A K-12 Federal Policy Framework for Competency Education:

Building Capacity for Systems Change

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iNAC☀L
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CompetencyWorks

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.

About iNACOL

The mission of the International Association for K-12 Online Learning (iNACOL) is to ensure all students have access to a world-class education and quality blended and online learning opportunities that prepare them for a lifetime of success. iNACOL is a non-profit organization focused on research; developing policy for student-centered education to ensure equity and access; developing quality standards for emerging learning models using online, blended, and competency-based education; and supporting the ongoing professional development of classroom, school, district and state leaders for new learning models. Learn more at www.inacol.org.

About KnowledgeWorks

KnowledgeWorks is a social enterprise focused on ensuring that every student experiences meaningful personalized learning that allows him or her to thrive in college, career and civic life. By offering a portfolio of innovative education approaches and advancing aligned policies, KnowledgeWorks seeks to activate and develop the capacity of communities and educators to build and sustain vibrant learning ecosystems that allow each student to thrive. Our portfolio includes New Tech Network, EDWorks and StriveTogether. Learn more at www.knowledgeworks.org.

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.

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I. Introduction

The world is rapidly changing, and we must ensure that our education system prepares students to be successful in a future that continues to foster innovation and change in a way that is difficult to predict. Empowered and emboldened by the changes underway, we must take a serious step to reframe quality, accountability, and access to do everything in our power to ensure that each and every student is prepared for their future with a student-centered, world-class education.

It is time to move away from traditional assumptions about how schools should look, how teachers should teach, and how students should learn. These assumptions too often restrict learning to physical buildings, bell schedules, credit hours, and static, paper-based learning materials. Many of these assumptions are further reinforced by federal, state, and local governments that incorporate them through outdated compliance requirements and funding structures.

Our education system must break free from these traditional views so it can adequately prepare students for success in college, career, and the global economy. Fortunately, a growing number of districts and states have begun to think about the next step to increase equity, rigor, and relevance in the system, increasing achievement for students who have been underserved, and opening new opportunities for advancement. Using college- and career-ready standards as the foundation, these innovators envision a system in which students master deeper, aligned competencies that provide graduates with the skills to navigate the demands of an increasingly dynamic global economy. Their success rests heavily on federal adoption of a new student-centered policy framework that will advance the growth of competency education.

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.

What is Competency Education?

In 2011, iNACOL held a summit on competency education, bringing together educators, instructional leaders, and education advocates who believed in the promise of this new approach to teaching and learning. Participants developed the following working definition of competency education, which this paper uses as its definition:

· 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.[2]

Depending on the state or district, competency education may be called proficiency-based, performance-based, standards-based, or mastery-based education. Although the terminology can vary, these approaches have in common the elements of competency education. Students in these environments receive a personalized education that meets each one at his or her level, providing robust, timely supports and interventions to keep them engaged and on track to college and career readiness.

HOW DOES COMPETENCY EDUCATION WORK?

Adapted from "How Does Proficiency-Based Learning Work?" by the New England Secondary Schools Consortium and Great Schools Partnership. Leadership in Action Issue Brief #11; A Briefing Series for New England's Educational Leaders.[3]

How is it possible that a student can graduate from high school and yet be unable to read or write well, do basic algebra and geometry, identify major countries on a map, understand how our political system works, or explain the scientific method? While it may be difficult to believe, countless students graduate from high schools every year without the fundamental knowledge and skills they will need to earn a college degree, succeed in the modern workplace, or contribute meaningfully to their communities. How is this possible?

The answer is that many schools do not use teaching, testing, grading, and reporting methods that require students to prove they have actually acquired the most critically important knowledge and skills. In fact, high schools give out thousands of grades, report cards, and diplomas every year, but many of them would not be able to tell you what their students have specifically learned or not learned.

How it works

- **All students must demonstrate what they have learned before moving on.** Before students can pass a course, move on to the next grade level, or graduate, they must demonstrate that they have learned what they were expected to learn. If students fail to meet learning expectations, they are given more support and instruction from teachers, more time to learn and practice, and more opportunities to demonstrate progress. Until they acquire the most essential skills and grasp the most important concepts, students do not move on to the next level.

- **Teachers are very clear about what students need to learn.** In every class, students know precisely what teachers expect — no guesswork required. The learning expectations for the course are clearly described and communicated, and students will know precisely where they stand throughout the course — for example, a student will know that she has achieved three of six expected learning standards, but that she needs to work harder to achieve the last three before she can pass the course. Importantly, her parents will also know precisely what she's learned and what she may be struggling to learn.

- **Common, consistent methods are used to evaluate student learning.** In many schools, different learning expectations are applied from course to course, and different methods and criteria are used to evaluate what students have learned. Consequently, one Algebra I course in a school may be very challenging, for example, while another Algebra I course may be comparatively easy — and a B earned in the "difficult" course might actually represent stronger learning achievement than an A in the "easy" course. Proficiency-based learning [i.e., competency education] applies the same standards to all students, while teachers use consistent methods of evaluating and reporting on student learning — everyone knows precisely what grades stands for and what each student has learned. As a result, grades mean the same thing from course to course, and schools can certify that students are prepared when they move on.

- **While learning expectations are fixed, teachers and students have more flexibility.** Even though learning expectations and evaluation methods are common and consistent, teachers can be given more flexibility in how they teach and students can be given more choice in how they learn. For example, teachers don't need to use the same textbooks, assignments, and tests — as long as their students learn what they need to learn, teachers can develop new and more creative ways to teach. Similarly, students can be given an assignment — research an American president, for example — but they can choose which president to study or how they want to show what they've learned (one student may write an essay, while others may create a short documentary using archival photos or an audio podcast in the style of a presidential address). As long as students meet the course expectations — demonstrate a strong understanding of the election system, the executive branch of the federal government, and the role of the American president — teachers can teach and students can learn in the ways that work best for them.

State and Local Innovation

The current competency education movement can be traced back twenty years to the Chugach, Alaska, school district,[4] which at that time faced grim statistics: 90 percent of its students could not read at grade level and only one student in 26 years had graduated from college. After implementing a new performance-based vision for education, the district saw dramatic gains. In just five years from implementation, average student achievement on the Terra Nova California Achievement Test rose from the bottom quartile to the 72nd percentile, the percentage of students participating in college entrance exams rose from zero to 70 percent, and teacher turnover dropped to 2 percent — a striking reversal from its twenty-year history of 55 percent annual teacher turnover.

As Chugach's success took hold, schools and districts around the country began to pilot their own competency-based models. Those with high-quality implementation experienced similar striking results. Barack Obama Charter School in Los Angeles, a K–6 facility in its fourth year of a competency-based implementation, reported a 150-point gain on the California Standards Test from the 2010-11 to the 2011-12 school year.[5] These results are particularly remarkable given that nearly 100 percent of the students are eligible for free and reduced price lunch, 50 percent of the student population changes every year due to high mobility rates, and less than 10 percent of the students were performing at grade level when they entered the school. In another part of the country, Colorado's Adams 50 School District celebrated the exit of its last school from turnaround status this past year. The district implemented a competency-based model three years ago, replacing traditional grades with Levels 1–10 that incorporate standards from elementary school through high school graduation.[6]

With exciting results, and a growing voice of local educators who believe in the approach, a number of states have since removed policy and regulatory barriers to make it possible for local innovators to scale competency education statewide. Thirty-nine states now allow schools to opt out of seat-time requirements for graduation,[7] and in New Hampshire, credit hours have been altogether redefined into competencies.[8] Additionally, some states and districts have begun to engage key stakeholders, including representatives from K–12, higher education, and the workforce to develop competencies aligned to their academic standards.

