June 6, 2013

Competency Education Series: Policy Brief Two

Federal Innovation Competitions: A Catalyst for Competency Education





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INTRODUCTION

The pace of American innovation has accelerated significantly over the past few decades, shaped in part by a growing demand for flexibility and customization. Nearly every industry has benefited from this shift, including the country's education system. An increasing number of educators and learners have begun to demand a new approach to education that embraces the shift to rapid personalization while ensuring that every graduate has the content and skills to succeed in college and the workforce. The result is a growing network of schools, districts, and states committed to the development and implementation of competency education. The appeal of this approach stems from its highly flexible learning structure that gives students the freedom to pursue individualized learning paths and the personalized support to master a challenging curriculum.

America's international competitiveness depends on its ability to support innovation through investment in the study and replication of teaching and learning strategies such as competency education that have the potential to transform student achievement. While state and local education stakeholders can initiate change through regional efforts, the federal government is well-positioned to catalyze and scale innovation at the national level. Evidence of this impact is beginning to emerge as federal policymakers increasingly invest in education innovation competitions to advance strategies focused on personalized learning. These

COMPETENCY EDUCATION DEFINED¹

- Students advance upon demonstration of mastery of content, 21st century skills, and dispositions that prepare them for college and careers.
- Learning standards are explicit, understood by students, and measurable.
- Assessments formative, interim, and summative measure and promote learning.
- Demonstration of learning uses a variety of assessment methods including in-depth performance assessments that expect application of learning.
- Instruction is personalized, flexible, and adaptable to student needs both initially and as required by student learning.
- Students both direct and lead their learning even as they learn from and with others both within and outside of school.
- Grading is used as a form of communication for students, parents, and teachers not control or punishment.

competitions have established a national platform for competency education, in particular, resulting in proposals from all over the country to test, refine, and replicate strategies focused on student-centered learning.

This paper, the second policy brief in KnowledgeWorks' Competency Education Series, will examine three federal innovation competitions: Race to the Top, the Investing in Innovation Fund, and the Race to the Top-District, to

^{1 &}quot;2012 SBAC Proficiency-Based Learning Task Force Final Report," Smarter Balanced Assessment Consortium, http://www.smarterbalanced.org/

better understand their impact on the growth of competency education. KnowledgeWorks' analysis and conclusions are based on a thorough review of applications submitted by states, districts, and non-profit organizations seeking funds in each of these competitions. This review of applications provides great insight into the paradigm shift to competency education including evidence of heightened demand for this approach and emerging commonalities across models that will help inform the national conversation about how to develop systems to support this work at scale. Detailed summaries of the applications and their competency elements are included in an appendix section.

Overview of Innovation Funds

Innovation is one of the defining elements of President Barack Obama's education agenda. As his strategic plan, *A Strategy for American Innovation*², states, his Administration is committed to "providing incentives for States and local educational agencies (LEAs) to implement comprehensive educational reforms and to test, evaluate, and expand innovative educational strategies and practices." The Obama Administration has championed a number of cross-agency innovation competitions focused on improving student achievement, including his most visible education initiatives – The Race to the Top Fund (RTT), the Investing in Innovation Fund (i3), and the Race to the Top-District Fund (RTT-D).

- ▶ Race to the Top Fund RTT³ provides competitive grants to states to incentivize systematic state and local reform focused on improving student outcomes. The federal government provided \$4.35 billion in Fiscal Year 2010 to fund K-12 reform in twelve winning states and another \$200 million in Fiscal Year 2011 for seven winning states. (Note: The U.S. Department of Education has also created a RTT-Early Learning Challenge Fund to incentivize systemic state and local reform focused on improving early learning outcomes and a RTT-District Fund focused on K-12 school level transformation.)
- ▶ The Investing in Innovation Fund i3⁴ provides grants to school districts and non-profit organizations to validate or replicate educational strategies with strong evidence of improving educational outcomes. The program also provides grants to develop a base of evidence for promising strategies. The federal government provided \$650 million in Fiscal Year 2010 to fund 49 winning applicants and over \$400 million in subsequent funding years to hold additional rounds of the competition.
- Race to the Top-District Fund RTT-D⁵ provides grants to school districts to identify and scale effective classroom practices. This competition builds on the original RTT program with an absolute priority for personalized learning. The federal government provided \$400 million in Fiscal Year 2012 to fund 16 winning districts. The U.S. Department of Education recently announced it will reserve \$120 million of its Fiscal Year 2013 RTT funds for a second round competition of RTT-D.

² "A Strategy for American Innovation: Securing Our Economic Growth and Prosperity," National Economic Council, Council of Economic Advisers, and Office of Science and Technology Policy, (February 2011), http://www.slideshare.net/whitehouse/a-strategy-for-american-innovation

^{3 &}quot;Race to the Top Fund," U.S. Department of Education, http://www2.ed.gov/programs/racetothetop/index.html

^{4 &}quot;Investing in Innovation Fund (I3), U.S. Department of Education, http://www2.ed.gov/programs/innovation/index.html

⁵ "Race to the Top District (RTT-D), U.S. Department of Education, http://www2.ed.gov/programs/racetothetop-district/index.html

Federal innovation competitions have a number of benefits that make them an appealing approach to policymakers. While they are not meant to replace traditional formula funding, they offer a balanced approach to federal investment when implemented in conjunction with formula programs. Some of their benefits include:

- ▶ Catalyze Change Innovation competitions require applicants to explore new ways to approach teaching and learning. This creates opportunity to abandon practices that do not work in favor of promising strategies with greater potential for impact.
- ▶ Energize Stakeholders The opportunity to compete for federal innovation resources often energizes a broad range of stakeholders, expanding capacity and increasing the likelihood for sustainability of reform.
- ► Focus on Outcomes Applicants for innovation competitions are encouraged to focus on outcomes in the development, implementation, and evaluation process. This helps all stakeholders communicate strengths and weaknesses of reform strategies and informs future investments.
- ▶ Emphasis on Replication and Scale The goal of innovation competitions is to test and replicate promising approaches to education reform. The emphasis on replication ensures applicants think about the big picture and begin to lay the groundwork for long-term systems reform.

