

Awarding Credit to Support Student Learning

A Report to the Governor of Pennsylvania

January 2013

Contents

Acknowledgements	
Executive Summary	
Introduction	
1. The Need for Educational Reform	
Current Statewide Efforts	
Student Competency-Based Learning	
2. Credit Flexibility in Pennsylvania	
What is credit flexibility?	
Is credit flexibility occurring in Pennsylvania?	
Open Campus Initiative	
Accelerated Placement Initiative	
What will it take to expand credit flexibility in Pennsylvania?	
What is the Pennsylvania Credit Flexibility Framework?	
Parameters	
Principles	
What is the Pennsylvania Credit Flexibility Draft Research Agenda?	
3. Learning from Other States	
How are states adopting competency-based education?	
Redesign Approach	
Credit Flexibility Approach	
Waiver Approach	
How have states approached adopting competency-based education?	
What has been learned thus far?	
Are resources available?	
4. Leadership Team Recommendations	
Policy	
Research and Data	
Technical Assistance and Support	
Outreach and Engagement	
5. Supportive Documents	
A. Pennsylvania Credit Flexibility Framework	
B. Pennsylvania Credit Flexibility Draft Research Agenda	
C. Pennsylvania Credit Flexibility Leadership Team	
References	



Acknowledgements

The Awarding Credit to Support Student Learning Leadership Team was convened by the Pennsylvania Department of Education in partnership with the Central Susquehanna Intermediate Unit (CSIU)/Center for Schools and Communities. The Leadership Team examined ways to implement a state policy agenda that would allow all students to earn school credits toward graduation based upon mastery of content and skills.

The findings in this report were written for the Leadership Team and the Pennsylvania Department of Education by Thomas Robel, CSIU/Center for Schools and Communities; graphic design by Brian Zeiders, CSIU/ Center for Schools and Communities. Special thanks for the content contributions made to this report from Rose Colby, Competency-Based Learning and Assessment Specialist, Epping, NH and Chris Sturgis, Consultant, Philanthropy Consultant and Contractor, Santa Fe, NM.

The project was funded by a grant to Pennsylvania from the National Governors Association's *Technical Assistance Grant to States on Awarding Credit to Support Student Learning.*

Leadership Team

Chair Elizabeth Bolden, Policy Director Pennsylvania Department of Education

Members

Bill Bartle, Youth Policy Director Pennsylvania Partnerships for Children

Margaret Clark, Executive Assistant Pennsylvania Department of Education

Paul Clymer, State Representative and Chair of the House Education Committee Pennsylvania House of Representatives

Kathleen (Kacy) Conley, Director Pennsylvania Statewide Afterschool/ Youth Development Network (PSAYDN)

Kirk Hallett, Member, Pennsylvania State Board of Education and Director, The Joshua Group

James Hartman, Executive Director Pennsylvania Association of Elementary and Secondary School Principals

Kathleen Howley, Senior Associate Vice Chancellor Pennsylvania State System of Higher Education

Julie Kane, Higher Education Associate Office of Postsecondary and Higher Education, Pennsylvania Department of Education

Erica Koser, Policy Analyst Pennsylvania Department of Education Bernard Miller, Director of Education Services Pennsylvania State Education Association (PSEA)

James Moran, Vice Chancellor Pennsylvania State System of Higher Education

Amy Morton, Executive Deputy Secretary Pennsylvania Department of Education

Shileste Overton-Morris, Senior Program Development and Organizational Manager CSIU/Center for Schools and Communities

David Volkman, Executive Assistant Office of Elementary and Secondary Education, Pennsylvania Department of Education

Technical Consultants Patrick Byrne, Educational Consultant Byrne Educational Works

Travis Reindl, Program Director Postsecondary Education, National Governors Association Center for Best Practices

Staff

Amber Carmo, Research and Evaluation Data Management Specialist CSIU/Center for Schools and Communities

Thomas Robel, Grants, Development and Special Projects Manager CSIU/Center for Schools and Communities

Executive Summary

On May 15, 2012, the commonwealth of Pennsylvania (PA) was awarded a six-month National Governors Association (NGA) Awarding Credit to Support Student Learning Planning Grant. The grant established the Pennsylvania Credit Flexibility Leadership Team chaired by Elizabeth Bolden, Policy Director for the Pennsylvania Department of Education (PDE). The Leadership Team was asked to examine ways to implement a state policy agenda that would allow all students to earn school credits toward graduation based upon mastery of content and skills.