Despite this growing movement, local and state innovators continue to confront a number of federal policy barriers that make it challenging to fully realize their vision to fidelity. Many of these barriers stem from federal accountability and assessment policies, as well as policies for identifying schools for improvement.[9] Equally challenging is the long list of time-bound, compliance-focused federal data requirements that bind states and districts to a traditional culture of teaching and learning.

An Emerging Federal Role to Build Capacity for Systems Change

The federal government is in a unique position to catalyze and scale student-centered learning approaches — including competency-based education. Federal policymakers can remove barriers, provide funding incentives, develop learning infrastructure, and invest in a cycle of research, development, and evaluation to identify the most effective strategies for student success. While the federal government is an important partner in this transformation, federal policymakers should work collaboratively with local and state leaders to support the emerging work on the ground. Transformation can only succeed with local buy-in, educator collaboration, and a fundamental shift in our expectations and assumptions about what education should look like.

Advanced States
Those states with clear policies that are moving towards proficiency-based education; more than just an option.

Developing States
Those states with pilots of competency education, credit flexibility policies, or advanced next gen policies for equivalents to seat-time.

Emerging States
Those states with waivers, task forces.

ILN States
Since its inception, the Innovation Lab Network (ILN) has engaged schools, districts, and state education agencies working to identify through local efforts new designs for public education that empower each student to thrive as a productive learner, worker, and citizen. The state's responsibility is to establish conditions in which innovation can flourish and to develop capacity to sustain and scale what works through policy. The Council of Chief State School Officers (CCSSO) facilitates this network of states to support programmatic, policy, and structure design work within each participating states and across the network.

No Policies in Competency Education
States with seat-time and no competency education policies.

The CompetencyWorks Briefing Paper Necessary for Success: Building Mastery of World-Class Skills – A State Policymakers Guide to Competency Education (Patrick & Sturgis, 2013) shares information about states implementing competency education and creating a culture of competency within state agencies.

Federal policymakers can support state and local innovators by establishing a student-centered federal policy framework that supports competency education. This framework should embody the following principles:

- *Greater rigor and relevance* — Measurement of student learning would be based on ensuring that students are on track and held to high, rigorous standards and aligned competencies — from cradle to career — to be successful in college and the workforce.

- *A shift from "one size fits all" to "fits each student"* — All elements of the system, from data systems to accountability, would be built around student learning needs — not those of adults or institutions. In this system, time would be variable and learning constant, unlike our current system in which time-based policies drive most educational decisions. Students would actively engage in their learning, and educators would be prepared to adapt instruction to their needs with robust, multi-tiered supports and universal learning design.

- *Educator empowerment* — Personalized, dynamic, and collaborative instruction would be the hallmark of a system that supports competency education. Educators' roles would shift as they take a more active role in designing assessments and personalizing instruction to ensure that every student advances along his or her individual learning trajectory. The system would also ensure that educators have the supports, instructional tools, and content to personalize instruction and provide timely supports and interventions.

- *Transparency and equity* — Our current accountability system hides the true extent of the achievement gap. Increased transparency and equity shift the focus to closing the achievement gap and raising the bar for each student. Individual student growth and proficiency measures can be lost in averages, *n* sizes, and cohorts. Assessing students when they enter a program and continuously throughout their learning trajectory is the only way to understand where students are in their learning progressions. This information can help educators understand what students need to do to demonstrate competency, and could ensure that they receive "just in time" supports and interventions to advance at an adequate pace. A system that supports competency education would expand educational opportunity for all students, regardless of their background or challenging circumstances.

The Federal Education Landscape

Federal involvement in K–12 education dates back to the U.S. Supreme Court's 1954 *Brown v. Board of Education* decision which effectively ended school segregation. That historic decision gave federal policymakers the responsibility to ensure that disadvantaged students have access to the same high-quality educational opportunities as their peers. Enactment of the Elementary and Secondary Education Act (ESEA) in 1965 further reinforced this role, establishing the Academic Achievement of the Disadvantaged program, better known as Title I, to bridge resource inequities in impoverished communities.

The 2001 reauthorization of the ESEA, No Child Left Behind (NCLB), built on this legacy. The law required schools to report academic achievement data for all student subgroups, shining a much-needed light on the academic achievement of students previously overlooked by the education system. For the first time, many schools were compelled to take a hard look at the quality and opportunities they provided to students with disabilities and English learners, as well as poor and minority students. While NCLB's legacy of increased transparency and accountability was a step in the right direction, in some respects, it fell short. Schools that failed to make Adequate Yearly Progress (AYP) toward an ambitious goal of 100 percent of students achieving proficiency on state math and English language arts assessments by the year 2014 faced sanctions and targeted school-level interventions that often failed to improve the schools, and which created perverse incentives to target only

"bubble kids" who stood a chance of achieving proficiency on tested skills. Student-level supports — tutoring and the opportunity to attend a different school in the district — proved largely ineffective. A common refrain about NCLB is that it encourages schools to "narrow the curriculum" and forces teachers to "teach to the test."

As this paper goes to press, federal policymakers have failed to reach agreement on an ESEA reauthorization proposal, although NCLB's authorization expired in 2007. As such, it remains the law of the land. In lieu of congressional action, the Obama Administration moved forward with a regulatory strategy in 2012 that gave states the opportunity to waive many of NCLB's accountability provisions in exchange for proposals to adopt college- and career-ready standards, implement teacher and leader evaluation systems, and develop a system for turning around the state's lowest performing and widest achievement gap schools. Most states have received a waiver from NCLB's requirements, effectively bypassing many of that law's central accountability provisions. Even with these waivers, however, states and districts remain largely confined to the traditional framework of NCLB. The next reauthorization of ESEA must remove the barriers and disincentives that stand in the way of student-centered learning.

About This Paper

This paper provides federal policymakers and advocates with comprehensive, big-picture ideas for transforming federal policy to support the transition to competency-based learning. It is meant to start a dialogue on these issues, posing important questions to explore as policymakers contemplate a new vision for federal education policy through the next reauthorization of ESEA.

This paper is divided into four chapters; each addresses a different federal policy domain.

- *Accountability*
  Federal accountability policies should incent districts, schools, and educators to use real-time, individual student data to tailor instruction, supports, and interventions to ensure that each student is on pace to graduate with mastery of college- and career-ready standards and aligned competencies.

- *Systems of Assessments*
  Flexible, balanced systems of assessments should measure mastery of competencies aligned to standards, with multiple measures, performance assessments, and evidence providing educators with a data-driven guide for prioritizing continuous improvement of student learning to ensure that every student is on pace to graduation.

- *Supports and Interventions*
  The federal government should support states and districts in the development and implementation of a proactive system of supports and interventions that uses real-time data to help students advance to college and career readiness through learning experiences aligned to their personalized learning pathways.

- *Data Systems*
  Student-centered data systems should collect, report, and provide transparent information on where every student is along a learning trajectory based on demonstrating high levels of competency, to help educators customize learning experiences to ensure that every student can master standards and aligned competencies. Data should provide useful information for improving teaching and learning, as well as for accountability and quality purposes.

While this paper addresses four important domains of the education system, there is a need to explore equally important policies on building teacher and leader competency, and on supporting research to pilot, evaluate, and disseminate best practices to ensure that the best knowledge and tools are available for high-quality competency education. Though integrally linked to the elements in this paper, they are substantial topics that merit separate consideration.

