadership	16
Encouraging Federal Leadership in Advancing Performance-Based Systems	17
Emerging State Policy Issues	19
#1 Redefine the Carnegie Unit Into Competencies	19
#2 Personalized Learning	21
#3 Student-Centered Accountability and Assessment Models	22
#4 Learning Empowered by Technology	24
#5 Supporting Educators in the Transition to a Competency-Based System	25
#6 Financing a Competency-Based System	27
Conclusion	29
Resources	30

Introduction

As our country embarks upon the transformation to next generation learning, our understanding of what makes good policy must also be transformed. Once focused on regulated process and compliance, state policymakers are seeking ways to open space for breakthrough innovations that produce excellence and equitable results. Performance-based learning is one of the keys to cracking open the assumptions that undergird the current educational codes, structures, and practices. By finally moving beyond the traditions of a time-based system, greater customized educational services can flourish, preparing more and more students for college and careers.

The following proposed policy framework, designed to expedite state policy development in performance-based learning, may be applied to all next generation learning. Building upon the 2011 Competency-Based Learning Summit convened by the International Association for K–12 Online Learning (iNACOL) and the Council of Chief State School Officers (CCSSO), this discussion explores how state policy can loosen the regulatory environment that is handcuffing administrators and educators who are ready to move toward student-centered, competency-based models of learning. The paper is organized to answer four questions.

A Note on Language

In this paper, we use the terms performance-based and competency-based interchangeably. Federal policy uses the term competency-based learning in Race to the Top and other programs. The Council of Chief State School Officers uses the term performancebased learning. Some leading states and districts refer to proficiency-based or standards-based learning. The hope is that as long as a shared working definition is used to drive policy, the variations in the descriptive term will not be a barrier.

- What is performance-based learning?
- What are states doing to advance performance-based learning?
- What type of policy framework can guide state leadership in advancing a performancebased education system?

What are the emerging issues in redesigning the education system around performancebased learning?

Transitioning to a competency-based system requires deep analysis and wide-reaching creativity. Thus, chief state school officers will want to work collaboratively, drawing on insights and innovations from other states in order to expedite the process of constructing a set of policies that promote innovation and breakthrough strategies, rather than the traditional compliance model.

In a proficiency system, failure or poor performance may be part of the student's learning curve, but it is not an outcome.

 Proficiency-Based Instruction and Assessment, Oregon Education Roundtable

For More Information

The Council of Chief State School Officers (www.ccsso.org) offers up-to-date information on the Common Core State Standards. You can also find resources at www.commonstandards.org.

The iNACOL website (www.inacol.org) offers a wiki with resources and examples about the issues raised in this paper, as well as three related papers:

- "When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning"
- "Clearing the Path: Creating Innovation Space for Serving Over-Age, Under-Credited Students in Competency-Based Pathways"
- "It's Not a Matter of Time: Highlights from the 2011 Competency-Based Learning Summit"

Defining Performance-Based Learning

The Council of Chief State School Officers included performance-based learning as one of the six attributes of Next Generation Learning. It is a powerful concept that mutually reinforces personalized learning and anytime, everywhere innovations. However, it is not enough to simply create seat-time waivers. Performance-based learning requires a new set of practices and policies that is riveted on student learning.

Students have been locked down by the concept of seat-time and locked out of the technological revolution that has transformed nearly every sector of American society, except for education.

– Jim Shelton, Assistant Deputy Secretary of Education

A Working Definition

At the Competency-Based Learning Summit, participants expanded upon the working definition of

competency-based learning proposed in "When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning," Sturgis and Patrick (2010). The following working definition for high-quality, competency-based approaches is designed to generate rich policy discussions on transforming the education system.

- Students advance upon 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.
- Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.¹

¹ Competency-based innovators design two sets of competencies: academic and skills that students need for college and career preparation. Using different terms, innovators all include forms of applied learning competencies such as creativity, problem solving, and communication. Many include personal skills such as perseverance, cultural competency, and study skills. Those serving vulnerable students include social-emotional literacy and navigational skills that are particularly important for students from low-income communities

As Clayton Christensen and Michael Horn have described, disruptive innovation redefines the fundamental value proposition. A competency-based system embraces student learning above all other social values. It operates on a new value proposition:

By aligning all of our resources (in schools, the community, and online) around student learning to enable students to progress upon mastery, our country can increase productivity in the education system, while simultaneously raising achievement levels overall and reducing the achievement gap.

Competency-based efforts are certainly not a simple guarantee of high achievement. Like any service industry, only high-quality implementation will produce meaningful results. To ensure equitable results, all of the elements of the competency-based definition must be implemented. They are highly interdependent; all are necessary, none alone are sufficient.

Next Generation Learning

The Council of Chief State School Officers initiated a next generation learning agenda to help states bring forward elements of a new education system designed to personalize learning so that each child's educational experience is successful and enduring. Working with seven states and partners, CCSSO has developed the Partnership for Next Generation Learning to discover and amplify exemplars of transformative learning, identify key components of a new education infrastructure, and demonstrate how to actualize those changes at all levels of the system. CCSSO has defined Next Generation Learning as rooted in six critical attributes, or essential conditions:

- Personalizing learning, which calls for a data-driven framework to set goals, assess
 progress, and ensure students receive the academic and developmental supports they need;
- Comprehensive systems of learning supports, which addresses social, emotional, physical, and cognitive development along a continuum of services to ensure the success of all students;
- World-class knowledge and skills, which require achievement goals to sufficiently encompass the content knowledge and skills required for success in a globally-oriented world:
- Performance-based learning, which puts students at the center of the learning process by enabling the demonstration of mastery based on high, clear, and commonly-shared expectations;
- **Anytime, everywhere opportunities**, which provide constructive learning experiences in all aspects of a child's life, through both the geographic and the Internet-connected community; and
- Authentic student voice, which is the deep engagement of students in directing and owning their individual learning and shaping the nature of the education experience among their peers.



The Need for Performance-Based Learning

There are many driving forces for advancing performance-based learning in the K–12 system, including school improvement, the dropout crisis, and expansions in online and blended learning. The Common Core State Standards is also creating a unique opportunity to introduce performance-based approaches. As Gene Wilhoit, Council of Chief State Schools Officers explained, "Competency-based learning is going to be a central component of the new systems. It is already

anchored in. The first step was states coming together to adopt a common core of learning in the English language arts and math. There is going to be clear definition around all content areas. There's going to be a next phase of learning across content. There's going to be all kinds of ways that we create more dynamic learning. But it will not happen if we hold onto the current system of accountability. The debate is over in my mind. We're going here... We are on a pathway for competency-based learning in the United States."