The six-month planning grant enabled the Leadership Team to identify:

- Policy and regulatory changes needed to advance credit flexibility;
- Approaches and supports needed to actively engage schools and school districts in the work of credit flexibility;
- 3. Ways to engage other stakeholders and build public interest and support for this effort; and
- Researched-based promising practices that are occurring in other states to award credit to support student learning.

During the planning period, the Leadership Team developed the *Pennsylvania Credit Flexibility Framework*. The framework contains a series of parameters and principles that will help develop related policies and shape the state's credit flexibility plan. The framework seeks to build common understanding and support among stakeholders and advances competency-based options within schools and school districts.

The Leadership Team also constructed a draft research agenda that supports the credit flexibility plan. The *Pennsylvania Credit Flexibility Draft Research Agenda*



The report offers recommendations that can assist the commonwealth in developing its credit flexibility plan.

contains seven areas that will require in-depth research, review and analysis. Within each agenda item are a series of guiding questions for further in-depth policy and practice review and analysis.

The report offers seven recommendations that can assist the commonwealth in developing its credit flexibility plan that will provide educational opportunities for all students in the commonwealth to earn credits based upon their mastery of content and acquisition of needed skills, to be career ready. The report also strives to increase state- and local-level stakeholder interest and support for credit flexibility, foster strong integration of PDE initiatives, and assist schools and school districts as they consider implementing credit flexibility options. Before any recommendations are considered, the Leadership Team believes that adoption of/agreement on key elements of the credit flexibility framework should occur.

Policy

 Direct state agencies to conduct a policy audit to identify opportunities and barriers to implementing credit flexibility.

Research and Data

- Develop a process of assessment, including benchmarks, to ensure credit flexibility goals are being achieved and to make appropriate modifications over time.
- 3. Conduct further in-depth policy and practice research based upon the agenda areas and guiding questions outlined in the *Pennsylvania Credit Flexibility Draft Research Agenda*.
 - Conduct further research into other states' credit flexibility policies and practices that align and support those strategies under consideration by the commonwealth.
 - Consider focusing in-depth research on models and practices that are consistent with the parameters and design principles offered by the Leadership Team.
 - Use the research data to guide policy and practice changes and offer recommendations to schools and school districts.
- 4. Conduct a data collection systems audit to identify what data are currently being collected and determine what data will need to be collected to evaluate the overall impact of credit flexibility at the state-, localand student-levels.

Technical Assistance and Support

 Develop technical assistance tools and resources that encourage and support schools and schools districts when implementing credit flexibility approaches for their students.

Outreach and Engagement

- Craft an outreach strategy, messaging and communications plan for PA's credit flexibility effort.
 - Increase understanding of PA's credit flexibility effort among school districts, key stakeholders and constituents.
 - Develop a strategy that places credit flexibility in the context of broader education reforms that are underway or planned within PDE.
 - Adopt common language and operational framework for PA's credit flexibility effort.
- Engage key constituents and constituent groups in understanding and supporting credit flexibility efforts statewide.
 - Host a legislative breakfast or briefing event for legislators and staff to increase awareness of the state's credit flexibility efforts, demonstrate why credit flexibility is important and what needs to occur legislatively.
 - Convene a Credit Flexibility Summit for legislators, legislative staff, school superintendents, school board members, higher education administrators, staff of statewide educational associations, providers of afterschool and alternate education, etc. to engage stakeholders. This statewide summit should be video streamed during the live event, recorded and archived for post event web-based viewing. Summit proceedings should be produced and electronically distributed statewide.
 - Conduct a series of online sessions (focus groups) for select constituencies (e.g., students, school board members, school administrators, parents, out-of-school time/extended learning opportunity [ELO] providers, etc.) to obtain input, observations, feedback, etc.