Structure of This Paper

Each chapter in this paper follows a similar structure, opening with a big idea to help the reader envision its relationship to a new policy framework for competency education. It then frames the issue, enhanced by a sidebar with a more detailed vision of what the issue would look like in a transformed federal system. The core of each chapter includes a list of federal policy barriers and a menu of policy actions to support the transition to competency education. These policy recommendations include immediate actions that stakeholders at the local, state, and federal levels can implement under current law. We also recommend enabling policies, some of which will require congressional action, and some that can be accomplished through regulatory adjustments to current federal law. The chapters conclude with case studies of early adopters who are finding ways to implement competency education in states, districts, and schools thanks to, or often in spite of, federal policy. Finally, for those who wish to dig a little deeper, we end each chapter with a list of questions for further discussion. It is our hope that this paper will catalyze deep discussions among stakeholders, to advance a new policy framework to transition the federal education system from its current compliance focus to one centered on continuous improvement of student learning.

Enabling Policy Framework for Competency Education

Accountability

Accountability policies should incent districts, schools, and educators to use real-time, individual student data to tailor instruction, supports, and interventions to ensure that each student is on pace to graduate with mastery of college- and career-ready standards and aligned competencies.

Continuous System Improvement

The federal government should pilot, evaluate, and scale the most effective practices, and fund research and development about competency-based, personalized learning.

Systems of Assessments

Flexible, balanced systems of assessment should measure mastery of competencies aligned to standards, prioritizing continuous improvement of student learning to ensure that every student is on pace to graduation.

Data Systems

Student-centered data systems should help educators customize learning experiences to ensure that every student can master standards and aligned competencies.

Educator Competency

A competency-based continuum of aligned pre-service preparation, credentialing, professional development, and evaluation should empower educators to help each student succeed.

Supports and Interventions

The federal government should support states and districts in the development and implementation of a proactive system of supports and interventions that uses real-time data to help students advance to college and career readiness through learning experiences aligned to their personalized learning pathways.

Central diagram: **Student Learning** surrounded by segments labeled Accountability, Systems of Assessments, Educator Competency, Supports & Interventions, Data Systems, Continuous System Improvement.
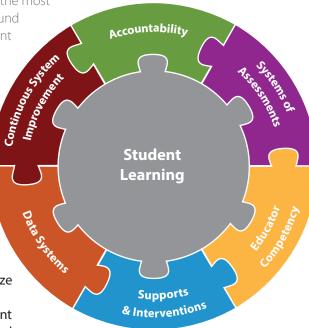
II. Accountability

BIG IDEA: Federal accountability policies should incent districts, schools, and educators to use real-time, individual student data to tailor instruction, supports, and interventions to ensure that each student is on pace to graduate with mastery of college- and career-ready standards and aligned competencies.

An outdated federal accountability system presents significant barriers to widespread implementation of competency education. Despite improvements under No Child Left Behind to increase transparency and support for subgroups of students, the system's focus on after-the-fact summative tests, time-based elements, annual rankings, and narrow indicators of success have created disincentives for educators who are interested in student-centered learning and accountability policies focused on individual student growth, pace, and achievement. Without federal action, competency-based educators are compelled to maintain parallel accountability systems: one required by federal law and one that aligns with their vision of success for every student.

A paradigm shift must occur to transition the current federal accountability system to one that drives equity and embraces a new vision for the future.

CURRENT FEDERAL SYSTEM	VISION FOR THE FUTURE
Measures school effectiveness by percent proficient on annual state summative assessments in English Language Arts (ELA) and Math	Measures school effectiveness by reporting on multiple measures of student growth and pace along learning progressions in a wide range of subjects
Drives a narrow instructional focus by encouraging states and districts to seek minimum proficiency on tested high-stakes subjects in order to avoid annual sanctions	Drives continuous improvement of student learning to ensure that all students progress toward graduation with the knowledge and skills necessary to succeed in college and career
Expects schools to get 100 percent of students to proficiency on state standards at the same pace	Expects students to master standards and aligned competencies at a sufficient pace to be on track to graduation
Provides annual, after-the-fact data on school performance on state summative assessments	Provides real-time data on student performance, growth, and pace toward mastery of standards and competencies
Provides annual data on subgroup proficiency on state summative assessments	Provides real-time data on subgroup performance, growth, and pace to ensure mastery of standards and competencies
Requires states and districts to use school and subgroup proficiency data to rate schools annually and make decisions about sanctions and supports	Helps educators and instructional leaders make real-time decisions about how to provide personalized supports for every student and school

Provides annual data for parents, students, and other stakeholders about the quality of districts and schools	Provides real-time information for parents, students, and other stakeholders about the quality of educational options and programs, including individual courses
Prevents states and districts from piloting new methods of accountability	Enables states and districts to continuously improve the system by piloting new methods of accountability and quality assurance

The federal government can address the disconnect between the current system and the vision for a student-centered system that supports competency education as it works to modernize federal accountability policies. Policymakers should strive to create an accountability system that builds on the transparency goals of No Child Left Behind while prioritizing deeper learning, encouraging local innovation, and ensuring that all students receive the personalized support they need, when they need it, to graduate college and career ready.

What are the Federal Policy Barriers?

Federal time-based accountability policies fail to emphasize continuous improvement of student learning. Federal law requires states to establish Annual Measurable Objectives (AMOs) for each school and district based in large part on student achievement on annual summative assessments. While it is critical to set rigorous performance goals and benchmarks for all students, these policies emphasize end-of-the-year data collection, which cannot contribute to customized learning supports that drive improvement throughout the year. These time-based calculations make it difficult to address inequities in the system, limiting data about equity to after-the-fact elements such as grade-level performance and proficiency scores on summative assessments.

Federal law does not include flexibility for states to use multiple measures for federal accountability calculations. The federal accountability system takes into account annual student achievement in math and English language arts, and annual graduation rates, for all students and subgroups. The U.S. Department of Education's ESEA waiver extended this to include student achievement in other subjects. While a step in the right direction, this is not codified in federal law.

Federal accountability indicators do not measure student progress toward mastery of competencies aligned to standards. The ESEA waiver process permits states to incorporate student growth data into their accountability calculations; however, this regulation doesn't go far enough to support competency-based learning. States embracing competency education must be able to track student rate of growth and pace toward mastery of college- and career-ready standards to reflect differences in the pace of student learning. These systems should be based on individual students, not cohorts, and should track multiple data points to show a student's learning trajectory.

Federal requirements regarding annual classification of schools and districts for improvement can inhibit continuous improvement. Federal law requires states to use annual accountability data to make annual determinations regarding the classification of schools and districts for interventions and supports. This encourages stakeholders to rely on after-the-fact, summative data rather than incenting continuous improvement of each student, school, and district.

POLICY SOLUTIONS

What Are the Opportunities for States Under Current Law?

- Although federal law requires states to implement a time-based accountability system focused explicitly on student achievement of college- and career-ready standards and graduation rates, states can build competency-based elements on top of this system, incorporating measures of student growth, pace, and mastery of competencies.

- States can create additional flexibility regarding how and when students demonstrate mastery of competencies aligned to standards, such as providing multiple opportunities to demonstrate mastery on the summative assessment, and multiple options for which assessments states and districts can use to account for student mastery.

What Federal Policies Could Enable Change?

- Establish a competency-based accountability pilot program that permits individual states, or states in consortia, to develop systems that drive continuous improvement of student learning using multiple measures, at multiple points in the year.