We are on a pathway for competency-based learning in the United States.

- Gene Wilhoit, Council of Chief State School Officers

The increased global competition and economic pressures are of particular importance at the national and state level. Resource constraints are demanding that we find more cost-effective methods to educate our children. With the economic crises causing state budgets to tighten, the United States must find a way to do more with fewer resources, especially in K–12 education.

Consider the number of students on a global scale: the United States has 55 million students in K–12 education. China has 60 million students that are "gifted and talented"—more than the entire population of K–12 students in the United States. Our education system cannot afford to have untapped talent. Today, we are losing close to 30 percent of our high school students as they "drop out" or "stop out" of school.

With approximately \$600 billion spent annually in the United States on K–12 education, why wouldn't we want to create incentives for our schools so that every dollar going to fund education was based on students' outcomes, performance, and growth in learning toward world-class expectations, rather than on "seat-time"? What would it take to unleash innovation to allow practitioners, educators, and administrators to create competency-based pathways of learning for each student, regardless of where or how long they sit? One participant expressed this thought: "The problem is quite simple—we are measuring the wrong end of the student, related to learning."

State Policy Exemplars

Just as there are multiple pathways for students to learn, there are multiple pathways for states to create room for innovation. States can start by opening the door with seat-time waivers, promoting more flexibility through "credit flex" policies, or designing comprehensive competency-based learning policy frameworks. Advanced policy revisions include redefining Carnegie units (from seat-time to competencies), developing strategic communications efforts with parents and stakeholders, creating professional development for competency-based learning, developing support networks for schools and districts, increasing flexibility of scheduling and school year calendars, and rethinking accountability and assessments from the ground up.

Seat-Time Waivers

Policymakers venturing forth into competency-based approaches for the first time often establish "seat-time" waivers. Arizona and Michigan are offering seat-time waivers on a case-by-case basis. Waivers are useful because they allow districts, schools, or even classroom educators to have alternatives to "seat-time" restrictions while remaining "in compliance" with state policy. However, seat-time waivers don't go far enough toward creating flexibility for systemic approaches to innovating education. For example, districts are often required to reapply for waivers annually, creating an administrative burden every year. Furthermore, reporting remains the same, driving traditional behaviors and undermining the innovations. States that want to take small steps forward should consider creating flexibility within the seat-time waivers procedure to provide greater innovation space. They can also create credit flexibility policies or design comprehensive policy frameworks, as described below.

Credit Flexibility

Increasingly, states are creating policies that enable credit flexibility. This has primarily been in response to the expansion of online learning and the demand for credit recovery. These policies provide districts with the ability to use competency-based learning instead of seat-time. There are two drawbacks to promoting innovation in this policy approach. First, it relies on districts taking advantage of the enabling policy. Experience in other states suggests that there is rarely much uptake unless the state provides supportive mechanisms such as training, technical assistance, peer networks, or pilots. Second, there is a risk of districts implementing credit flexibility with inconsistent attention to quality and the level of academic standards. States may need to establish quality-control mechanisms.

Our job now is to create a support mechanism so the implementation can be differentiated. Much like the conversation in differentiating what we're trying to do for students, we are differentiating the support for adults as well.

Tommy Bice, Deputy
 Superintendent, Alabama
 Department of Education

A CLOSER LOOK: Alabama

Dr. Tommy Bice, Deputy Superintendent of the Alabama State Department of Education, explained that two complementary policy goals drove their entry into competency-based policies: 1) raising the high school graduation requirements to make the advanced diploma the default diploma for all students, and 2) supporting students that are struggling to graduate. In 2005, Alabama launched the ACCESS program to provide every high school in the state with online courses, but due to seat-time restrictions, they were only offered between 8:00 a.m. and 3:00 p.m. This constraint opened the door to discussions about competency-based learning.

Once education leadership invested in credit recovery for students who had experienced course failure, they wondered *why not use the same technique for credit advancement?* In 2008, the Alabama State Board of Education passed a resolution allowing school systems to offer what Dr. Bice explained as "Credit Recovery and/or Credit Advancement opportunities through which students may obtain course credit based on proficiency or mastery of content, rather than time spent in the classroom."

Using the "tight/loose" theory of change, the Alabama State Department of Education used very clear outcomes to drive improvements, encouraging districts to find ways that worked for them to reach those outcomes. Thus, the state anticipates variation as districts explore competency-based learning. "Our biggest challenge on the front end," Dr. Bice stated, "was that districts were initially waiting for the state to send them the template for how to do this work... A lot of people are still waiting for the template for how to do the work... Our job now is to create a support mechanism so the implementation can be differentiated. Much like the conversation in differentiating what we're trying to do for students, we are differentiating the support for adults as well."

Currently, nearly 50 percent of the districts in Alabama are taking advantage of the enabling policy to provide credit recovery and/or credit advancement. Every high school in Alabama offers online credit advancement, Advanced Placement courses, and credit recovery through the Alabama ACCESS program. In just three years, Alabama is starting to see dropout rates decrease and graduation rates increase.

Advanced Competency-Based Policy

A few states are racing ahead, designing policies that boldly advance competency-based learning. They provide excellent building blocks in the nascent field of competency-based systems for designing comprehensive state policy frameworks. Drawing upon the lessons learned from the most advanced states, an initial starting point for policy redesign is outlined below.

• Eliminate seat-time and redefine awarding credits based on competencies.

- Require districts to offer competency-based credits so that students have competency-based options. Offer competency-based alternative schools and credit recovery.
- Provide support mechanisms. Education leaders will need opportunities to work with their colleagues or technical assistance providers to create competencies, train teachers, and establish information management systems.
- Establish quality-control mechanisms. To safeguard equity and to ensure that higher expectations for student learning are not compromised, states will want to design quality-control mechanisms, including rubrics and formative evaluations, and provide supporting tools and resources such as examples of student work at each proficiency level.²
- Expand learning options. Competency-based efforts immediately trigger demand by students for expanded learning options in the community, after school, and in online courses.
- Align higher education with K–12 competency-based efforts. Teacher training, college
 admissions, and streamlining budgets to support accelerated learning are all critical elements
 to creating a sustainable competency-based approach.

There are a number of other policy issues that states will want to tackle, including accountability, information management systems, and funding. The section below on emerging issues gives an exploration of these policy considerations.