Race to the Top Fund - A Pathway for Competency Education

The purpose of the RTT program is to reward states on a path to sweeping education reform with the resources to expedite their reform initiatives. Winning applicants are not only expected to implement an aggressive reform package, they are also expected to model effective strategies for improving student achievement, closing achievement gaps, improving high school graduation rates, and preparing students for success in college and career. The competition focuses on four major reform areas:

- 1) Adopting standards and assessments that prepare students to succeed in college and the workplace and to compete in the global economy;
- 2) Building data systems that measure student growth and success, and inform teachers and principals about how they can improve instruction;
- 3) Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most; and
- 4) Turning around our lowest-achieving schools.

Although the federal government did not design RTT to advance one particular reform strategy, the program includes a number of elements that lay the groundwork for a shift to competency education. Two of the four reform areas – 1) adopting high-quality standards and assessments that measure a student's knowledge and ability to

apply critical concepts; and 2) building data systems that support continuous instructional improvement; – are critical elements of student-centered learning. Competency-based models depend on clear standards that reflect knowledge and skills as well as a robust system of formative, interim, and summative assessments that help educators evaluate progress along an individualized learning path. Robust state and local data systems provide stakeholders with real-time access to this information so they can adjust instruction and personalize the learning experience. The inclusion of these two reforms in RTT represents an important step in the shift to competency education.

In addition to an emphasis on high-quality standards, assessments, and data systems, RTT includes several invitational priorities that align closely with states exploring a transition to competency education. These include expansion of state longitudinal data systems to connect and coordinate all parts of the education system, greater coordination of education programs across the P-20 spectrum, and greater school-level flexibility and autonomy to drive reform. This last priority even emphasizes strategies for "awarding credit to students based on student performance instead of instructional time."

Many phase 1 and phase 2 applicants capitalized on this vision, crafting proposals with a wide range of competency elements. Some states chose to focus their entire application on student-centered learning, while others proposed to tackle one or two elements that would build capacity for districts interested in the implementation of competency-based models. A review of these applications uncovered the following common themes focused on competency education.

RACE TO THE TOP SNAPSHOT

Alabama: Advancing Education as
The 21st Century Civil Right (June 1, 2010)

Vision:

All students will graduate high school prepared to succeed in college or the workplace. Alabama will increase its percentage of students graduating from high school incrementally over four years from 65% to 80%. The state will accomplish this by transforming its education system from the rigid industrial model of the 1950s to a place where learning is the constant and time the variable, schedules are based on the individual interests and needs of the student, progress is determined by proficiency toward the standard, and demography is irrelevant.

- Build on its FIRST CHOICE initiative which creates opportunities to transform traditional high schools into centers of learning where time is variable and mastery is the measure.
- Provide schools with the flexibility to craft individual and group learning plans without the restriction of the Carnegie Unit while maintaining high standards.
- Expand the Alabama Connecting Classrooms, Educators, and Students Statewide (ACCESS) initiative which provides all high school students with access to quality instruction and a wide range of course options online.

^{*} Please see the Race to the Top chart below

- While all applicants were asked to adopt new high-quality assessment systems, many applicants proposed comprehensive assessment systems with the capability to measure deeper learning skills, provide real-time data to inform instruction, and ensure multiple fomats to improve the utility and flexibility of assessments. Some states even proposed to give students multiple opportunities to demonstrate mastery on summative assessments throughout the school year. Almost all states incorporated plans to help expand district and classroom access to formative assessment tools so educators can personalize instruction.
- ► Emphasis on 21st Century Professional **Development** – Nearly every applicant proposed significant changes to its professional development system to ensure educators have the expertise to deliver high-quality instruction. Many states proposed the creation or expansion of digital platforms that give educators real-time access to professional development experiences, resources aligned to college and career ready standards, assistance developing instructional plans, and the ability to network with other educators throughout the state. Many states also emphasized the importance of preparing educators to analyze data in real-time to inform the development and continuous improvement of personalized learning plans.
- ▶ Provision of Multiple Learning Pathways –
 Many states included proposals to provide
 multiple learning pathways to increase relevancy
 and student engagement. These proposals

RACE TO THE TOP SNAPSHOT

Ohio: Fifth to First - Ohio's Race to the Top Strategy (June 1, 2010)

Vision:

A successful transition from its historical industrial-based economy to one based on innovation and emerging technologies requires Ohio to significantly improve student achievement across all segments of the population, raise college ready high school graduation rates, and increase the percentage of Ohio students who receive a strong college education especially in STEMrelated fields. Ohio's reform vision will build on its 2009 reform legislation which set goals of a near 100% graduation rate, elimination of achievement gaps, increase in higher education matriculation and completion rates, and an emphasis on personalized learning that enables students to explore talents, interests, and skills.

- Implement the Personalize Learning through Formative Assessment Project to ensure every district has access to the Ohio Instructional Improvement System which combines summative, formative, and value-add data so educators can create individualized learning plans.
- Establish one school of innovation within roughly 50 miles of any existing school in Ohio that would focus on 21st century skills and personalized learning.
- •Expand the state longitudinal data system to personalize learning and to collect detailed information on credit flexibility.

would empower students to design their own educational path based on individual interests, learning preferences, and proficiency-level. Some states also emphasized the importance of integrating community partners to provide students with opportunities for experiential learning.