- Conduct a national evaluation of states piloting competency-based accountability systems to determine their impact on student academic achievement, college readiness, college access and matriculation, and employment outcomes.

- Request a study of all time-based federal policies and regulations, and develop a plan to eliminate or replace these policies with ones that drive continuous improvement of student readiness for college and career.

- Require states to have a plan in place that describes how they will ensure that student progress is identified in real time, and that all students receive the type of instruction, supports, and interventions they need, when they need it.

Questions for Further Discussion

- How can the federal government shift from an end-of-year, time-based accountability system to a real-time one that drives continuous improvement for all students along a learning trajectory that will ensure college and career success?

- What types of indicators and measures are necessary to track student progress through competencies aligned to standards? How can the system account for social and emotional learning measures to ensure a more robust picture of student readiness?

- What types of indicators, evidence, and measures should trigger federally required supports and interventions? When should federally required supports and interventions occur?

- What changes in reporting are needed to better communicate student progress so that stakeholders will focus on the continuous improvement of learning for all students? What reporting requirements are necessary for each level of the system?

- How could the accountability system account for competency-based elements such as a shift from traditional levels (i.e., middle to high, high to college) to stages of learning across the trajectories and support the emergence of diverse learning pathways?

EARLY ADOPTER

Accountability 3.0 – New Hampshire's Emerging Vision[10]

New Hampshire was the first state in the nation to redefine the credit hour in terms of competency (in 2005), and has since instituted a number of policies to align the state's education system to student-centered learning. With its approved NCLB waiver up for renewal in the summer of 2014, New Hampshire plans to submit a groundbreaking request that would allow the state to implement a new vision for accountability. This "Accountability 3.0" would enable the state to measure the full range of college- and career-ready knowledge and skills, shift toward personalized learning approaches such as competency education, and connect meaningful student outcome determinations to ensure that students benefit from aligned, evidence-based supports.

The theory of action underpinning the state's vision for "Accountability 3.0" is the belief that accountability will be more rigorously applied if developed and "owned" by the district and school. To support that theory, New Hampshire would let districts shape some of their specific accountability goals, within a state framework, to support the community's vision for teaching and learning. Although the state would administer summative assessments at least once in each of the elementary, middle, and high school grade spans, districts would be expected to incorporate locally and state-developed performance assessments, along with other forms of data, aligned to their accountability plan. The state intends for these localized goals and associated assessments to drive meaningful instruction and increase student engagement.

New Hampshire's emerging vision for "Accountability 3.0" would incorporate the following innovative policies:

- Incentivize districts to implement local performance assessments in exchange for greater autonomy in selecting accountability indicators and measures across at least four domains: 1) academic, 2) college and career readiness, 3) teacher effectiveness, and 4) school environment.

- Require districts to administer a state summative assessment, at a minimum in grades 4, 8, and at least once in high school to ensure comparability.

- Require districts to establish annual measurable targets for accountability purposes.

- Require districts to demonstrate a clear vision and the capacity for high-quality execution. This process would include a commitment to building leadership and educator capacity, as well as plans to support equity and excellence.

- Establish a locally developed performance assessment pilot for high schools. Participating districts and secondary schools would agree to base their local curriculum on state-developed competencies in core disciplines, develop an accountability system that incorporates performance assessments, administer a required number of state-developed performance tasks within each core discipline, and attend all locally developed performance task validation and scoring calibration sessions.

In addition to the above policies, the New Hampshire Department of Education is exploring strategies to incentivize broader adoption of high-quality personalized learning approaches. The state would accomplish this goal by developing state-approved college- and career-ready competencies in all major academic disciplines, developing a bank of common statewide competency-based performance tasks, and offering technical assistance for validating high-quality local performance assessments.

III. Systems of Assessments

BIG IDEA: Flexible, balanced systems of assessments should measure mastery of competencies aligned to standards, with multiple measures, performance assessments, and evidence providing educators with a data-driven guide for prioritizing continuous improvement of student learning to ensure that every student is on pace to graduation.

While the federal accountability system provides the framework for monitoring performance and identifying appropriate supports and interventions, assessments provide information about what students know and can do. In a high-performing education system, assessments are designed and used for both accountability and instructional purposes.

States and districts implementing competency-based models would benefit from an alignment of federal policies on assessment and accountability, as well as financial support to manage high-quality, performance-based assessments. Although many states have begun to make improvements to their systems of assessments with funding from the federal Race to the Top Assessment Grants program, federal policy continues to emphasize a time-bound system of end-of-year, within-grade summative assessments. Time-bound assessment policies assume that all students will master and demonstrate academic content and skills at the same pace and in the same way — an assumption that can make it challenging to customize learning pathways for all students.

An education system that supports the growth of competency education should emphasize balanced systems of assessments. These systems should integrate multiple measures of student learning to provide

VISION FOR THE FUTURE

Federal policy should realign to support states in developing systems of assessments that:

- Are aligned to research-based learning progressions or groupings of competencies instead of grade levels or course sequences;

- Are able to measure the pace at which students master competencies in order to track how they are progressing along their learning trajectories;

- Can "roll up" interim assessment data over time to inform summative accountability measures;

- Can be administered whenever students enter a program and again when they are ready to demonstrate mastery of specific competencies;

- Provide students with multiple opportunities to demonstrate mastery of competencies;

- Incorporate performance tasks and other sources of student learning to determine mastery of competencies; and

- Provide standardized, objective validation of student achievement.

These systems of assessments would support educators to:

- Use real-time data to inform instructional practice and continuously improve student performance;

- Design supports and interventions to ensure that each student is on pace to college and career readiness; and

- Score the assessments using standardized and calibrated scoring rubrics and other strategies to ensure inter-rater reliability and comparability of determinations of mastery.

stakeholders with a comprehensive picture of each student's learning progression. Types of assessments employed in this system could include standardized assessments that measure mastery of college- and career-ready standards, performance tasks that require deeper application of skills, and student-designed projects that give students the opportunity to engage in longer demonstrations of mastery throughout the year.

Competency-based assessments should enable educators to use real-time information on student performance, growth, and pace to customize learning for each student. Assessments should emphasize mastery of knowledge and important skills instead of grade levels, providing students with the support and flexibility to progress through competencies aligned to standards on pace to graduation.

Building on Common Core-Aligned Assessments

The ongoing development of next generation systems of assessments aligned to college- and career-ready standards is the first step in the transformation to competency education. The assessments currently under development by the federally funded Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC), for example, will provide educators with timely and meaningful feedback on student mastery of standards. These new systems of assessments will help educators target instruction and supports for students. While these improvements will increase rigor and continuous improvement of the learning environment, additional steps would be needed to bring these assessments in line with a competency education system.

What Are the Federal Policy Barriers?

Federal policy does not allow out-of-grade testing for summative accountability purposes and limits the use of student growth data to determine student learning progressions. Federal law requires states to verify academic performance through annual assessments in grades 3 through 8 and once in grades 10 through 12 for math, English language arts, and science. These assessments are administered at a single point in time and provide after-the-fact data that do not inform instruction. This results in an education system that focuses on annual accountability goals instead of the continuous improvement of student learning. Current assessments that were designed to meet federal requirements do not measure the pace of student learning, do not gauge student mastery of competencies, and, therefore, do not help practitioners pinpoint where students are in their learning progression.

Federally required assessments were not designed to measure the breadth and depth of competency-based learning. Federal accountability policies require states to administer one annual assessment in each tested subject and grade, aligned to academic achievement standards. As a result, states interested in a system that supports competency education must develop parallel summative systems of assessments that measure mastery of competencies aligned to standards, or supplement their current systems of assessments with performance-based or educator-developed assessments. This can impose undue time and cost burdens on states and often results in excessive testing practices.