Introduction

On May 15, 2012, the commonwealth of Pennsylvania (PA) was awarded a National Governors Association (NGA) Awarding Credit to Support Student Learning Planning Grant. The funds enabled PA to examine ways to implement a state policy agenda that would allow students to earn school credits toward graduation based upon mastery of content and skills, as opposed to Carnegie Unit seat time. The effort provides PA with an opportunity to become a national leader in designing a comprehensive model that supports and advances student competencybased learning. Planning grant funds also were awarded to two others states, Kentucky and New Hampshire, to strengthen their statewide efforts.

The six-month grant established the Pennsylvania Credit Flexibility Leadership Team (Leadership Team), chaired by Elizabeth Bolden, Policy Director for the Pennsylvania Department of Education (PDE). The planning grant enabled the Leadership Team to identify: I. Policy and regulatory changes needed to advance credit flexibility; 2. Approaches and supports needed to actively engage schools and school districts in the work of credit flexibility; 3. Ways to engage other stakeholders and build public interest and support for this effort; and 4. Researchbased promising practices that are occurring in other states to award credit to support student learning. The Leadership Team received technical assistance support from the NGA Center for Best Practices and recognized national experts from the field of competency-based learning. The list of Leadership Team members and related team process can be found in the Supporting Documents section of this report.

The report presents key findings that will assist the commonwealth in designing flexibility into state policy and building capacity within local school districts. Supporting this effort will allow students to earn credits based upon their mastery of content and acquisition of needed skills to transition successfully to college and career. The report is divided into five sections:

- I. The Need for Educational Reform
- 2. Establishing a Credit Flexibility Agenda
- 3. Learning from Other States
- 4. Recommendations
- 5. Supportive Documents

I. The Need for Educational Reform

Having a well-prepared and educated workforce is beneficial to the commonwealth of Pennsylvania, its citizens, industries, businesses and employers. By 2018 nearly two-thirds of all American jobs and more than half of PA jobs will require some form of postsecondary education and training. 2 Recent expansion of the commonwealth's manufacturing and natural gas industries means many of those jobs will require workers who are skilled in the areas of science, technology, engineering and mathematics (STEM).3 Educating students to be successful in the workplace and providing appropriate career readiness pathways must be a priority if students are to acquire the skills necessary for 21st century careers. Students must have access to appropriate education and training opportunities to be career-ready and must reach that critical first milestone - a high school diploma.

The economic recession that began in 2006, has presented PA with an opportunity to rethink the role and purpose of government in this changing economy. Governor Tom Corbett challenged PA school districts and PDE to change the "culture of education," while emphasizing that the mechanisms needed to deliver quality academic programs continue to be accessible to children across PA. To achieve this educational reform, schools must find ways to increase efficiency and effectiveness, innovate and accelerate their efforts. At the center of these efforts is the need for schools to transfer student seat-based credit requirements into competency-based pathways for postsecondary and workforce readiness.

Schools are beginning to rethink traditional learning pathways, while emphasizing personalized student competency-based learning. These changes are being



prompted by a new type of student and their parents who are asking schools to provide new and diverse models of course delivery, and models that incorporate educational technology and emphasize the student's ability to master course content. Providing this new individualized approach requires new educational policies and practices at both the state- and local-levels.

On the following pages are a series of statewide efforts creating the supportive environment needed to support educational change. These efforts serve as a catalyst for implementation of competency-based learning strategies within local schools and school districts, which will result in an educational system that graduates highly skilled students prepared for the 21st century economy. Colleges and employers will know that students who graduate from PA's public schools have achieved the required educational attainment levels, so that time and money is not spent on duplicative remedial training.



There are many driving forces for advancing student competency-based learning in PA's educational system, including adoption of core state standards, increased use of online and blended learning opportunities, and implementation of school improvement strategies.