Investing in Innovation (i3) Fund – A Pathway for Competency Education

The federal government established i3 in 2009 to address growing concerns over the lack of evidence in education. Advocates argued that i3 would create the research base to better inform federal investment in education and maximize impact on student learning outcomes.

We're making an unprecedented investment in cutting-edge ideas that will produce the next generation of school reforms. The i3 competition will provide seed money for fresh ideas, help grow promising programs with a good track record and scale up programs with proven results to a national level.

- U.S. Education Secretary Arne Duncan

School districts and non-profit organizations are encouraged to apply for federal resources to test, validate, or scale strategies that have demonstrated previous success in closing achievement gaps, improving student progress toward proficiency, increasing graduation rates, or recruiting and retaining high-quality teachers and principals. Applicants are asked to apply in one of three categories:

INVESTING IN INNOVATION SNAPSHOT

Plymouth Public Schools (MA) (2010 Grant Cycle)⁶

Partners:

New England Network for Personalization and Performance (NENPP), Center for Secondary School Redesign, Inc., New York Performance Standards Consortium (Consortium), the UCLA School Management Program

Project Description:

The NENPP will work with 13 schools in New England to develop personalized learning environments that include performance assessments as a vehicle for demonstrating mastery of course competencies. The vision for this network is to redesign high schools where learning can happen anytime, anyplace; where students demonstrate learning through complex, rigorous performance assessments; and where teachers function as facilitators of learning rather than lecturers.

- Every student in every network school will participate in at least two inquiry-based learning experiences and demonstrate mastery through performance assessment.
- A summer institute will support teams of teachers to develop inquiry-based curricular units.
- A Performance Assessment Review Board of nationally recognized individuals will visit the schools, observe and participate in student presentations, interview students and teachers, and review faculty documentation.

^{6&}quot;The Network: Project Summary," The New England Network for Personalization and Performance, http://www.thenewenglandnetwork.net/project summary

- ➤ Scale-up Grants This category provides the largest awards for applicants focused on programs and practices with the potential to reach hundreds of thousands of students. Applicants must have a strong base of evidence that their program has had a significant effect on improving student achievement.
- Validation Grants This category focuses on existing, promising programs that have good evidence of impact but need to build an evidence base.
- Development Grants This category provides the smallest grants to support new and highpotential practices whose impact should be studied further.

The i3 competition includes several components that align closely with the elements of competency education. Two of the four absolute priorities, *Innovations that* Complement the Implementation of High Standards and High-Quality Assessments and Innovations that Turn Around Persistently Low-Performing Schools, include language that would support the transition to studentcentered learning. Specifically, the assessment language identifies strategies that increase the "development and use of formative assessments or interim assessments, or other performance-based tools and metrics that are aligned with high student content and academic achievement standards." Similarly, the turning around persistently low-performing schools language calls for strategies that create multiple pathways for students to earn regular high school diplomas. The language further recommends strategies that award credit based on demonstrated evidence of student competency.

INVESTING IN INNOVATION SNAPSHOT

Forsyth County Schools (GA) (2010 Grant Cycle)

Partner:

Infinite Campus (MN)

Project Description:

Forsyth County Schools has multiple software applications that contain student data, assessment data, and learning resources that require a separate application and login. EngageME – P.L.E.A.S.E. will integrate several systems into one data system to create a role-based portal so that students and teachers can access all resources necessary to inform teaching and learning.

- The new data system will enable the design of a personalized learning plan that includes the student's longitudinal and immediate feedback data from prior courses, learning preferences, and intervention successes.
- Teachers will prescribe standards-based content and assessments that will be delivered to the student. The student will be able to assess his or her own learning, and the assessment engine will report on and select options to support student mastery of standards.

The inclusion of these elements has encouraged many districts and non-profit partners to apply for resources to test or replicate strategies with competency-based elements. In fact, nearly a dozen of the highest-rated applicants since 2010 included some competency element in their proposal. A review of these winning applications identified the following common themes among applicants focused on competency-based approaches:

- ▶ Reliance on Experiential Learning Many applicants proposed to study strategies that provide students with experiential learning opportunities both inside and outside of the classroom to enhance the relevancy and rigor of the learning experience. Experiential learning is an essential component of a personalized learning system because it helps educators design a learning path for each student that adapts to individual interests, learning styles, and talents. Many applicants proposed to integrate community partners in the development and implementation of the instructional program.
- ▶ Emphasis on Growth and Continuous Improvement A significant percentage of applicants proposed to test or replicate strategies that closely track student growth in real-time. These applicants aimed to take advantage of new technologies that make it possible to assess and track student progress on a continuous basis so education stakeholders can adjust instruction to ensure all students master the content and skills they need to succeed.
- ▶ Robust Local Data Systems After years of progress in the establishment of state longitudinal data systems, applicants seemed eager to construct and expand local data systems that integrate data from a variety of sources to inform classroom instruction. Applicants proposed to use these data systems to personalize the learning experience for students. Local data systems would integrate information from a number of previously siloed systems including assessment results (formative, interim, and summative), information from prior courses, learning preferences, and information on successful interventions.

Race to the Top-District - A Pathway for Competency Education

In 2012, Congress gave the U.S. Department of Education the authority to expand RTT to focus on district-level reforms. The U.S. Department of Education responded by establishing a \$400 million RTT-D competition aimed at classroom level reform efforts that encourage transformative change within schools. Districts and consortia of districts were invited to apply for funding to implement a reform plan that built on the four assurances from the original RTT competition but with a new emphasis on personalized learning. Applicants also had the option of addressing a competitive preference priority focused on resource alignment across the educational continuum. The inclusion of an absolute priority for personalized learning made RTT-D a perfect opportunity to explore the implementation and replication of competency-based approaches to education. This absolute priority, as defined below, encouraged applicants to think comprehensively about personalized learning instead of the piecemeal strategies present in many of today's schools.