Federal funding for assessments is inadequate and not aligned to the needs of a student-centered system that supports competency education. Federal resources for assessment were intended to support the development and administration of annual summative assessments aligned to state standards. With limited federal funding for enhanced assessments, and no prioritization for competency-based systems of assessments, states that wish to develop a more robust system focused on competency education face steep financial barriers.

POLICY SOLUTIONS

What Are the Opportunities for States Under Current Law?

- States can adopt assessment policies that accelerate learning by allowing schools to administer summative tests to students who are above their grade level, thereby "banking" their scores for future-year accountability determinations.*

- States and districts can supplement federal assessment requirements with additional statewide or local performance assessments that are aligned to competencies and provide a more robust picture of student learning. States can incorporate these assessments into the state's graduation requirements and use the results to guide decisions about supports and interventions

What Federal Policies Could Enable Change?

- Provide states and districts with federal waiver relief from certain ESEA assessment provisions to pilot flexible assessment policies that support competency-based education. Waivers could permit the use of alternate assessment instruments for summative assessments and the ability to amend annual reporting requirements so students can demonstrate mastery when they are ready throughout the year.

- Establish an assessment pilot program that permits individual states, or states in consortia, to develop and pilot a balanced system of assessments for federal accountability purposes that emphasizes mastery of standards and aligned competencies based on learning progressions instead of grade levels, and provides students with multiple opportunities to demonstrate mastery.

- Provide funding to states, or states in consortia, to develop summative, interim, and formative assessments that measure student achievement against college- and career-ready standards and aligned competencies and that are valid, reliable, and consistent with nationally recognized professional and technical standards.

- Prioritize funding for the development of competency-based state systems of assessments in future competitions of the federal Enhanced Assessment Grants program.

- Request a study to identify current time-based federal reporting requirements that make it difficult for states and districts to implement competency-based assessment strategies, and develop a plan to either provide states and districts with greater flexibility from these barriers or remove them.

* See Oregon's Assessment Inclusion Rules For Accountability Reports for an example of such a policy http://www.ode.state.or.us/data/reportcard/docs/asmtinclusionrules1213.pdf

EARLY ADOPTER

Rhode Island – Building a Comprehensive System of Assessments

Policymakers and educators in Rhode Island are working hard to build a high-quality education system focused on the continuous improvement of all students. The state's vision prioritizes personalized learning and targeted instruction to ensure that all students graduate with the knowledge and skills to succeed. Assessments play a critical role in achieving this vision because they provide educators with real-time information from a variety of sources to inform high-quality instruction.

The state's 2009 Basic Education Program (BEP)[11] regulations call for implementation in each district of a Comprehensive Assessment System (CAS) "that includes measures of student performance for the purposes of formative, interim, and summative evaluations of all students in each core content area," and "include assessments of sufficient frequency and relevance as needed to ensure that students have access to diverse pathways to support their Individual Learning Plans."

The state expects districts to incorporate multiple perspectives and sources of data to help educators understand the full range of student achievement. Practitioners should use this information to evaluate educational programs and practices and make informed decisions related to curriculum and instruction, professional development, and the allocation of resources to better meet students' needs.[12]

Performance assessments play a critical role in Rhode Island's Comprehensive Assessment System (CAS), enabling students to demonstrate a higher level of thinking through the application of knowledge and skills. The state requires all high school students to pass a summative performance assessment in order to satisfy the state's graduation requirements. To satisfy the high school graduation requirements, districts may use an end-of-course performance-based exam, senior project, digital portfolio, Certificate of Initial Mastery (CIM), or similar requirement that demonstrates proficiency on the Rhode Island Grade Level/Grade Span Expectations (GLE/GSE) and applied learning standards.

Questions for Further Discussion

- How could the timing of state summative assessments vary?

- What policies would ensure that assessments are meaningful for students and educators while also driving school and system improvement?

- How can the federal government assist in the ongoing development of balanced systems of assessments to support competency education at scale?

- Should assessments continue to measure grade-level performance, or is there a more appropriate scope for each assessment that accounts for grade spans or learning progressions?

- What safeguards are necessary to ensure that assessments are high quality, aligned to standards and competencies, and valid for the purposes for which they are used?

- Are the current definitions of formative and summative assessments in law and statute adequate to shape student-centered systems of assessments that support competency education?

- How can federal policy support states to ensure the reliability and validity of performance-based assessments? Would federal resources to support validating processes such as inspectorates be helpful to states?

ɪᴠ. Supports and Interventions

BIG IDEA: The federal government should support states and districts in the development and implementation of a proactive system of supports and interventions that uses real-time data to help students advance to college and career readiness through learning experiences aligned to their personalized learning pathways.

The federal government has a long history of partnering with states and districts to bridge resource inequities and focus academic support on the students who need it the most. This partnership emerged with the creation of the federal Title I program in the ESEA authorization of 1965, and has evolved significantly over the years as persistent achievement gaps have made it clear that funding alone would not close them. The most recent reauthorization of ESEA, NCLB, attempted to address this problem by holding states and schools accountable for the performance of subgroups of students. A heightened focus on accountability encouraged policymakers and practitioners at all levels of the system to rethink strategies for supporting underperforming schools — through both whole-school improvement models and supports for teaching and learning. This resulted in the rise of federal programs to disseminate evidence-based practices to personalize learning, including multi-tiered systems of support and universal design for learning.

While some practices have helped schools improve, NCLB's district and school improvement policies on the whole have not resulted in all students receiving the support they need, when they need it most. Schools that missed AYP targets had to undergo a series of interventions, based on the length of time they had failed to make AYP. These interventions would escalate each year until a school reached the fifth and final year, then requiring state take-over or restructuring.

VISION FOR THE FUTURE

The federal government should establish a proactive district and school improvement process that provides students with the personalized supports they need, when they need it most, rather than waiting to intervene a year or two after summative data reveals a problem.

- Federal policy should encourage the development of integrated systems of supports and interventions to ensure that students master essential competencies as they advance through an increasingly transparent education system.

- Federal funding for district and school improvement should align with real-time data on the growth and pace of student mastery to ensure that districts, schools, and other learning providers have the resources they need to customize the learning experience for each student.

- Every student should have access to a personalized learning plan and multiple pathways to ensure mastery of competencies by graduation.

- Federal funding for low-performing schools should ensure that students have access to high-quality, credit-bearing learning experiences, both inside and outside the traditional school system.

Although the recent ESEA waivers provided most states with relief from these provisions, states must now annually identify and intervene in the bottom five percent of schools with the lowest performance and widest achievement gaps. The federal School Improvement Grant (SIG) program provides some resources to help states turn around their lowest performing schools. Some grantees have found innovative ways to use SIG to advance competency education (see the early adopter example below).

 All decisions regarding the identification and classification of schools under these policies are made annually, after a school exhibits widespread low student achievement. This time-based approach is a disservice to students who need support the minute they get off-track to graduation. If the federal government adopts the student-focused assessment, accountability, and data system policies recommended in this paper, states, districts, and schools should be able to more readily identify the need for and deploy interventions and supports.

As federal policymakers begin to rethink the federal role in school improvement, they should look closely at the reforms happening in competency-based learning environments. The model's intensive focus on supports and interventions makes it possible to identify warning signs before students get significantly off track. In competency education, the learning experience is personalized and targeted to a student's learning trajectory, pace, and interests. The system should include embedded, tiered, and timely interventions for just-in-time support that leads to successfully meeting or exceeding the learning targets (Shubilla & Sturgis, 2012).