Current Statewide Efforts

- Alignment of the PA Standards to the K-12 Common Core Academic Standards. These standards articulate the skills and knowledge expected at all grade levels and ensure that quality education is consistent and available to all K-12 students.
- Development of the PA Standards Aligned System (SAS) for PA schools. SAS is a common research- and evidenced-based framework for continuous school and school district enhancement and improvement.
- Implementation of the Keystone Exams as a component of PA's new system of high school graduation requirements. Keystone Exams are end-of-course assessments designed to assess proficiency in a variety of core subjects. The exams will help schools and school districts guide students toward meeting state standards and enable students to be on a path to post-secondary and workforce readiness.

- Implementation of an educator effectiveness system that incorporates high standards and multiple measures of student success and professional development. PDE will introduce a new evaluation tool for teachers in 2013; a tool for evaluating principals and education specialists will be released in 2014.
- Refinement of current data protocols such as the Pennsylvania Value-Added Assessment System (PVAAS) to inform teacher effectiveness.
- Planning and implementation of the U.S. Department of Education funded Race to the Top grant. A portion of this funding will be used to facilitate online learning for students, with an emphasis on STEM.
- A growing number of schools and school districts are leveraging technology and virtual learning, providing greater educational flexibility and affording students the opportunity to customize their curriculum, based on personal educational interests and needs. This customization allows for content mastery to be obtained through multiple course delivery methods in a nontraditional school environment.
- Increasing student use of afterschool programs . and services. PA's network of afterschool programs and services currently serve over 157,000 students. These school- and community-based afterschool programs play an important role in helping students remain in school by providing opportunities to increase their content knowledge. The Pennsylvania Statewide Afterschool/Youth Development Network (PSAYDN) brings together key policymakers, state agency representatives, local leaders, advocates and providers in an effort to sustain a shared mission and vision for afterschool services. These out-of-school time programs and services are a "valued resource" in designing new flexible credit programs and strategies to meet students' educational needs.

- Development and implementation of Career and Technical Education (CTE) Programs of Study based on relevant career and technical content and competencies, as well as state academic standards. Students also have the opportunity to earn postsecondary credit for skills and tasks learned at the secondary level and to have that credit apply toward a postsecondary certificate, diploma or degree. CTE Programs of Study serve as a pathway to postsecondary education and ensure students make the transition without experiencing delays or duplication of learning.
- Expansion of the statewide college transfer system to include the transfer of associate degrees into bachelor degrees based on competencies in specific programs of study rather than individual courses.

Student Competency-Based Learning

There are many driving forces for advancing student competency-based learning in PA's educational system, including adoption of core state standards, increased use of online and blended learning opportunities, and implementation of school improvement strategies. These efforts are being undertaken by schools and school districts to produce the highly skilled workers needed to fill the business and industry jobs of the 21st century.

As competency-based learning moves forward, students are placed at the center of the learning process. This allows for the demonstration of content mastery and the support for constructive anywhere, anytime student learning opportunities and experiences. These efforts champion a personalized student learning experience that is currently being requested by both students and their parents. This personalized learning environment sets goals, assesses progress, and ensures that the needed academic and developmental supports are provided.

As PA places an emphasis on core state standards, new opportunities for implementing competency-based



A growing number of schools and school districts are leveraging technology and virtual learning, providing greater educational flexibility and affording students the opportunity to customize their curriculum, based on personal educational interests and needs.

learning models emerge. These models are enabling schools and school districts to rethink course structures, redefine the Carnegie Units into competencies, and organize units of learning that inspire and empower students and teachers alike. The models, including credit flexibility, provide the opportunity for students to master content and develop required academic and lifelong learning standards in traditional classrooms, online and in community and workplace settings.

2. Credit Flexibility in Pennsylvania

The commonwealth faces the opportunity, and necessity, to develop multiple options for students to earn the credits they need to graduate. A "just in time" economy needs "just in time" educational options that are available to all students, especially those most at risk of dropping out and those seeking to re-engage with school. These options, including students' ability to earn credit at their own pace and in settings other than traditional classrooms, will enable them to have the competency-based education needed to compete in this changing work environment. Because curriculum decisions are made at the local level in PA, credit flexibility options will be locally driven and vary from one school district to another.