A CLOSER LOOK: New Hampshire

In 2005, New Hampshire became the first state to eliminate the Carnegie unit. Paul Leather, New Hampshire Deputy Commissioner of Education, explained that three policy goals converged, changing expectations for education and creating a shared vision: 1) creating real-world learning opportunities and anytime, everywhere learning, 2) meeting the Governor's challenge to improve high school graduation rates and have zero drop-outs by 2012, and 3) raising the compulsory age for K–12 education from sixteen to eighteen. Leather said, "Until there was that moral imperative, driven by the leadership and the Governor, people didn't see why they had to change the system."

Fred Bramante, of the New Hampshire State Board of Education, described the urgency of a full redesign. "The most important thing we could do is get rid of the Carnegie unit everywhere—it needed to go away." He explained that the initial policy in New Hampshire provided districts with credit flexibility, but almost no districts took advantage of the policies to innovate. They learned from this experience and developed a transitional policy. "We put the first regulations in place in 2005 and gave all districts until the 2008–2009 school year to move from a time-based system to a mastery-based learning system of required competencies." The State Board gave districts two options during the transition years of 2005–2008: they could continue awarding credits based on Carnegie units, or they could award credit based on competencies. In 2008, the seat-time part

² EdSteps, a new web-based resource, is now available for measuring student growth. Developed by the Council of Chief State School Officers, the centerpiece is a public library of student work samples in key skill areas, including writing, global competence, creativity, problem solving, and analyzing information. Student work is presented in a continuum—a gradual progression—from emerging to accomplished work or another searchable format. EdSteps will allow teachers, parents, and students themselves to measure individual students' progress over time and answer questions about whether students are on track to success. The work samples will help answer a central question for student growth: Where is a particular student now, and what should he or she do to improve? www.EdSteps.org

of the policy was eliminated. The only policy that remains is progress based upon demonstrated competencies and mastery. Bramante said, "We wanted to mandate flexibility, which is an oxymoron."

In doing this, New Hampshire has taken the boldest step toward replacing the time-based system with a competency-based system. It eliminates the Carnegie unit, replaces it with a competency-based system, and allows students to earn credit toward graduation outside of traditional classrooms. New Hampshire's comprehensive approach is designed around three themes: 1) personalization, 2) students as active learners, and 3) choice and flexibility for where and when learning occurs.

In New Hampshire, the Concord Area Center for Educational Support (CACES) is taking a leadership role in supporting districts and schools as they redesign, helping to clarify the competencies that students are expected to master. In addition to academic standards, there are crosscutting competencies such as communication skills and problem-solving.

Bramante highlighted three areas that need further work. First, New Hampshire changed the K–12 regulations, yet didn't change the higher-education regulations. "That was a mistake on our part," he added. In 2011, the New Hampshire State Board of Education is reworking the higher-education regulations to align with the K–12 competency-based policies. Second, the requirement that every student have a personalized learning plan didn't make it into the original policy. Bramante believes that a personalized learning plan is critical for customized learning for every child's needs. Finally, the traditional calendar and scheduling is problematic for moving to anytime, everywhere learning. New Hampshire is considering ways to create more flexibility around school calendars. Districts implementing competency-based learning models see the value in flexibility and are now asking the legislature to change the law that states there is a 180-day school calendar.

New Hampshire continues to update the regulations as districts implement more competency-based learning models, and there is ongoing work in improving the policies. For example, terms are being updated in regulations: removing the word "teacher" and replacing it with "educator," removing "instruction" and replacing it with either "learning" or "learning strategies," and removing the word "classroom" and replacing it with "learning environment" to allow anytime, everywhere learning. Finally, the State of New Hampshire is putting together a commission to create a white paper to discuss what a competency-based system will look like moving forward.

A CLOSER LOOK: Oregon

At the forefront of the credit for proficiency movement is the state of Oregon. Since 2003, Oregon has enabled districts and schools to use proficiency-based approaches through an administrative rule for credit options. In 2004–2006, the Department of Education invested in seven district pilots, gaining insights into implementation that affected 2009 revisions to the Oregon diploma and credit options policy. In 2009, the policy was expanded to require all in-class and equivalent work to be tied explicitly to demonstration of proficiency or mastery to identified standards.

The Oregon State Department of Education is supporting school districts in the development and implementation of credit for proficiency policies. The Oregon Proficiency Project has been

working with several districts to explore the development and implementation of proficiency-based learning. They have developed guidelines, tools, and resources to support other schools that are experimenting with proficiency-based approaches. In addition, the Business Education Compact has provided service and support to nearly 2,000 teachers and administrators in developing proficiency-based teaching and learning.

Susanne Daggett from the Oregon Department of Education indicated that state legislators are exploring ways to expand options for students. "The different funding streams do create a bit of a road block. But people are trying to think about how the money should follow students that are ready to move on to college-level courses."

As a result, Oregon continues to pursue policy that increases access to accelerated learning options. In 2005, state law provided for the Expanded Options Program, which allows students aged sixteen to eighteen to attend publicly funded post-secondary schools—community colleges and universities—either part-time or full-time. Students can work toward their high school diploma and associate's degree at the same time. Since 2005, various amendments to the statute and statewide standardization of dual-credit opportunities have continued to increase access for high school students.

A CLOSER LOOK: Florida

Florida Virtual School (FLVS) has pushed next generation learning forward with a combination of competency-based learning and performance-based funding. With open enrollment, students can register and begin online courses any day of the year. Able to learn anytime, everywhere, students progress upon mastery. Teachers provide individualized support so that students are moving at their own pace. Funding is provided when students successfully complete courses. Every student in Florida has access to the 115 online courses offered by the Florida Virtual School, providing licensed educators who are skilled in online instruction.

This performance-based funding model has required FLVS to develop sophisticated data systems that monitor student progress in detail. Data was integrated between the instructional and administrative information systems used in the school. Specifically, the learning management system for the online course data was integrated with the student information system for a standards-based learning model for monitoring progress in real time.

Florida Tax Watch reported that the performance-based model of Florida Virtual School was a better return on taxpayer dollars—serving a higher percentage of under-served students, while producing better results in student learning outcomes—than traditional models.³

For more information, see "Final Report: A Comprehensive Assessment of Florida Virtual School," Florida Tax Watch Center for Educational Performance and Accountability, www.inacol.org/research/docs/FLVS_Final_Final_Report(10-15-07).pdf.

A Policy Framework for Advancing a Performance-Based Education System

At the Summit, Gene Wilhoit offered a historical perspective on how "good" state policies are defined very differently today from the way they were even five years ago.

Historically, state policy would be considered "good" because it was very clear. It would help the state departments of education administer rules and regulations usually set outside the agency. A primary function of a state department of education was to be a keeper of established policies. Policies were often stated as institutional priorities or adult needs in the system. Policies defined how adults and students would act and the procedures to follow. States measured success by how well everyone was complying in carrying out policies in the same way.