Absolute Priority 1: Personalized Learning

Environments. To meet this priority, an applicant must coherently and comprehensively address how it will build on the core educational assurance areas to create learning environments that are designed to significantly improve learning and teaching through the personalization of strategies, tools, and supports for students and educators that are aligned with college and career ready standards or college and career ready graduation requirements; accelerate student achievement and deepen student learning by meeting the academic needs of each student: increase the effectiveness of educators; expand student access to the most effective educators; decrease achievement gaps across student groups; and increase the rates at which students graduate from high school prepared for college and careers.

An overwhelming number of applicants responded to the emphasis on personalized learning with proposals to implement competency-based strategies. In fact, 75 percent of the winning applicants proposed plans to help their districts transition to a competency system. Common elements across these winning applications include the following:

► Integration of College And Career Ready
Standards and 21st Century Skills – Applicants submitted reform plans that would ensure all students graduate with the academic knowledge and transferrable skills to ensure success in college and the workforce. Many applicants proposed to integrate these deeper learning skills into their assessment and grading policies to emphasize their importance. Examples of deeper learning skills incorporated by applicants

RACE TO THE TOP-DISTRICT SNAPSHOT

Lindsay Unified School District (CA) (2012)

Project Description:

Project EMPOWER! will transition the district's performance-based Personalized Mastery Learning System through its developmental period of reform into a sustainable, district-wide systemic practice that can be replicated for other districts through a learner and facilitator digital learning platform.

- Curriculum is based on college and career ready standards, is aligned to state assessment blueprints, and organized into units or measurement topics. Lifelong learning standards are integrated into academic competencies to promote 21st century skills.
- Students are grouped along the learning continuum by performance, not age or grade, with the flexibility to move to more advanced work upon demonstration of mastery.
- A facilitator digital learning platform will provide instructional content that is prematched to standards, teacher assessment tools, manuals and courses for improving student-centered instructional skills.
- A comprehensive student information system gives students access to meaningful data to help them track progress.

in the winning applications include: goal-setting, teamwork, perseverance, critical thinking, problem solving, character development, career development, service learning, and technology.

- Development of Personalized Learning Plans Many applicants proposed to develop personalized learning plans for every student based on a comprehensive data analysis of student performance and individual learning interests, styles, and talents. In many cases, these plans would serve as a tool for helping students select from a variety of learning pathways that include options such as dual enrollment, project-based learning, extended learning opportunities, and pathways aligned to specific career clusters.
- emphasis on Mastery Instead of Time The emphasis on competency education was most apparent among applicant strategies for prioritizing mastery over time. Applicants proposed strategies such as grouping students based on performance instead of grade level, allowing students to advance to more challenging work upon mastery, and providing extensive supports and extra time for students who fail to reach mastery at the end of a unit. These strategies serve to create a flexible and responsive learning environment that provides students with maximum opportunity to graduate with the knowledge and skills necessary to succeed.
- Robust Formative Assessment Tools The development of high tech, customized formative assesment tools made an appearance throughout the winning applications. Districts proposed to integrate these tools into their reform plan so educators, parents, and students could access real-time information on student progress from

RACE TO THE TOP-DISTRICT SNAPSHOT

Green River Regional Educational Cooperative (KY) (2012)

Project Description:

The Green River Regional Educational Cooperative and the Ohio Valley Educational Cooperative will partner with 22 school districts to shift the educational system from teacher-led instruction to competency-based, kid-friendly learning. This plan focuses on three core values: 1) students advance upon mastery, not age or seat time; 2) explicit and measurable learning objectives empower students; and 3) assessment is meaningful and a positive learning experience for students.

- Principals will work with teachers through school data teams to shift teacher, parent, and student thinking about mastering standards vs. course completion. Teachers will group and regroup students around specific content areas, instructional approaches, projects, and life experiences.
- A personalized learning team in each school will develop a mechanism to integrate student choice into the demonstration of mastery at the classroom and course level.
- Grading practices will shift. Kids will be able to move fluidly from standard to standard rather than grade to grade. Academic supports, software, and engaging instructional practices will ensure students are learning at and beyond traditional grade levels.

any location, any hour of the day. Educators would use this information to target instruction and regroup students to eliminate content and skills gaps.

CONCLUSION

Federal innovation competitions are an effective tool for catalyzing transformative change in education. Recent competitions such as RTT, i3, and RTT-D, have energized stakeholders across the country to produce the next vision for education reform. Many of these stakeholders proposed compelling plans that will help states, districts, and schools transition to a competency education system where students are empowered to master the content knowledge and transferrable skills to succeed in college and the workforce. The heavy concentration of competency-based applications throughout these innovation competitions indicates a high and growing demand for student-centered approaches to education. Common elements across the applications also suggest a growing consensus around the tools, strategies, and infrastructure needed to support this work. As these winning applicants implement their reform plans, important lessons will emerge that will help the field reach further consensus around impact and quality. KnowledgeWorks will follow these early-adaptors closely to highlight their success and identify next steps for advancing this work at the local, state, and national levels.