A "just in time" economy needs "just in time" educational options that are available to all students, especially those most at risk of dropping out and those seeking to re-engage with school.

Strong administrative leadership and school board support will need to be in place in order to effectively engage and communicate with staff, stakeholders, parents, students and the community at large. School staff will need to receive appropriate professional development instruction and should be prepared to work with flexible credit options. When done well, integration of competencybased learning may conflict with some practices used in the traditional learning system. Therefore, schools and school districts across the state should have a common understanding of what credit flexibility is and how it can be effectively implemented. To build a common understanding, the Leadership Team proposes an action agenda to formulate state policy and construct a statewide credit flexibility plan.



What is credit flexibility?

"Credit flexibility" refers to the ability of PA students to earn academic credit requirements toward graduation by demonstrating competency outside the prevailing Carnegie Unit (seat time) requirements of traditional school settings. In a competency-based system the Carnegie Unit is no longer the only acceptable measure of credit. Credit flexibility also provides a learning environment that can help improve dropout rates, re-engage students, and provide opportunities for accelerated learning.

Is credit flexibility occurring in Pennsylvania?

Work is underway at both the state and local levels to provide flexible credit opportunities to schools, school districts and their respective students. On the state-level, PDE is researching an alternative flexible credit program option for CTE students. CTE has been proven to assist with student engagement and decrease the likelihood of students dropping out of school.^{4,5} Therefore, PDE views CTE as one pathway many PA students can take to achieve grade level proficiency, remain engaged in school and become career ready. PDE is also researching the use of credit recovery courses as a strategy to bring CTE students to grade level proficiency. This will enable them to remain in school and graduate. The credit recovery program will offer free core academic courses to participating public high schools. These courses will be rigorous in design and will impart as much learning as traditional academic courses. The courses will address the PA Common Core Academic standards and be aligned to the PA Keystone Exams. State policies will ensure the integrity of the courses being offered and the related assessments.

Pennsylvania schools and school districts are also beginning to take up the challenge of moving from an exclusively traditional learning pathway to one that incorporates competency-based learning. Internal changes are underway with school scheduling and programming. Schools and school districts are offering an increased number of scheduled courses, alternative school calendar formats (e.g., accelerated, weekend, week-long, summer sessions) and more online courses between and among school districts and higher education institutions. Cyber schools are also increasing across the state, offering students a personalized educational learning opportunity. Although not widespread across the state, several school districts are leading the effort by forming district partnerships or operating independently to design and implement local "grass roots" competencybased learning initiatives. Below are two local school district examples.

Open Campus Initiative

The Open Campus Initiative is a joint initiative of the Hempfield, Penn Manor and Manheim Township school districts in Lancaster County. Approximately 18,000 students attend these three districts. These school districts have designed a credit flexibility model of instruction that provides students the choice and selection of taking a traditional face-to-face class, a blended learning class (a mix of face-to-face instruction and virtual education) or a totally virtual class. The Open Campus Initiative provides an opportunity for students to select challenging courses, master content and graduate early. Currently, 150 juniors and seniors are taking advantage of credit flexible course options within select courses in English, math, science, and foreign language.

Using their strong teaching staff, these districts are collaborating to develop their own curricula and are working toward expanding regular educational program hours on campus from 6:30 a.m. until 9 p.m. Offering classes outside the traditional school day enables the school districts to respond to the needs of high school students who are balancing education with employment and the need to support their families.

Accelerated Placement Initiative

The Accelerated Placement Initiative is an initiative of the Blacklick Valley School District, a rural school district located in Cambria County. The initiative is designed around the premise that students who demonstrate mastery of the subject material should be allowed to advance and have the opportunity to graduate early. For example, students who master text complexity on grade level reading standards are able to advance without regard to predetermined grade level. Within math, students in 5th and 6th grade who demonstrate content mastery are able to take the Keystone Exam with their 8th grade counterparts. These opportunities enable the district to consider reshaping a student's senior year by providing internships, elective/alternative course offerings and college credit courses.