Wilhoit explained how state legislatures and departments of education have redefined themselves as "on a mission for transforming the system to meet a set of higher expectations." Marginal improvements are inadequate under the global challenge to simultaneously lift academic standards, eliminate the achievement gap, personalize instruction, and discover greater cost-effectiveness. The traditional approach emphasizing compliance "becomes suspect as state departments of education strive to encourage innovation."

Within the context of next generation learning, what makes "good" state policy is going to be very different. Wilhoit outlined a new set of principles as a state policy framework for next generation learning.

- Drive Policy by Student Learning Outcomes: Focus on student learning and student learning outcomes. First and foremost, policies should be made to support the needs of students.
- **Guard High Academic Standards:** States will need to be vigilant to ensure that academic expectations do not slip, resulting in lower achievement for groups of students. Focus on equity with high expectations for all students.
- **Expand Student Options:** State policies should expand, not limit, the options that students have to reach learning outcomes.
- Create Shared Vision: Policy development cannot be top-down. It will be important to keep communication open, inviting stakeholders to contribute to the vision and the steps to get there.

- Offer Districts and Schools Flexibility: Be clear about desired outcomes and then provide incentives for educators to take different pathways to achieve the goal. Remove process rules and regulations in order to allow and encourage innovation.
- **Commit to Continuous Improvement:** Policy will need to evolve as we learn more about the dynamics of next generation learning, requiring ongoing improvement efforts.

In the following discussion, the role of state leadership is explored through four different angles. The policy framework is designed to guide leadership requirements and organizational capacity of state education agencies so that they are able to manage the overall reform strategies.

Synchronizing Policy and Practice

As stated previously, depending solely on top-down compliance models is not a viable strategy for introducing performance-based learning. State leaders will need to create enabling policies, while ensuring feedback from innovators to inform further policy development. This iterative process requires strong relationships and two-way communication. There are five areas that the state can address to support innovative growth, ensure that policy is informed by innovative practice, and guard against slippage of academic standards and inequities.

- Create Innovation Space: The introduction of competency-based systems and other elements of next generation learning cannot be done solely through top-down policies or by using compliance as leverage for change. Instead, states must create space for organic development and expansion of innovations. States can use a variety of techniques to let innovation take hold, including: convening innovators, creating innovation zones, establishing cultures of continuous improvement, eliminating barriers, defining new performance metrics based on desired outcomes, and developing policies and funding formulas that create incentives for innovation and the desired behaviors.
- Provide Catalytic Support and Knowledge Transfer: Funds should be dedicated to peer networks that can support rapid exchange of knowledge, leadership development, and technical assistance. These networks can also expedite creative work such as developing and disseminating options for lifelong learning competencies to reduce the cost of every district designing their own.
- **Engage Communities:** Communities need to be engaged early and often. They need to understand the reasons, goals, and elements of the change to competency-based learning. Most of this work will be done at the district and school levels, but states can help by supporting the development of effective communication tools and providing a website that districts can use to help educate communities.
- **Protect High Standards:** States have the unique responsibility of guarding high academic standards and ensuring that students are getting the supports they need to reach them. Developing mechanisms to ensure that there is consistency across schools and districts will be important in the long run, but it is absolutely critical in the early stages of innovations.
- Offer Adaptive Leadership: State leadership can play a critical role in supporting innovative districts by using the bully pulpit, recognizing the leaders that are taking risks, and engaging statewide associations early on in vision-building. In addition, they can assist districts that need more time to build community support by offering flexibility in reporting.

Integrating Next Generation Learning with Efforts to Improve Current System

Paul Leather, Deputy Commissioner of New Hampshire Department of Education, stated that "many state education agencies have been looking at standards and assessment, data systems, teacher capacity, and improving the lowest performing schools. If you do all of these four areas and still use the old ways, you can freeze the current system. It is imperative to overlay the critical attributes of next generation learning so that 1) the student is at the center; 2) complex performance assessments measure the deep dive of learning; 3) adults, educators, students, and the community are provided with comprehensive systems of supports; 4) a clear picture of high expectations is set; 5) anytime, everywhere learning opportunities are available; and 6) the focus is on performance-based learning. These principles of next generation learning must be brought together and laid upon those four areas that state education departments are constructing their work around to realize the mission of transforming the education system."

State policy leaders will be challenged to bring these two different reform approaches together into a comprehensive approach. They can get started by using one or more of the following techniques:

- **Creating Innovation Teams:** States can create teams that have dedicated time to explore implications of next generation learning and competency-based approaches within traditional reform approaches.
- Engaging Innovators in Design and Revisions: Local innovators will be able to provide
 insight into how education reforms designed to support the current system will either inhibit
 or enhance competency-based innovations.
- **Facilitating Discussion with Education System Leadership:** Engaging higher-education and schools of education early in the process can help identify opportunities and barriers to integrating next generation learning into current initiatives.

Collaborative State Leadership

The emerging policy issues require substantial analysis, creativity, and engagement of multiple stakeholders to develop viable alternatives to our traditional system. Although states can do it alone, by working collaboratively they can expedite the process, reduce the costs of poorly formed policies, and guard against being caught by surprise in unintended consequences. In addition, states that work together can create more cohesiveness in the policy environment, thereby allowing competency-based innovators to expand their ideas more easily.

States can collaborate on several areas to design competency-based learning policies.

- Implementing the Common Core with Fidelity: Share approaches to Common Core implementation, ensuring that practitioners are basing competencies on worthy and meaningful learning objectives that empower students.
- Integrating Competency-Based Learning in Assessments: Encourage the assessment consortia to design next generation assessments with standards-based and competency-based learning models that include multiple pathways as a design specification.

- Investing in New Accountability Models: Break through preconceived notions of state
 accountability, federal requirements for AYP (adequate yearly progress), assessments, and
 what states can do to open up next generation learning and new models of accountability.
- Sharing Best Practices: Engage state and district networks in sharing best practices on performance-based learning models, and online and blended learning for anytime, everywhere learning opportunities for students and teachers. Investigate open education architectures and open educational resources in next generation learning for sharing and collaboration across districts and states.

Encouraging Federal Leadership in Advancing Performance-Based Systems

The federal government will need to work alongside states as traditional accountability models are challenged and student-centered innovations take their place. Gene Wilhoit noted that "there is a major issue between state accountability and the federal requirements for AYP and end-of-year assessments. Breaking through what we have as preconceived notions on state accountability, and understanding what we can do to open up next generation learning and new models of accountability, is difficult but possible."