ELEMENTS OF A COMPETENCY-BASED SYSTEM OF SUPPORTS AND INTERVENTIONS[13]

- Interventions are grounded in assessments that are transparent, ongoing, and provide meaningful feedback to support student learning.

- Shorter learning cycles with fewer, more integrated learning targets are developed to allow for immediate intervention and feedback. A continuous improvement system responds to keep students within or above pacing expectations.

- Students and teachers work together to make sense of assessments, learning strengths, and learning needs to guide the development of personalized learning plans.

- A network of learning experiences inside and outside of school support educators and students at various stages of learning, allowing students to demonstrate mastery of competency through anywhere/anytime learning experiences. Adaptive partnerships also provide necessary student services that are beyond the scope of the school and district.

- Blended learning and adaptive digital tools expand options and provide choices for ways students can practice, apply skills, and demonstrate evidence of learning.

Federal policy and funding should incentivize this proactive approach to education. Under this approach, far fewer schools would rise to the level of alarm that requires intensive federal and state intervention. However, in cases requiring intervention, there should be a priority on whole school and whole district competency-based models that employ customized learning experiences with all the supports and opportunities needed to advance upon mastery.

What Are the Federal Policy Barriers?

Federal law requires states to annually identify low performing schools based on end-of-year summative data. This creates a reactive system of supports and interventions that leaves few to no resources for preventative practices. Annual determinations are often too late to help students who are struggling to meet their achievement targets. It can take years for a school to report gains in improvement after selecting a new implementation model, conducting a planning process, developing and hiring new staff, and refining practices to ensure results.

Monitoring and evaluation of federal grants for school improvement rely on annual data, making it difficult to identify implementation problems early and make necessary adjustments. Recipients of federal SIG grants must report annual summative assessment data to help the federal government monitor and evaluate the effectiveness of grant funds. A lack of availability and use of ongoing data prevents schools from receiving timely technical assistance from state and district experts.

The annual classification of underperforming schools and time-based delivery of supports and interventions make it challenging to ensure that current students benefit from reforms. Federal Title I and SIG programs provide funding to districts to support school improvement activities. While it takes time to structure a high-quality whole school reform, the process does not provide immediate support for current students. They should be afforded similar high-quality learning opportunities.

POLICY SOLUTIONS

What Are the Opportunities for States Under Current Law?

- States can rework their Title I plans to include a robust state and local system of supports and interventions that includes multi-tiered systems of support (e.g., Response to Intervention) and applies competency-based elements such as the development of competencies, student learning objectives, and personalized learning plans to ensure that all students receive support before they end up off-track to graduation.

- States can incorporate competency-based elements into statewide turnaround principles and prioritize competency-based models within the SIG program.

- States can use multiple sources of evidence for identifying and classifying districts and schools in need of supports. States should make every effort to account for student learning pace and differences in student learning progressions.

What Federal Policies Could Enable Change?

- Ensure that state Title I plans describe a robust system of supports and interventions that incorporates data on student achievement, growth, and pace in real time to drive resources to districts and schools throughout the year so they can make necessary adjustments to instruction.

- Amend Title I to ensure that states have a plan for supporting districts in the development of personalized learning plans and multiple pathway options for every student.

- Revise policies that classify schools for supports and interventions, replacing annual measures with real-time data on measures that take into account student learning pace and ensure early warning of potential problems.

- Integrate competency-based elements into school and district improvement program application requirements and prioritize applicants that plan whole school and district competency implementations.

- Allocate funding to states and districts for the development of multiple pathway options for students attending schools identified in the state's lowest tier of performance.

EARLY ADOPTER

Competency-Based Turnaround in Detroit

In 2011, the non-profit school turnaround organization Matchbook Learning, which targets persistently low-achieving schools using a competency-based turnaround model, launched a blended school model at A.L. Holmes, a bottom-performing, five percent K–8 public school in the Detroit Public School District. The organization leveraged federal SIG funds to implement the model, purchase netbooks and digital content, and place personnel in the school. By 2013, the percentage of students proficient in reading more than doubled (from 22 to 46 percent) and quintupled in math (from 2.9 to 15 percent), and rising third graders were testing at 67 percent proficient in reading and 35 percent proficient in math. Clearly no longer a bottom five percent school, the State of Michigan recently designated it as a "Reward School."

In 2012, Matchbook built on this prototype, launching a second model with another bottom five percent K–8 Detroit public school, Brenda Scott. This time the organization partnered with the innovative competency-based district Education Achievement Authority of Michigan. After just one year, this school went from less than one percent of its students achieving proficient in either reading or math to 71 percent and 63 percent of its students making more than a year's worth of gain in reading and math, respectively.

According to Matchbook's CEO and founder Sajan George, "[We have] a unique opportunity to disrupt public education by leveraging Federal funds and autonomous operating conditions available to bottom five percent schools to design, implement and eventually scale the very best in competency based, student centered models to the very worst schools with the hopes of flipping the entire trajectory of these bottom performing schools, and eventually the systems they are under."[14]

Questions for Further Discussion

- Should federal policy continue to identify schools for supports and interventions, and if so, which indicators should states collect to make those decisions? Which schools should receive support? And which school-wide intervention models best support competency-based supports and interventions?

- If federal policy transitions from school-focused interventions to a competency-based, student-centered system of supports and interventions, how can the system ensure that students trapped in underperforming schools have access to high-quality options? And how can the federal government ensure that all students have access to these options?

- How can the federal government facilitate the alignment of data systems and sharing of data to support coordinated wraparound services that go beyond the school building?

- What incentives can federal policymakers provide for educators to focus supports and interventions on hard-to-serve students, whether they are struggling or advanced, while at the same time ensuring that all students get the supports and interventions they need to progress?

v. Data Systems

BIG IDEA: Student-centered data systems should collect, report, and provide transparent information on where every student is along a learning trajectory based on demonstrating high levels of competency, to help educators customize learning experiences to ensure that every student can master standards and aligned competencies. Data should provide useful information for improving teaching and learning, as well as for accountability and quality purposes.

Competency education depends on the effective use of data to drive continuous improvement of student learning. Exemplary competency models will use data systems and technology to provide educators, students, and parents with immediate information on student performance so that every student has the support and opportunities to graduate college and career ready. The emergence of these models represents a tipping point in our education system. After decades of compliance-based policies and practices, educators are recognizing that data and instructional technologies are powerful tools to personalize instruction and maximize learning. Data become the tools that shape daily instruction instead of static, annual measures used to make punitive decisions about school and student performance.

> *After decades of compliance-based policies and practices, educators are recognizing that data and instructional technologies are powerful tools to personalize instruction and maximize learning.*

VISION FOR THE FUTURE

Federal, state, and local data systems should shift from a primary focus on compliance to a primary focus on continuous improvement of student learning. All data systems should be aligned and focused on supporting the achievement of individual student mastery of standards. Local data should be rolled up into state accountability and compliance systems (rather than compliance systems influencing what is collected and used in accountability systems) to inform decisions about targeting of federal and state resources to support the goal of college and career readiness for all students.

- Federal reporting requirements should transcend grade levels, years, and content so stakeholders can access the most accurate and timely information on student learning in order to make adjustments to instruction and supports.

- States and districts should include robust strategies for meaningful data use and technology integration in their ESEA Title I and Title II plans.