Appendices

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RACE TO THE TOP - Pathways to Competency

State	Scope of Work	Competency Element
*Denotes Funded	Applications	
AL AL	All students will graduate high school prepared to succeed in college or the workplace. Alabama will increase its percentage of students graduating from high school incrementally over four years from 65% to 80%. The state will accomplish this by transforming its education system from the rigid industrial model of the 1950s to a place where learning is the constant and time the variable, schedules are based on the individual interests and needs of the student, progress is determined by proficiency toward the standard, and demography is irrelevant.	Build on its FIRST CHOICE initiative which creates opportunities to transform traditional high schools into centers of learning where time is variable and mastery is the measure. Schools will have the flexibility to craft individual and group learning plans without the restriction of the Carnegie Unit while maintaining high standards. Expand the Alabama Connecting Classrooms, Educators, and Students Statewide (ACCESS) initiative which provides all Alabama high school students access to quality instruction and a wide range of course options online. Implement a plan to turnaround Alabama's persistently lowachieving schools by working with LEA's to develop multiple models of innovative pathways to high school graduation.
СО	Colorado's education reform plan would prepare all students to, by graduation, be ready to succeed in postsecondary education and the workforce. To achieve this goal of readiness by exit, Colorado's education reform framework focused on: • Ensuring all students have access to a high-quality public school choice. • Developing educator capacity to deliver standardsbased, data-driven instruction. • Providing incentives for effectiveness, knowledge capture, and sharing best practices. • Creating opportunities for innovation in school organization, support models, educator practice, educator evaluation, and turnaround strategies.	New assessment system would: Gauge knowledge and skill and inform teaching and learning. Give students multiple possibilities to take equated forms within the same year. Gauge mastery. Be relevant to students, parents, and educators. Include a rich mix of items (such as multiple-choice, open-ended constructed response, and online simulations). Support the creation and dissemination of formative assessment items to be incorporated into the SchoolView platform and provide regional data coaches to train all educators to use the information to differentiate instruction.
СТ	Connecticut's reform vision would build on its 2010 reform legislation, which requires students to complete their K-12 experience both college and career ready, with a base of knowledge, skills and behaviors. Connecticut's Race to the Top vision would enable the state to accelerate the goal of the reform legislation which states that all students who enter the 5th grade in 2010 will graduate in 2018 college and career ready.	Expand the Connecticut Accountability for Learning Initiative (CALI) to all school districts. CALI provides professional development for educators focused on a standards-based curriculum, extensive use of data, and frequent analysis of student progress. Rapid implementation of Connecticut's Plan for Secondary School Reform which raises graduation requirements, requires districts to develop individualized student success plans to ensure students master these requirements, and emphasizes the use of formative assessment to improve instruction.

ME	Maine's reform vision would ensure that all students graduate from high school prepared for post secondary education, careers, and citizenship by implementing a system focused on the individual student. This system would have five elements: 1. personalized learning; 2. performance-based learning; 3. systems of learning support; 4. great teachers and leaders; 5. data to guide teaching and learning.	Expand Maine Course Pathways which helps parents and students design a four year personal plan consisting of a path of courses that will address all of the standards needed to graduate. Develop Next Generation Innovative Schools and Innovation Lab Schools to pilot new approaches to teaching and learning that embody these five elements. Provide professional development for teachers and leaders to effectively implement systems of learning support which use data from interim, formative, and benchmark assessments; and learning plans to provide tiered interventions using state, school, home, and community resources.
NH	Students are at the core of New Hampshire's reform vision which states that all New Hampshire students will graduate from high school prepared to persist in college and/or a financially sustaining career through an educational system that supports the development of personal and civic responsibility and creates human and social capital to grow and strengthen the State's global economic position in the 21st century. New Hampshire's mission is to support the ongoing development of a comprehensive and coherent statewide education system focused on personalized learning, instructional rigor, and high levels of cognitive demand for all students.	Develop and implement a comprehensive assessment system for improving student achievement using formative, benchmark, summative, and competency- and performance-based assessments. Develop, research, refine, and disseminate effective education reform practices, e.g., extended learning opportunities, expanded time to learn, investing in collaborative activities with the region and beyond. Improve the preparation of teachers and leaders to meet student needs and ready them for the 21st century by developing residency preparation programs for teachers and leaders.
OH*	A successful transition from its historical industrial-based economy to one based on innovation and emerging technologies requires Ohio to significantly improve student achievement across all segments of the population, raise college-ready high-school graduation rates, and increase the percentage of Ohio students who receive a strong college education especially in STEM-related fields. Ohio's reform vision will build on its 2009 reform legislation which set goals of a near 100% graduation rate, elimination of achievement gaps, increase in higher education matriculation and completion rates, and an emphasis between personalized learning that enables students to explore talents, interests, and skills.	The Personalize Learning Through Formative Assessment Project would give every district access to the Ohio Instructional Improvement System which combines summative, formative, and value-add data so educators can create individualized learning plans. Establish one school of innovation within roughly 50 miles of any existing school in Ohio that would focus on 21st Century skills and personalized learning. Expand the state longitudinal data system to personalize learning and to collect detailed information on credit flexibility.
OR	Oregon's education reform agenda is built upon the State's ambitious goals to raise the level of education attainment of Oregon citizens by 2025. In what has come to be known informally as 40-40-20, this goal advances the proposition that 40% of Oregonians 25 years or older should have a bachelor's degree or higher, 40% should have an associate's degree or post-secondary credential in a skilled occupation, and the other 20% should have at least a high school diploma that represents a high level of academic and work readiness skills.	Oregon is committed to developing and adopting proficiency-based assessments as a promising next step in transforming secondary classroom instruction, raising achievement, and closing the achievement gap. Proficiency-based assessments and practices represent a significant advance beyond traditional high school classroom practice. To improve the quality of its assessment systems, Oregon will participate in the formative assessment consortium – Multiple Options for Student Assessment and Instruction Consortium (MOSAIC). Oregon has initiated an Assessment Literacy program to train educational professionals in using the data from student assessments to improve student learning. To support this effort, the focus includes creating more dynamic, user-friendly data tools for collection, validation, analysis, and reporting of all data.