At the Competency-Based Learning Summit, Jim Shelton, Deputy Assistant Secretary for Innovation at the U.S. Department of Education, noted that the most important role for the federal government is to ensure that it does not put up barriers for state policymakers. Shelton said, "The reality is that most of the policy framework set is at the state level." He went on to propose that "the growth model starts to move to a world to support competency-based work. . . . The

The budget crisis is increasing areas of non-consumption where you have to reach for other solutions. The nature and depth of the crises will create a spark for innovative solutions that look at reformulating how to deliver education at a much higher productivity level. So what the states have to do is create the space as solutions are introduced.

– Michael Horn, Innosight Institute

question is how do states, districts, and schools respond to the flexibility in the framework? Can we get 'out of the box' of what we know so well in terms of age-based, end-of-year assessments?"

State leaders will need to encourage the federal government to create space for states to innovate by engaging in the conversation supporting new accountability systems and competency-based learning as a way to help transform the system. Ideas generated from the Summit for how the U.S. Department of Education could play a meaningful role included:

• Integrating Competency-Based Learning into Major Policies: In each of the areas of the federal blueprint for the Elementary and Secondary Education Act (ESEA), reauthorization should be considered, especially including competency-based learning approaches as a model for turning around low-performing schools. In large programs, like Race to the Top grants, including competency-based learning as a design element is an important factor in creating space for innovation at the state and local levels.

- **Eliminating Time-Based Regulations:** The federal government can examine their policies to ensure that they are not embedding expectations that are age-based or seat-time-based. Shelton specifically asked for feedback from states to identify any federal barriers that limit states' ability to innovate using competency-based learning approaches.
- Changing Roles of Educators: Acknowledging that the federal highly qualified teacher provisions are deeply rooted in age-based, time-based, and student grade-level structures requires rethinking educator effectiveness around competency-based learning.
- Assisting in Creating Innovation Zones and Capacity: Federal grant programs could help states in establishing state and district pilot programs, technical assistance providers, research, and development grants to help break open the opportunities for states to develop competency-based learning policies.
- **Providing Political Cover:** The "bully pulpit" and federal competitive programming grants can spark innovation while also providing a national policy environment supportive of states engaging in early stages of the work.

Emerging State Policy Issues

As states and performance-based innovators move forward, they quickly encounter the underlying assumptions defining the dynamics of the traditional education system. The following discussion lifts up a number of emerging state policy issues. How well and how quickly these issues are resolved will determine how rapidly the benefits of next generation learning are unleashed.

EMERGING ISSUE #1:

Redefine the Carnegie Unit into Competencies

The Common Core State Standards are opening new possibilities for competency-based models. With the Common Core, we have the opportunity to use competencies as the organizing unit, rather than the time-based Carnegie unit. The Common Core's standards of academic knowledge and deeper learning in English Language Arts and Mathematics are internationally benchmarked against the highest performing nations' standards and dispositions. Rarely pointed out in international comparisons, Finland already operates competency-based learning models, resulting in the necessary data to ensure that every student is learning at high levels. In the United States, innovators in competency-based learning are rethinking course structures. States and districts working with the Reinventing Schools Coalition (RISC) use levels of standards-based units that are not age-based grade levels. New Hampshire kept the course structure with schools that were developing the competencies within them.

In redesigning policy, states can facilitate the adoption of a set of comprehensive competencies. The Common Core is absolutely critical to college and career readiness, but it is not sufficient on its own. States should also consider students' needs for lifelong learning competencies, such as navigating new environments, social-emotional literacy, and skills to make the transition to college and careers.

States can play a critical role in helping districts and schools develop high-quality competencies and learning objectives. Outcomes must be defined with enough clarity that they can be measured. This does not mean that we define "easily measured" goals. Rather, it means that we must define the outcomes in precise language so that the meaning is less open to interpretation and the results are comparable across jurisdictions.

As states pursue performance-based learning, they will reach a point where they ask, what different ways can we organize learning? Paul Leather thinks about it as looking for the new "container" by which we organize units of learning. Are there ways that we can organize learning so that it is inspiring and empowering to students and teachers alike? We don't have the answers to this now, but we are sure to discover that innovators are experimenting with different ways to bring the Common Core to life in early implementation.

State Policy Design Elements

for Redefine the Carnegie Units into Competencies

- Create more modular units of learning by redefining the Carnegie unit with competencies.
- Facilitate collaborative effort to implement the Common Core and develop competencies with precise learning objectives.
- Include academic and lifelong learning competencies.
- Establish mechanisms to protect fidelity to higher expectations.

Just Imagine....

Arturo, an eighth grade student who has been allowed to scrape by from year to year with C's, suddenly finds Algebra I out of reach. The years of accumulating a patchwork quilt of math skills now requires the synthesis of knowledge and skills, the ability to work through multiple variables and solve word problems using systems of equations. Arturo—normally a quiet student—suddenly starts to make trouble in class, caused by a combination of shame and boredom as the teacher introduces concepts he is unfamiliar with and unable to master. Instead of removing him from class, the educator recognizes that Arturo is struggling and tries to identify the source of the problem but without success. Instead of turning away, the educator offers the student a quick diagnostic using an adaptive, online assessment. The student and educator find that there are gaps in his knowledge as far back as fifth and sixth grade math, including important, underlying concepts.

Arturo and his math teacher design a personalized learning pathway with an in-school tutor and an adaptive online curriculum that allows Arturo to progress through the material as he demonstrates his proficiency. The online system provides a real-time data "dashboard" to further personalize the pathway and accelerate his progress. Arturo and his principal, teacher, and parents have access to the data and are excited and emboldened by the wealth of information they have about how Arturo is progressing. The educators find new ways to support and accelerate Arturo's learning through mentoring, tutoring, hands-on learning projects, adaptive software and digital content, and math problems directly related to his personal interests. In six weeks, Arturo has come from behind, demonstrated mastery on all math concepts from fourth to seventh grade, and is now moving into the eighth grade curriculum. By the end of the year, Arturo will be caught up and even advance to master four lessons into the next level of ninth grade math.

EMERGING ISSUE #2:

Personalized Learning

In competency-based pathways, students progress based on mastery; they advance by demonstrating proficiency through a performance of their achievement. Personalized learning plans guide students in developing the required academic and lifelong learning standards—in school, online, and at informal settings in the community and workplace. The personalized learning plan shows what competencies and learning objectives have been mastered, which ones are the current focus, and what the student needs to do next. This is much like the concept of scouts earning merit badges by effectively demonstrating their knowledge, skills, and dispositions through performance.

Educators have greater flexibility in personalized learning settings to create rich learning tasks that engage students independently or collaboratively.