- Data systems should provide valuable feedback to federal, state, and local decision makers about which programs and practices have the greatest impact on student learning.

- Privacy rules (FERPA) should permit the development of portable data records that students and parents can access at any time and share with a variety of educational providers to maximize the quality of learning experiences.

A shift from compliance to continuous improvement will require a new technological infrastructure of data systems aligned at the federal, state, and local levels to support competency-based learning. However, the marketplace has been slow to provide a solution that can connect real-time student learning data seamlessly with state accountability systems to inform decision making at every level of the system. Federal and state policymakers can accelerate demand for these technologies by enacting student-centered accountability policies that require such systems to function. The federal government could also help states and districts underwrite the cost of data infrastructure. This new infrastructure must evolve beyond artificial grade levels, years, and content areas so stakeholders have a complete picture of student mastery.

Many districts have already begun to develop robust platforms that enable educators to access data in real time through a single interface. These platforms integrate student data and learning resources from a number of previously siloed sources so educators can develop learning plans with student input, connect students to aligned instructional resources, assess progress toward mastery, and make necessary adjustments in real time. The following chart includes examples of data elements and core functions embedded within some of the emerging local platforms designed to support competency education.

SAMPLE DATA ELEMENTS FOR COMPETENCY-BASED LEARNING PLATFORMS

- Benchmark student achievement data collected on program entry and throughout learning progressions
- Growth, pace, and proficiency for mastery of aligned competencies
- Growth, pace, and proficiency on social and emotional indicators
- Formative, interim, and summative assessment data
- Portfolio of student work including performance tasks
- Participation and impact of student support services
- Student identified learning preferences and styles
- College and career goals
- Demographic data

CORE FUNCTIONS OF DATA SYSTEMS TO IMPROVE STUDENT LEARNING

- Provide access through a transparent cloud-based platform so educators, parents, and students can access information anytime and anywhere
- Integrate information from a student information system, a learning management system, and formative and summative assessments so educators can develop a personalized learning plan for every student
- Map student progression to proficiency for every aligned competency so educators, students, and parents can track performance in real time
- Integrate student support data so educators and community partners can work together to improve student learning
- Span grade levels, years, and content areas so stakeholders can determine the extent of student mastery independent of time and disciplinary barriers
- Connect students and educators to a wide range of aligned supports
- Provide information on the impact of instructional practices

What Are the Federal Policy Barriers?

A compliance-based federal accountability system has created a legacy of compliance-based state and local data systems. Federal policies that require reporting of data for compliance purposes have resulted in state and local data systems with a primary function of compliance, instead of continuous improvement.

Federal funding is insufficient to build the technology infrastructure to support competency education at scale. Compliance-based state data systems do not align with the local data systems and learning management systems emerging to support competency-based models. Alignment of competency-based data systems will require significant start-up investment.

Lack of federal action to align the accountability system to support student-centered learning means the market has been slow to respond to the needs of states and districts that have taken on this work. No student information/data system product currently exists that allows real-time individual student data and multiple forms of evidence throughout the year to support data flow of information into a state accountability system for practical accounting to all stakeholders.

POLICY SOLUTIONS

What Are the Opportunities for States Under Current Law?

- States can accelerate development of the technology infrastructure to support competency education by partnering with providers of their choice to develop integrated systems and single interfaces that align a wide range of existing tools and applications focused on the continuous improvement of student learning.

- Districts can explore creative financing strategies to develop and implement integrated student information and learning management systems to support competency-based education. These systems should have the capability to integrate data from a wide range of sources — including formative, interim, and summative assessments — in real time to inform the development and implementation of personalized learning plans.

- States can incent the development of collaborations, or collective impact partnerships, that encourage a wide range of stakeholders to use data to set common goals and drive community resources in support of competency-based pathways for students. These partnerships should have the flexibility to pool funding from siloed programs to invest strategies that have impact.

What Federal Policies Could Enable Change?

- Reinvigorate the State Longitudinal Data Systems (SLDS) grant program with an emphasis on the development of an aligned technology infrastructure to support competency education that integrates student information systems, LMS, and assessment functions to support student learning. SLDS should prioritize applicants that have a plan to pilot integration with local technology platforms and to track and report student pace toward proficiency of competencies.

- Provide districts with the resources to develop and implement a technology platform that supports and is aligned with competency education, with the capability to develop personalized learning plans in real time, integrated with LMS and systems of assessments.

- Condition absolute priorities, invitational priorities, or competitive preference priorities focused on data access and use on the development of systems that track student progress toward mastery of competencies in real time.

- Establish a performance pilot program that waives barriers to cross-agency collaboration for entities proposing to serve over-age, under-credited students using promising competency-based strategies. Waivers should encourage streamlining of data systems and reporting requirements.

Forsyth County Schools EngageME – PLEASE

Forsyth County Schools, a district serving 38,000 students in Atlanta's metropolitan region, was one of the highest rated applicants in the 2010 inaugural competition of the federal Investing in Innovation Fund (i3) competition. Selected from thousands of applicants, the district received $4.7 million in federal funds to develop an integrated data system that will help educators personalize learning for all students. The proposed system will integrate three different software applications into one, providing educators and students with access to real-time data to transform instruction and learning.[15]

The project, titled EngageME – PLEASE (Personalized Learning Experiences Accelerate Standards-based Education), will merge information from siloed systems for state and federal reporting, an LMS that includes learning resources and course information, a Student Information System that provides data for multiple other applications such as transportation or food service applications, and Response to Intervention (RTI) assessment data. The project will also include standards-based learner plans and a content management system in which activities and resources are matched based on feedback from the assessment engine and student characteristics such as learning preferences and intervention successes. Forsyth County Schools hopes to develop a system that will serve as a model for other districts interested in personalized learning approaches.

Questions for Further Discussion

- How can the federal government shift from a compliance-based approach to accountability and reporting to encourage the development of data systems that emphasize continuous student learning?

- Are the 12 Essential Elements for State Longitudinal Data Systems included in the America COMPETES Act sufficient to sustain student-centered data systems that support competency education? If not, what changes or additions are necessary?

- How can the federal government help states and districts build the aligned technology infrastructure to support competency education at scale? Should the federal government play a role in spurring market demand for the development and dissemination of integrated digital platforms and tools that support student-centered, competency-based learning?

- Can the federal government reduce the data collection burden for states and districts by exploring strategies to roll up instructional data already collected and used at the local level to improve student learning?

- As the traditional boundaries between in-school and out-of-school learning become blurred, how can the federal government modernize FERPA requirements to ensure that stakeholders have the information they need to provide quality learning experiences without compromising critical student privacy protections? How can federal privacy rules ensure safe and practicable implementation of data "backpacks" that allow students and parents to link and carry data across schools, courses, and community services?

vi. Conclusion

America's education system must undergo significant change to provide students with the rigorous and engaging learning experiences that will prepare them for success in college and career. Graduates will require more than just mastery of academic content to succeed. They must have deep knowledge and a broad skill set to navigate an increasingly dynamic and, at times, unpredictable workforce. A shift to competency education will ensure that every student graduates with this strong foundation for success. Although this transformation must originate in schools, districts, and states across the country, stakeholders at every level of the system should engage in a dialogue about shared goals and strategies for high-quality implementation. The more stakeholders are involved in the vision, the greater the potential for sustained impact.