INVESTING IN INNOVATION FUND - Pathways to Competency

Applicant	Scope of Work	Competency Element
(0040) Wi		
Plymouth Public Schools (MA) Partners: New England Network for Personal- ization and Performance (NENPP), Center for Secondary School Redesign, Inc. (CSSR), New York Performance Standards Consortium (Consortium), the UCLA School Management Program	The NENPP will work with 13 schools in New England to develop personalized learning environments that include performance assessments as a vehicle of demonstrating mastery of course competencies. The vision for this network is to redesign high schools where learning can happen anytime, anyplace; where students demonstrate learning through complex, rigorous performance assessments, and where teachers function as facilitators of learning rather than lecturers.	Our goal is that every student in every Network school will have participated in at least two inquiry-based learning experiences and demonstrated mastery through performance assessment. A summer institute will support teams of teachers to develop inquiry based curricular units and begin the conversation about assessment. CSSR will provide onsite follow-up with these teacher teams and will work with a change leadership team from each school. The Consortium will provide teacher mentors to assist teachers in addressing challenges. A Performance Assessment Review Board of nationally recognized individuals will visit the Network schools, observe and participate in student presentations, interview students, and teachers, and review faculty documentation.
St. Vrain Valley School District (CO) Partners: IBM (CO), RidgeviewTel (CO)	The St. Vrain Valley School District is implementing a plan for addressing the unmet needs of at-risk students — specifically, Hispanic students and English language learners (ELLs) – at Skyline High School and its feeder schools. The strategy provides students with a sequence of focused interventions to reduce the achievement gap.	The St. Vrain Valley School District's i3 Project encourages and facilitates the evaluation, analysis and use of student achievement and student growth data by teachers to improve student achievement; student growth; and teacher, principal, school and district performance and productivity. The program provides classroom information technology tools, professional development, time, peer mentorship and collaborative supports for 24 teachers. Collaboration with RidgeviewTel, a local broadband Internet provider, and IBM will further support this initiative by providing the technology and international connections to grow it.
Forsyth County Schools (GA) Partner: Infinite Cam- pus (MN)	The district has multiple software applications that contain student data, assessment data and learning resources that currently require a separate application and login. Engage ME-P.L.E.A.S.E. (Personalized Learning Experiences Accelerate Standardsbased Education) will integrate several systems into one data system to create a role-based portal so that students and teachers can access all resources necessary for reflection on student learning and teacher instruction.	This new data system will enable the design of a personalized learning plan that includes the student's longitudinal and immediate feedback data from prior courses, learning preferences, and intervention successes. Teachers will prescribe standards-based content and assessments that will be delivered to the student. The student will be able to assess his or her own learning, and the Assessment Engine will report on, and evidentially select options to support, the student's mastery of standards. Then the cycle continues: reflect, design, teach and assess.
Bay State Reading Institute (MA) Partners: MA districts: Brockton, Fitchburg, Gloucester, Malden, Pittsfield, & Taunton	Bay State Reading Institute (BSRI) will conduct a study that examines the relationship between student achievement, the implementation of the BSRI model, and interventions used by turnaround coaches to help schools transform their practice. The study will make explicit, for purposes of replication and scaling, the competencies required of successful turnaround coaches and the organizations that support them.	The BSRI model is characterized by robust, long-term support; effective use of data; research-based pedagogy; reorganization and alignment of resources; small-group differentiated instruction; and professional development coordinated with embedded coaching that leads to teacher mastery and outstanding principal leadership. The result is lasting change that is embraced by teachers and driven by data, and that dramatically improves student outcomes.

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New York City Department of Education (NY)	The School of One will use its i3 grant funds to develop an enterprise solution that can be scaled to an exponential number of schools and students, both in New York City and beyond.	In the New York City Department of Education's School of One, students receive instruction through multiple modalities, and delivery is organized through an adaptive, highly intelligent learning platform so that students can learn in ways that are personalized to their academic needs, interests and ways of learning.
Beaverton School District 48J (OR) Partners: University of Washington (WA), Young Audiences Arts for Learning (NY), Young Audiences of Oregon & Washington (OR, WA)	The Arts for Learning Lessons Project (A4L) integrates standards-focused content and arts strategies to improve student achievement in literacy, learning, and life skills. Partners will develop and enhance A4L for students in grades 3 through 5 while developing and refining a sixth unit for grade 4 and implement two A4L units with an arts residency in every classroom in grades 3 through 5.	A4L is designed to improve student achievement by leveraging motivation and engagement in the arts for reading and writing instruction; expanding time students spend reading and writing, both in and out of school; efficiently using instructional time by integrating arts with teaching literacy skills; effectively interweaving reading, writing, and the arts to meet specific standards and to foster habits of learning and life; and, uniting diverse classrooms with group work and public presentations that build community.
2011 Winning Applicants)		-
New Visions for Public Schools, Inc. (NY) Partners: NYC DOE, Silicon Valley Mathematics Initiative, Boston Plan for Excellence/Boston Teacher Residency	New Visions for Public Schools, in partnership with the Silicon Valley Mathematics Initiative and the New York City Department of Education, will establish the Accessing Algebra through Inquiry program that will maximize student and teacher mathematics learning by implementing the Bryk framework in 30 high need secondary schools.	Teacher-led inquiry teams, supported with intensive training and ongoing targeted professional development, will use research-based assessments and carefully designed and learner-responsive formative assessment lessons to ensure that students have the opportunity to learn the kind of mathematics they will need to succeed in higher education and more demanding work environments.
Del Norte Unified	The district will use Data Walls in preschool to high	This project will train teachers and administrators on how
School District (CA) Partners: Cowell Foundation, The California Endowment	school classrooms as an integrated assessment and intervention system that identifies at risk, monitors student progress, and provides evidenced-based interventions at multiple-levels.	to use formative and summative assessments stored and displayed on a Data Wall to analyze student performance, improve the effectiveness of instructional practices, and target instructional needs of students in the general and subgroup populations using Professional Learning Community (PLC) Data Teams, site and district Data Coaches, and Data Informed Instruction (DI2) strategies.
2012 Winning Applicants)		
Citizen Schools (MA, IL, TX, NY, CA) Partners: Boston Public Schools, Chicago Public Schools, Houston Independent School District, The New York City Department of Education, Oakland Unified School District, and Ravenswood City School District	Citizen Schools and the partnering districts will identify 17 school sites to implement the STEM apprenticeship model in the 2012-13 academic year as part of an extended school day. The model will be implemented in subsequent years in both the Cohort 1 schools and several additional schools each year, for a final sample of 23 schools with varying terms of implementation.	Citizen Schools' STEM apprenticeship model helps students build academic and 21st century college readiness skills by incorporating discussions led by staff and community volunteers about their own college experiences, the value of a college education in their field or profession, and what it takes to prepare for and succeed in college. Students participate in field trips to workplaces and colleges that highlight the experience of post-secondary education. Apprenticeships help students understand college affordability and the financial aid and college application processes by describing the value of a college education in the context of specific professions and careers and by emphasizing steps that students must take in middle school and in high school in order to successfully apply to and persist in college.
Internationals Network for Public Schools (NY) Partners: NYC Public Schools, San Francisco Public Schools	Project RISE will improve college preparedness for 1100 ELLs in Persistently Low Performing schools (PLPs) with significant ELL populations in two partner LEAs.	Project RISE will implement and evaluate four innovative strategies designed to increase the educational outcomes of ELLS: (1) collaborative interdisciplinary teaching teams responsible for (2) shared heterogeneous groups of students will provide opportunities for teachers to enhance instruction through (3) the integration of language and content using (4) collaborative experiential projects across the curriculum.