In August 2012, Blacklick Valley School District launched its own Cyber Academy concomitant with other school districts that send students to the local vocational school. The academy operates from the local vocational school with teachers from the seven participating school districts. These districts use an alternative web-based platform for presenting the curriculum. Using technology, the district has the goal of expanding elective course offerings to students that would not be feasible in a brick and mortar setting, based on available resources. The increase in course content will enable students from this rural district to be better prepared for postsecondary and career opportunities. The Blacklick Valley School District has also expanded its participation in dual-enrollment courses with local colleges. The school district has initiated the Accelerate College Education (ACE) Program being offered through Pennsylvania Highlands Community College. The program, beginning with this year's 9th grade class, enables students, upon completion of required course work, to earn an Associate Degree in General Studies, as well as a high school diploma.

A small number of other PA schools and school districts have designed and implemented performance-based learning initiatives that provide a more personalized approach to learning. As more schools continue to implement diverse competency-based programs, an increase in review and follow-up action is anticipated. Therefore, any action taken by the State Board of Education to improve student competency-based learning must embrace new teaching and learning strategies. These strategies should consider the varied pace at which students learn, the diverse ways students can earn instructional credit based upon content mastery in both the classroom and through expanded learning opportunities, and ongoing student use and adaptability of instructional technology.

What will it take to expand credit flexibility in Pennsylvania?

To expand competency-based learning beyond the "grass roots" initiatives that are underway within the state, there must be a supportive policy environment and technical assistance infrastructure to help schools and school districts successfully understand and implement credit flexibility or other competence-based learning options. The education policies and regulations needed to support credit flexibility are basically in place. Legislators, state officials, school superintendents, school board members and other key stakeholders must obtain a common understanding of the scope and purpose of this credit flexibility effort, effective ways to implement, and how to evaluate the impact it has on student learning and career preparedness. Therefore, the commonwealth should consider ways to increase awareness and engage others in this work at all school and school district levels.

What is the Pennsylvania Credit Flexibility Framework?

The *Pennsylvania Credit Flexibility Framework* proposed by the Leadership Team builds common understanding and support among stakeholders and advances competencybased options within schools and school districts. The framework contains a series of parameters and principles that will help develop related policies and shape the state's credit flexibility plan.

Parameters

- Pennsylvania's credit flexibility options should be locally driven by schools districts; engage stakeholders, parents, students and the community at large; and have state-level policy guidance and opportunities for concomitant with regulatory change as needed.
- Credit flexibility options should be open to all students throughout the commonwealth, with primary emphasis on upper elementary, middle and secondary students.
- Credit flexibility strategies should take into consideration the educational needs of diverse student populations (e.g., gifted, special education, re-engagement, etc.)
- A range of content areas and courses should be eligible for credit flexibility, offered through and delivered by local schools and school districts, postsecondary institutions, afterschool providers, etc.
- State- and district-level policies and resources should be supportive and remain flexible to address barriers that impede local efforts, while ensuring that rigorous, high-quality learning opportunities are being provided to students.

- Strong administrative leadership and school board support is needed to implement credit flexibility options. Schools and school districts need to engage staff (e.g., administrators, teachers, special education directors, English as a Second Language (ESL) educators, guidance counselors, etc.) to ensure they receive appropriate professional development and are prepared to work with flexible credit options.
- Credit flexibility options should be competency-based and should support students in transitioning from educational settings to businesses and industries. Students and their parents should be kept at the center of credit flexibility work, with clear strategies to support and nurture students along the way. It should be designed to keep lines of communication open with students, parents and the community at large, to share information, and to head off/address issues and concerns as they arise.
- Credit flexible disciplines/courses should be taught by appropriately credentialed instructional staff to ensure that quality is found within the credit flexibility courses and other educational opportunities offered to students. Flexible credits should be handled appropriately on high school transcripts for internships, virtual courses, etc.
- Credit flexibility benchmarks should be established to evaluate the effort and should be part of the state's credit flexibility plan. Data should be used to assess, and make appropriate modifications over time, to ensure credit flexibility goals are being achieved.
- Technical assistance should be provided to schools and school districts to effectively implement credit flexibility options, deal with policy and regulatory issues, advance innovation and facilitate opportunities for peer-to-peer sharing.