The federal government has a unique and important role to play in the success of competency education. Federal policymakers should embrace this bold vision and work together to remove barriers to innovation so that early adopters can test ideas and scale results. Although there are steps districts and states can take now to advance competency education, the federal government should move quickly but thoughtfully to enact enabling policies that will seed innovation and build capacity for systems change. America's students should not have to wait for incremental change when it is possible to replace today's outdated system with one that is built around the needs and interests of those students. Over time, these enabling policies will provide policymakers with critical information to realign the federal education system so every student has the opportunity to graduate with mastery of competencies aligned to standards.

As policymakers and stakeholders at all levels of the system collaborate on a plan for scaling this work, they should commit to three important goals: 1) To address the system holistically, not one issue or piece of the system at a time; 2) To embed strategies for continuous improvement into every level of the system, investing in the research, dissemination, and scale of best practices; and 3) To design a system that puts students at the center so every program helps produce graduates who will excel in college, careers, and beyond. Adherence to these goals will ensure that policy and practice work together to build a system that will sustain the workforce for generations to come.

VII. Recommended Readings and Resources

Available from competencyworks.org and inacol.org:

Progress and Proficiency: Redesigning Grading for Competency Education

Chris Sturgis, January 2014

This paper explores how districts and schools can redesign grading systems to best help students to excel in academics and to gain the skills that are needed to be successful in college, the community, and the workplace.

Mean What You Say: Defining and Integrating Personalized, Blended and Competency Education

Susan Patrick, Kathryn Kennedy, and Allison Powell, October 2013

Explains the nuances of key terms used across the field of K–12 education related to personalized, blended, and competency education, and how the ideas integrate in order to create new learning models.

Necessary for Success: A State Policymakers Guide to Competency Education

Susan Patrick and Chris Sturgis, February 2013

Provides an opportunity for state leaders to reflect upon the efforts of contemporaries around the country; shares insights into re-engineering the policy and practices of our K–12 systems; introduces the main concepts behind competency-based learning; studies important initial steps taken by states in introducing this emerging model; and considers creating a culture of competency within state agencies.

Re-Engineering Information Technology: Design Considerations for Competency Education

Liz Glowa and Susan Patrick, February 2013

Analyzes and examines components and elements of effective competency-based information systems. Based on interviews and research, the ideas in Re-Engineering Information Technology build upon the lessons learned in analyzing information systems developed by competency education innovators, best practices of systemic approaches to information management, and emerging opportunities. The paper is designed for readers to find those issues that are of most interest to them in their role and be used to catalyze strategies, support new competency-based instructional models, and inform decision making for continuous improvement.

The Art and Science of Designing Competencies

Chris Sturgis, July 2012

Discusses how innovators in competency education develop competencies. Often this is referred to as a tuning process or reengineering process — mapping from what we want students to know and be able to do all the way backwards to the choices for curricular tasks and assessments. This paper provides insights into the orientation and processes that innovators use in designing competencies.

Available from competencyworks.org and inacol.org (continued):

It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit

Chris Sturgis, Susan Patrick, and Linda Pittenger, July 2011

Highlights the key issues from the proceedings at the March 2011 Competency-Based Learning Summit for advancing competency-based learning. The paper addresses the three main goals of the summit:

- Sharing expertise across innovators and policy leaders
- Building a common working definition of competency-based learning
- Enhancing strategies for advancing competency-based options

Cracking the Code: Synchronizing Policy and Practice for Performance-Based Learning

Susan Patrick and Chris Sturgis, July 2011

The report sets a policy framework for advancing performance-based learning and builds on recommendations made during the 2011 Competency-Based Learning Summit convened by iNACOL and CCSSO. The report recommends that states begin to transform policies from "rigid compliance" to "enabling policies," by offering seat-time waivers or "credit flex" policies that allow for the flexibility to offer competency-based learning in K–12. The policy development is multi-stage — building toward a "comprehensive policy redesign" that would require school districts to offer competency-based credits; provide proper training and information systems; establish quality-control; support individual growth models for accountability; and align higher education with K–12 competency-based efforts.

Clearing the Path: Creating Innovation Space for Serving Over-age, Under-credited Students in Competency-based Pathways

Chris Sturgis, Bob Rath, Ephraim Weisstein, and Susan Patrick, December 2010

This paper provides guidance on creating competency-based approaches for over-age, under-credited students that have fallen off the track toward graduation. Drawing on a wide range of expertise, this paper explores how states can create space for innovation, including design principles, minimum policy conditions, and options for moving forward.

When Success is the Only Option: Designing Competency-Based Pathways for Next Generation Learning

Chris Sturgis and Susan Patrick, November 2010

This paper is an introduction to competency-based pathways, a necessary condition for realizing the potential of next generation learning. The most important finding from this investigation is that competency-based pathways are a re-engineering of our education system around learning — a re-engineering designed for success in which failure is no longer an option. This paper is the first of the series. The following papers (above) from Sturgis and Patrick in 2011 provide a much more detailed exploration into policy and practice for competency-based learning.

Available from knowledgeworks.org:

Federal Innovation Competitions: A Catalyst for Competency Education
Lillian Pace, June 2013

Examines three federal innovation competitions: Race to the Top, the Investing in Innovation Fund, and the Race to the Top-District, to better understand their impact on the growth of competency education.

Competency Education Series Policy Brief One: An Emerging Federal Role for Competency Education
Lillian Pace, April 2013

Discusses a federal role for competency education, examples of states doing the groundbreaking work in this area, and an overview of federal accountability and assessment policy barriers that make it challenging to scale competency education.

Available from aypf.org:

The Role of Expanded Learning in Competency-Based Education Systems
American Youth Policy Forum, September 2013

Summarizes an AYPF discussion group that provided an opportunity to hear from leaders who are currently incorporating expanded learning opportunities into competency-based systems. Participants discussed and explored the opportunities and challenges inherent in this work.

Moving to Mastery: A National Policy Forum on Competency-Based Education
American Youth Policy Forum, March 2013

These video, Powerpoint presentations, and summary of a National Policy Forum, co-sponsored by CompetencyWorks and the International Association for K–12 Online Learning (iNACOL), highlight important research, policy trends, and issues for advancing competency-based education. The forum showcased experts who are leading state and district efforts to transform K–12 student learning using competency-based education, and provided an overview of federal policy issues and recommendations.

Available from achieve.org:

Advancing Competency-Based Pathways to College and Career Readiness
ACHIEVE, July 2013

Proposes a state policy framework, focused on graduation requirements, assessment, and accountability. The report is designed to assist states in building a policy structure that contributes to statewide adoption and implementation of competency-based pathways that support all students in reaching college and career readiness, as defined by the Common Core State Standards.

Available from carnegiefoundation.org:

50-State Scan of Course Credit Policies
Taylor White, Carnegie Foundation for the Advancement of Teaching, July 2013

Provides a comprehensive overview of state credit hour policies.

Available from [nga.org](nga.org):

State Strategies for Awarding Credit to Support Student Learning
National Governors Association, February 2012

Gives readers a brief overview of how the current system negatively impacts student learning, and how state policy plays a crucial role in competency education, with examples of the policies in different states.

Available from http://www.maine.gov/doe/

Case Studies of Three Districts in Maine
Maine Department of Education

Describes how school districts, teachers, and communities have explored the potential for customized and competency-based education. The Maine Department of Education has made a series of videos and case studies available to help other districts prepare for their reform process.

Available from [all4ed.org](all4ed.org):

Strengthening High School Teaching and Learning in New Hampshire's Competency-Based System
Mariana Hayes, Alliance for Excellent Education, January 2013

Provides an in-depth profile of New Hampshire's transition to a competency-based education system.

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