DISTRICT RACE TO THE TOP - Pathways to Competency

Applicant	Scope of Work	Competency Element
Metropolitan School District of Warren County (IN)	This proposal envisions a college and career readiness initiative beginning with district-wide supports for all schools in grades PreK-12, and initiatives that will transform the secondary educational delivery system and students' pathways for learning at the high school level.	Curriculum, instruction, and formative assessments (performance tasks) will be aligned to the new, more rigorous Indiana standards. Teacher representatives will develop curriculum maps, online formative assessments, and sample exemplar lessons. District-wide professional development will support teachers in using these tools to disaggregate results and differentiate instruction.
IDEA Public Schools (Charter Organization, TX)	This proposal will improve the quality of the blended learning model already implemented at the elementary school level; redesign the existing secondary instructional model to differentiate based on student needs; leverage real-time, actionable data to inform personalization of teaching and learning for all students across all subjects; develop teachers and leaders by improving their ability to individualize instruction based on student needs; and partner with community service providers to collectively address non-academic student needs.	Use iLearning Hotspot, an adaptive math software that adjusts to the pace of each student. Students complete frequent formative assessments to assist teachers in daily planning for re-teaching and re-grouping activities. 6th-12th grade students will be re-grouped biweekly by skill level to receive personalized instruction. Upgrade student data system to provide students, educators, and parents with insightful data around requirements for graduation, student progress toward those requirements, and a personalized path for students. Data will include summative, formative, and interim assessment data for all grades, core subjects, and schools.
Lindsay Unified School District (CA)	Project EMPOWER! will transition the district's performance-based Personalized Mastery Learning System through its developmental period of reform into a sustainable, district-wide systemic practice that can be replicated for other districts through a learner and facilitator digital learning platform.	Curriculum is based on college and career ready standards, aligned to state assessment blueprints, organized into units, or Measurement Topic. Life Long Learning Standards are integrated into academic competencies to promote 21st century skills. Students are grouped along the learning continuum by performance, not age or grade, with flexibility to move to more advanced work based on demonstration of mastery. A Facilitator Digital Learning Platform will provide instructional content that is pre-matched to standards, teacher assessment tools, manuals and courses for improving student-centered instructional skills. A comprehensive student information system gives students access to meaningful data to help them track progress.
Middletown School District (NY)	The school district will improve learning and teaching with an eye toward: accelerating student achievement; deepening student learning; and increasing equity through personalized student support. Note: Implementation of the nine programs proposed under this grant will take place as the district also introduces (and funds) other programs that are integral to the RTT-D funded projects' success.	Adaptive, tech-based assessments including Skills Pointer, and cognitive readiness tools including Fast ForWord, provide immediate feedback to support individualized learning and use vertical mapping to reveal skills gaps. Formative data is used to group students based on skills and needs and to help students set goals for their own learning. Students rotate through different stations within a classroom to personalize learning. The district will pilot two competency-based classes (one in elementary school and one in middle school) where students will advance on personal mastery, not seat time. Students will take state-approved local assessments three times per year to gauge proficiency.