What does competency-based *flexibility really look like?* Kids with different start and ending dates for courses; kids who are slower in some courses, faster in others; kids in online, hybrid, and classroom environments for different parts of the day; kids doing internships tied to learning outcomes (augmented with online homework to drive home conceptual and skill pieces tied to their daily internship experiences), etc.

- Bror Saxberg

Drawing upon a broad set of learning opportunities including individual tutoring, small groups, project-based learning, and online learning, educators are able to be creative in how instruction is delivered.

Students maintain portfolios of their work, which demonstrate the academic knowledge and skills they have mastered. Increasingly, these are electronic portfolios (e-portfolios) or "lockers," which capture the assignments, projects, and products that demonstrate their progress, making it easier to hold and share large amounts of evidence of learning. Students own the portfolios and "carry" them from school to school so that teachers can immediately see the level of work the students have mastered. Each new school will be able to assess students' readiness and enable students to advance, based on their current levels of proficiency.

Similar to portfolios, personalized learning plans become more feasible with well-designed information systems that support standards-based learning and levels of proficiency for each competency. Electronic personalized learning plans include all standards and competencies, and record each student's progress toward mastery. They can be designed to provide visual dashboards of student progress data, mapped along academic and lifelong learning competencies in real time. Mastery levels can be verified by daily online assessments, guarding against any tendency to let students slide into higher-level work unprepared.

Personalized learning plans assist in creating permeable walls between students' lives in the classroom and in their community. Students can pursue their interests—working to support their family, personal hobbies, after-school clubs, service in their neighborhoods, and responsibilities in their faith communities—to bring meaning and joy into learning.

An important aspect of personalized learning is allowing students to access multiple pathways to learn at their own pace. Personalized learning plans open up greater flexibility with fractionalized credits or credentialing modular learning. This is particularly useful for students with high mobility, interdisciplinary studies, and student-designed learning experiences that are not necessarily bound by traditional course sequences.

New next-generation models of learning are enabling students to accelerate by using digital learning resources, in online and blended learning, where teachers have access to data for pinpointing students' needs. Adaptive, formative assessments are embedded to help build pathways based on students' individual interests and passions. Pacing based on individual student needs allows struggling students to catch up when they have fallen behind and advancing students to move ahead when they are ready. Eighty-two percent of school districts today use online learning to meet student needs. More than 60 percent of school districts say they need online learning to support students in credit recovery, so they can catch up and graduate on time.

State Policy Design Elements

for Personalized Learning

- Create a personalized learning plan for every student.
- Incentivize anytime, everywhere learning.
- Allow students to earn full or partial credit by demonstrating mastery on skills learned in class, online, and outside of school.

EMERGING ISSUE #3:

Student-Centered Accountability and Assessment Models

At the Competency-Based Learning Summit, Bror Saxberg, Chief Learning Officer of Kaplan, Inc, opened the Accountability from the Ground Up session with an exploration of what accountability could look like. Saxberg described using competency-based learning models, with more sophisticated data systems and assessments, producing analytics and intelligence in real time. Saxberg described elements for accountability that state and federal policy makers need to consider.

What does competency-based flexibility really look like? Kids with different start and ending dates for courses; kids who are slower in some courses, faster in others; kids in online, hybrid, and classroom environments for different parts of the day; kids doing internships tied to learning outcomes (augmented with online homework to drive home conceptual and skill pieces tied to their daily internship experiences), etc.

What, then, is the interest of parents, employers, administrators, and ultimately the state in understanding how mastery is developing in this newly fluid environment? It's like a freeway for cars, or a roundabout, where the cars may be moving at different speeds, and entering and leaving at speed, rather than lots of stoplights gating the flow of traffic. You now need monitoring stations and data about flow and speed, with flags popping up when cars are stalled or moving too slowly (on an autobahn, safely moving fast is okay, too!). Your accountability "war room" is providing daily updates, with accumulating data about teachers, learning environments, internships, specific courses, comparing average rates of progress for cohorts of similar kids in one environment with rates of progress for the

same kinds of kids in another; as the data accumulate to show a learning experience is going badly compared to how it should go, either for a cohort or an individual, flares should go up to visit/coach/intervene/replace/support. A hard objective is being hit every week by large numbers of students, not just once a year—you can generate evidence about what works for mastering it (and what doesn't) as fast as you can think, not just once per year.

All of this depends, then, critically on high-quality (ideally, embedded within activities) data flow on learning within the learning environments. This means formative assessment, not just summative assessment, has to be developed professionally, separately, and carefully validated—waiting for end-of-year results is way too long, and damaging to individuals and groups. It would be like counting dents on cars at the off-ramps of freeways, instead of monitoring the conditions actually on the road in real time.

This means every state commissioner should wind up with an interactive map in his or her office, just like the folks running transit systems, color-coded to show all the experiences' and environments' learning status for students, every week—possibly every day, in some cases. Which innovations about mastering fraction equivalence are doing the best in your state THIS WEEK?

Most states have negotiated and designed accountability systems that involve testing windows that are time-based. Much of the design is attributed to meeting the federal requirements for reporting AYP. Today, assessment is based on a student's grade level, not stage of learning, and testing regimes are only administered once at the end of the school year in most states.

This poses a serious problem for competency-based learning models. In a competency-based system, students can be assessed when they are ready. Summative assessments can be modularized or occur at the end of a course; they should not be tied to a static calendar or single day of the year, which is inconsistent with enabling students to progress based on mastery. Testing should validate students' knowledge in a time frame consistent with when they learn the material.

Federal regulations do not require this rigid calendar schedule. Moving forward, states need to determine a new design for accountability for student progress that reports on a frequent and regular basis. Accountability reporting must have greater flexibility regarding when students participate in summative testing so that they can have the opportunity to master the material first. In addition, summative testing should be available soon after students master material, rather than waiting for months. Essentially, summative assessments should be available on-demand, year-round.

Formative assessment needs to be ongoing and embedded. In fact, formative assessment is an essential element of formative instruction. It is much more powerful to have students motivated by their own desire to learn than by high-stakes summative tests. Students are better able to use formative results to gain insight into their own learning process and to make good decisions and choices about how they learn, in what contexts and environments they learn best, and how to best demonstrate their knowledge.

State Policy Design Elements

for Student-Centered Accountability and Assessment Models

- States need individual student growth models for competency-based learning.
- Move from once-a-year, end-of-year testing regimes to modularized testing throughout the year that measure individual student progress on a regular basis.

- Strive for summative tests to be taken at the point students have mastered coursework and competencies by increasing the frequency of state-required exit exams and on-demand testing opportunities for students.
- Ensure that age-based and time-based policies are not written into accountability laws at the state level for accountability.
- Include assessments that are based on performance, portfolios, and work samples that demonstrate mastery of complex knowledge and skills.

EMERGING ISSUE #4:

Learning Empowered by Technology

Competency-based models are more viable today than ever before because of the advancements in technology and the introduction of the Common Core. Technology opens the door to anytime, everywhere learning through online and blended learning, and it dramatically changes the learning environments allowing much more personalization. It increases the ability of students to work at their own pace and receive more rapid feedback and support from specialists. It can provide enrichment and background knowledge for students who are constrained by living in areas of concentrated poverty. Digital personalized learning plans can make it possible for students who are competing for college admissions and jobs to present their e-portfolio work samples.

To transform the education system so that every student is college and career-ready, technology architectures and student information systems need to be designed with personalized learning plans for every student. Student data systems that can provide a picture of each student's progress toward mastery, based on the learning objectives and competencies, is certainly possible with the technology that is available today. However, even with the investment of hundreds of millions of dollars in student information systems, most current state data systems were designed around compliance models for No Child Left Behind and state accountability frameworks based on seat-time—student data plus once-a-year compliance data on high-stakes tests. The problem is that district data systems have been designed in the same silos as compliance policies for reporting: ten elements for student demographic data, attendance based on seat-time, and end-of-year NCLB assessments that don't inform instruction.

Students in a competency-based learning system should have access to meaningful data to see their progress in learning objectives and outcomes. In practical terms, at a minimum, this means an integration of student information systems, learning management systems, and analytics. Students, teachers, administrators, and parents should have a personalized learning plan for every student so that they can clearly understand exactly where the gaps are, how to link resources to fill the gaps, and when to further develop competencies through multiple instructional options, including extended learning opportunities, online courses, tutoring, or digital curricular materials.

Technology has been largely cobbled together with systems that communicate poorly or are completely unable to share data across platforms. Rarely is a student information system designed for full integration with learning management systems, including the individual learning objectives and competency levels for each student. In a competency-based learning system, technology must support the visualization of data with the levels of proficiency tied to each of the explicit learning outcomes. The information systems architecture must be integrated, tying the personalized learning

plans and student data systems to the learning management system, adaptive assessments, formative assessments, content management systems, and student e-portfolios. The best examples of this may be in online learning. Several states are exploring the creation of an openly architected platform that would help educators create and share the resources that are tied to the common standards.

Teachers have a very difficult time personalizing learning for every student without technology. Digital learning has the potential to make their jobs more fulfilling, while allowing differentiation for individualized instruction using virtual, blended, and face-to-face learning. Digital content in playlists, learning management systems integrated with student information systems, embedded online assessments, and recommendation engines will all help students and teachers customize learning for each student's needs.

As Michael Horn pointed out, creating protected space and support for innovation to take place is an important role for states. Revising state policies to allow for digital learning will help free up regulations to allow next generation learning to take hold. States need to take a leadership role in creating learning environments that use new technologies to enable student-centered learning. States will need to grapple with the implications of these opportunities within their funding and accountability policies, as well as updating state operations.

State Policy Design Elements

for Learning Empowered by Technology

- Design information systems to support students and teachers; design accountability using formative and summative data that is validated from the "ground up."
- Integrate technology systems, including digital learning, that allow student performance data to flow seamlessly between learning management systems, content management systems, assessment systems, and student information systems.
- Create meaningful dashboards or reports that display data graphically to support teachers, parents, and students in managing progress in learning.
- Expand online learning and blended learning.
- Support open architectures and open educational resources for innovating the existing system.

EMERGING ISSUE #5:

Supporting Educators in the Transition to a Competency-Based System

In *Proficiency-Based Instruction and Assessment,* the Oregon Education Roundtable states, "In a proficiency-based system, teachers flourish as much as students." The laser focus on learning in a competency-based approach increases teachers' sense of purpose, satisfaction, and efficacy. Teachers are central to the learning process for deeper learning, facilitating a multitude of learning resources and ensuring that the students are demonstrating learning objectives at advanced levels of proficiency. Thus, it is critical to fully invest in teachers as learners so that they have the knowledge

In a proficiency-based system, teachers flourish as much as students.

 Proficiency-Based Instruction and Assessment, the Oregon Education Roundtable and skills to fully support their students. This is a challenge given the weak state of the current teacher preparation and professional development system. Competency-based advocates will need to seek new methods of professional development as well as continue to confront the challenge of upgrading teacher education that can be relatively intractable.

The first thing to remember in supporting educators in this transition is that innovation must not be applied solely through a top-down model. States

need to guard against any type of rigid compliance model. Instead, they should support districts that are engaging the teaching workforce in exploring the possibilities in a competency-based model and participating in the decision to move forward. States will need to develop methods to introduce competency-based innovations through a balanced mixture of opportunities, choice and supports.

In a competency-based system, the role of teachers changes, sometimes dramatically. New Hampshire is exploring the idea of using the term "educator" instead of "teacher" to allow policy to capture the differentiated roles that are being created. In competency-based learning, there is much greater emphasis on formative assessment and rapid interventions so that students may continue to progress. Also, the expansion of how and where students learn means that teachers become the guardians of proficiency, ensuring that students are fully mastering the learning objectives, whether they are learning them in an after-school program, at work, or independently. In a performance-based system, the work of teachers becomes even more important as they take on roles of coaches, collaborators, mentors, personalized learning resource managers, and validators of authentic learning.

States play a critical role in facilitating the multiple elements of the education system to upgrade their functions, capacity, and policies around competency-based learning. This includes revising state policies on standards for teacher expectations, rethinking policy around job classifications to provide more flexibility for schools, and seeking alternatives outside of teacher certifications. In addition, states will need to rethink the definition of "highly qualified teacher," as the academic stage of the student may not be determined strictly by age. One policy change, advocated by CCSSO, is to use the term "highly effective teacher." Currently, certification and eligibility is determined based on age-based grade levels. In a competency-based system, teachers would be working with students at varying academic levels, including some that are doing much higher-level work within online or computer-based courses.

New models of instruction require new models of professional development. States are exploring new ways to support professional development for educators in changing roles around student learning. Several states highlighted the work of the National Commission on Teaching and America's Future in developing new models of differentiated educator roles, where educators form teams around the needs of students in learning studios to support students in knowledge transfer, application, and creation as part of the learning process. In addition, one of the benefits is that competency-based systems provide very clear feedback when a school or a teacher is struggling with their instruction. By reviewing aggregate student progress on learning objectives, principals can identify specific areas of instruction that need to be strengthened. Professional development can become "just in time" as gaps are identified, working with individuals or groups of teachers in teams.