Carson City School The district will map college expectations backwards Courses will have a published set of learning goals to help stu-District (NV) from freshmen year to fifth grade in every content dents identify learning targets and monitor progress. Students area in order to restructure education services using can demonstrate mastery in various ways. curriculum and assessment, student data systems, Students who do not reach mastery at the conclusion of the enhancing the quality of services provided by teachunit will have the opportunity to receive additional support to ers and administrators, and turning around the lowensure mastery within a reasonable amount of time. est performing schools. Students who are performing below grade level will receive intense remediation within the classroom. Students who require further remediation will receive it outside of the core classroom. Establish student learning factors at each transition in the per-Iredell-Statesville Innovative Methods for Personalizing Academics sonalized continuum with increasing intensity as the student Schools (NC) Complemented by Technology (IMPACT) will ignite a passion for lifelong learning by creating personalprogresses. Factors include: ized, flexible pathways for students to learn anytime, · Student Driven: Control over the learning path. anywhere. The district will implement a flexible port-· Competency-based Progression: Work at own pace to folio of options (STEM, ECHS, PBL, blended learning) master standards. to IMPACT and transform teaching and learning. • Project-based Learning: Authentic opportunities to investigate and address real-world problems. · Everywhere, flexible Learning: Hands-on, blended opportunities from a range of experts and technologies. Multiple personalized pathways, including blended learning, revolutionize student access to learning content and ensure exposure to a variety of concepts and perspectives. **Miami-Dade County** iPrep Math is an innovative high-tech, blended-learniPrep Math will leverage technology resources, coupled with School Board (FL) ing high school program designed to leverage the content expert teachers, to address the significant variability in power of online resources. Coupled with effective, the prior preparation of incoming students, the need to remedicontent expert teachers, within a highly adaptive ate over-aged students, and the need to provide masteryand flexible learning environment, it engages and based acceleration options. empowers students to take charge of their own All stakeholders – educators, students, and parents – will be learning. This will be implemented in middle school able to access timely and relevant data through a single signmath classes, specifically Algebra I. on web-based portal with 24/7 access. The portal will give students access to their test data, grades, classroom assignments, instructional resources, career preparation resources, e-textbooks, and a series of digital instructional tools. **New Haven Unified** The district will expand comprehensive K-12 reform Robust data systems will help teachers, principals, parents, School District (CA) strategies that focus on making sure students and students improve student learning by enabling all stakeacquire literacy and mathematics skills across the holders to track and support student growth. entire grade span while emphasizing real world ap-The district will administer the standards-aligned Northwest plications and broader competencies that empower Evaluation Association assessments (Measures of Academic students with 21st Century skills. The district is also Progress - MAP) three times yearly. This will be complementworking to ensure equity by implementing commued by the use of Data-Director, an online data and assessment nity schools that provide wrap-around services. management system that allows district staff to view, disaggre-

gate, and analyze assessment data.

Galt Joint Union School District (CA)

Galt's pre-kindergarten through grade eight vision is built on three local initiatives:

- 1. the Galt Joint Union Elementary School District Student Learning Plan to optimize student learning;
- 2. the Galt Joint Union High School District strategic plan to prepare every student for college and career; and
- the Galt Youth Master Plan to advance individual success from cradle to college and career.

Through personalized learning plans, every elementary student will have a learner-centered schedule of classroom, virtual, or outdoor learning experiences.

A manageable individualized social-emotional assessment and a Youth Strengths Explorer will identify strength-based talents. Students will work to develop content, skills, and traits such as goal-setting, teamwork, perseverance, critical thinking and problem solving.

Formative and summative assessment data will monitor individual and subgroup growth and guide professional development.

Harmony Science Academy, Harmony Public School (TX)

Harmony will further personalize the way each student uses time, receives support to master essential skills, and deepens understanding of content. Harmony will achieve this by redesigning the school day, expanding their approach to inquiry-based teaching and learning, and upgrading data infrastructure, resulting in a model for personalized education that can be replicated in the Nation's schools.

A comprehensive approach to assessment will include diagnostic, formative, benchmark, and summative assessments that give teachers the information they need to set accelerated goals, differentiate instruction, and provide timely corrective instruction to ensure student mastery.

Students will learn through a project-based curriculum.

A two-hour block of time will allow for flexible placement into intervention, enrichment, or elective courses. In intervention periods, teachers will use a variety of instructional approaches to support competency-based progress through individualized learning plans.

Green River Regional Educational Cooperative (KY)

The Green River Regional Educational Cooperative and the Ohio Valley Educational Cooperative will partner with 22 school districts to shift the educational system from teacher-led instruction to competency-based, kid-friendly learning. This plan focuses on three core values: 1) Students advance upon mastery, not age or seat time; 2) Explicit and measurable learning objectives empower students; and 3) Assessment is meaningful and a positive learning experience for students.

Principals will work with teachers through school Data Teams to shift teacher, parent, and student thinking about mastering standards vs. course completion. Teachers will group and regroup students around specific content areas, instructional approaches, projects, life experiences, etc.

A Personalized Learning Team in each school will develop a mechanism for improving student choice for demonstrating mastery of learning at the classroom and course level.

Grading practices and the way we look at grade levels will shift; kids will be able to move fluidly from standard to standard rather than grade to grade. Academic supports, software, and engaging instructional practices will ensure students are learning at and beyond traditional grade levels.

Charleston County School District (SC)

The district will combine research-based practices in personalized learning and continuous improvement with the many benefits of modern technology – such as personalized and self-paced instruction, technology-based assessments, expanded availability of subject matter, collaborative testing, and anywhere-anytime learning – to re-create "the classroom" and help students learn at new levels and achieve college and career readiness.

Personalized learning plans will create a clear map of learning and developmental goals aligned with the 16 federal career clusters. Courses will be available through dual enrollment, extended learning opportunities, and Career Technical Education (CTE).

Teachers will fuse a variety of instructional tools to promote learning on the individual, small group, and whole group levels instead of the whole class level.

Students will advance only when they have demonstrated proficiency at 80% or greater in the specific content standards. In addition to mastery of content, the needs of the whole child, which include character development, career development, service learning and technology, will be considered.



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ABOUT KNOWLEDGEWORKS

KnowledgeWorks is a nonprofit organization dedicated to advancing personalized learning that empowers every child to take ownership of their success. With nearly 20 years of experience exploring the future of learning, growing educator impact and working with state and federal policymakers, our passionate team partners with schools and communities to grow a system-wide approach to sustain student-centered practices so that every child graduates ready for what's next.