One of the most important needs is supporting schools of education in updating their preparation and professional development programs. It is important to ensure that the teachers themselves have experienced competency-based learning, including online learning. Furthermore, they will need increased training in formative assessments, interventions using multiple modes of learning, working in differentiated teams, using digital curriculum, and assessing lifelong learning competencies.

State Policy Design Elements

for Supporting Educators in the Transition to a Competency-Based System

- Increase flexibility in staffing, while restructuring the role of educator.
- Partner with educator associations and unions to explore the possibilities in a competencybased system.
- Upgrade professional development policies and programming to respond to the specific needs of educators and students within a competency-based system.
- Redefine "highly qualified teachers" as "highly effective educators" and ensure that the definition is not tied to time-based systems.
- Facilitate upgrading teacher education.

EMERGING ISSUE #6:

Financing a Competency-Based System

How can state policy address the funding and other resource allocation decisions within a competency-based system that meets the needs of individual learners? Policy can be simply permissive or it can contain incentives, and disincentives, that accelerate change. States can support competency-based pathways simply by allowing per-pupil funding that is not tied to seat-time. New Hampshire was able to move forward rapidly without changing their funding model. But is that enough?

States pursuing competency-based systems will likely begin to grapple with severing the relationship between funding allocations and physical presence, or seat-time, at the same time that they are implementing policies to separate seat-time from credit. Many state funding models function as disincentives to competency-based systems because if a student advances and graduates early, the school loses the funding as the student's time in school "runs out." Instead, might a state begin to guarantee a specific amount of funding for the task of educating a student, even if it takes more or less time?

Some states may ultimately want to use policy to create incentives for schools and students within competency-based models to accrue the greater benefits of the innovation. In the United Kingdom, schools are funded for students who advance past level 16, based on successful completion of credits. Likewise, in the United States, Florida Virtual School has performance-based funding and only receives funding based on students' successful completion of online courses. Performance-based funding creates incentives for schools to respond and intervene quickly to students if they begin to disengage or become stuck academically. It also creates incentives to provide high-quality curriculum and the best learning opportunities to increase the rate at which students are learning.

States may want to rethink funding models and finance policy, eliminating seat-time as the primary framework for funding. The question then becomes "what type of funding policies will encourage innovations and create incentives that increase student advancement?" There are multiple aspects to this question.

- Can districts incentivize individual student growth and progress, so that the schools that are the most effective at serving the most struggling students would receive incentives for productivity, based on student progress as well as outcomes? This requires much more advanced formative and summative assessments, accountability models, and validation of quality, based on outcomes. Michael Horn suggests "tying a portion of funding to student mastery, whereby states pay bonuses when students achieve mastery at an advanced academic level or students realize the biggest gains between pre- and post-assessment (to incentivize schools to serve students who have historically struggled the most)."
- Can performance-based funding follow students so that they may take advantage of multiple learning opportunities within their schools, in online courses, or even independently? Districts would need more flexible financial systems and contractual relationships to support greater student-centered options. Florida has managed this partially by running the Florida Virtual School as an independent local education agency that serves the entire state with the ability for funding to follow the student down to each course enrollment as 1/6 of a full-time enrollment.

Of course, we must be cautious about the potential downsides of performance-based funding, including incentives to enroll the "easiest-to-serve" students. It will also raise resource allocation issues as some students may need substantially more intensive support and enriched learning experiences to master material, while others can speed along independently. Finally, it raises questions on how we value the roles and skills of educators in systems in which students are motivated and empowered to work more independently.

State Policy Design Elements

for Financing a Competency-Based System

- Redefine the Carnegie unit as competencies, thereby removing funding based on seat-time.
- Incentivize high-quality, competency-based learning models by rewarding schools and districts that are most effectively serving traditionally underserved students.
- Streamline funding within K–20 so that students can advance to higher-level courses, even while remaining in their school.
- Modularize courses so that schools serving highly mobile students can receive proportional funding for student progress and so that students can receive proportional credit for modules they have mastered.

Conclusion

State leadership is increasing its mission to transform what is possible for education systems. This vision will continually drive us forward in an unquenchable quest for improving the opportunities and conditions for all students. Competency-based learning is essential to cracking the code, unleashing next generation learning, and positioning the United States to out-innovate global competitors.

The discussion in this paper is only the beginning in shaping next generation state policy to support a new range of competency-based learning. States will need to work together, building on each other's advancements and experiences in developing competency-based learning. Furthermore, states will need to intentionally keep an eye on engaging diverse leadership, ensuring that all parts of our communities are fully engaged in understanding, and leading the efforts to integrate next generation learning models.

With the right set of enabling policies, the expansion of models will be organic as schools, districts, and online learning programs drive innovation. State policies that set high expectations for students and unleash creativity in designing personalized learning will dramatically accelerate student outcomes at rates never before thought possible. It is state leadership that will be in the position to be the conductors of this transformation—synchronizing the innovations and policies into a vibrant education system where all of our children experience the joys of learning.

Resources

State Resources

Council of Chief State School Officers www.ccsso.org

New Hampshire

http://www.education.nh.gov/innovations/hs_redesign/index.htm

Ohio

 $\label{lem:http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEPrimary.aspx?page=2&TopicRelationID=1864$

Oregon Proficiency Project

www.k-12leadership.org/professional-development/proficiency-project

Blogs and Websites

International Association for K-12 Online Learning website and iNACOL Competency-Based Wiki

www.inacol.org

EdReformer Edreformer.com

Youth Transition Funders Group Connected by 25

Cby25.blogspot.com

Papers and Resources

Available at American Youth Policy Forum: aypf.org

- A New Model of Student Assessment for the 21st Century, Camille Farrington and Margaret Small.
 2008.
- Building Competency-Based Pathways: Success and Challenges from Leaders in the Field

Available at iNACOL: inacol.org

- Clearing the Path: Creating Innovation Space for Serving Over-Age, Under-Credited Students in Competency-Based Pathways
- It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit
- When Success is the Only Option: Designing Competency-Based Pathways for Next Generation Learning

Available at Innosight Insitute: www.innosightinstitute.org

- Wichita Public Schools' Learning Centers: Creating a new educational model to serve dropouts and at-risk students
- Florida Virtual School: Building the first statewide, Internet-based public high school

From Reinventing Schools Coalition: www.reinventingschool.org

 Delivering on the Promise: The Education Revolution by Delorenzo, R, Battino, W, Schreiber, R and Carrio, B. Gaddy.