- Multiple forms of credit flexibility should be available to enable students to earn credit toward graduation based upon demonstration of content mastery. The following forms of credit flexibility should be considered:
 - Accelerated coursework (online, on-site, or a combination; may be provided by other schools or institutions of higher education)
 - > Testing out of standard course offerings
 - > Portfolios of work, thesis or other project work
 - > Internships and/or paid employment
 - Extended learning opportunities such as afterschool programs, summer programs and internships
 - > Community service
 - Workforce certificate programs

Principles

The Leadership Team has identified five principles which should be reflected in the core strategies and action steps of the state's credit flexibility plan. These principles should guide the state's plan for the awarding of credits to support student learning. Credit flexibility should:

- Address the unique needs of all participating students. Credit flexibility is student-focused and designed to align learning with a student's individual academic needs and non-academic challenges/barriers.
- 2. *Focus on subject area mastery*. Student learning is based on demonstrating subject area mastery in the classroom and expanded learning opportunities. Rather than advancement based upon mastery within a defined period of time, credit flexibility allows students to advance as they demonstrate competency in the subject area.
- 3. *Provide explicit and measurable learning objectives.* Students must achieve clearly articulated goals and objectives in order to demonstrate mastery in a subject area. These goals and objectives are the same as those for students taking the same course in a traditional classroom setting.



As part of developing a proposed credit flexibility agenda, the Leadership Team constructed a draft research agenda that supports the credit flexibility plan.

- 4. *Require assessment against academic standards*. Evaluation of subject area mastery attained through credit flexibility is formative and summative (i.e., interim and final), and developed and administered by appropriately credentialed instructional staff.
- Provide supports for students and parents, educators, district/school leadership and key stakeholders.
 Effective credit flexibility programs must have forms of support for:
 - Students' individual credit flexibility education plans map out their courses, as well as "just in time" learning tools and aids that help them to stay on track toward accomplishing their learning objectives.
 - Parents receive clear, reliable and readily accessible information about available credit flexibility options and tools to help their children decide whether credit flexibility is the right option for them.

- *Educators* have instructional and diagnostic tools, and are appropriately credentialed to enable them to serve students pursuing credit flexibility, including validation of learning.
- District/School Leaders receive clear guidance, technical support and professional development regarding the implementation and administration of credit flexibility, including finance, accountability, evaluation and quality assurance.
- Key Stakeholders are engaged and have strong working relationships with school administrators and leaders to stimulate creative and entrepreneurial thinking and establish an environment for new strategies to be explored and developed.

What is the Pennsylvania Credit Flexibility Draft Research Agenda?

As part of developing a proposed credit flexibility agenda, the Leadership Team constructed a draft research agenda that supports the credit flexibility plan. The *Pennsylvania Credit Flexibility Draft Research Agenda* contains seven areas that will require in-depth research, review and analysis. Within each agenda item are a series of guiding questions raised during credit flexibility meetings that need further in-depth policy and practice review and analysis. Listed below are the research agenda areas and one related question within each area for illustration purposes.

- Definitions and Parameters What is the scope of credit flexibility (demonstrative fields versus core curriculum)?
- 2. Supports What needs to occur with school district staff (e.g., administrators, teachers, special education directors, English as a Second Language educators, guidance counselors, etc.) so they are prepared to work in credit flexible environments?



The Leadership Team has identified Data and Postsecondary Linkages as priority areas where in-depth research should begin.

- 3. *Quality Assurance and Assessment* How can quality be ensured for courses and educational opportunities where flexible credit is being offered?
- 4. Data Are there legal and/or regulatory issues that need to be identified and addressed for data to be shared across schools or between schools, systems of postsecondary education and the state?
- 5. *Finance* What impact do competency-based enrollments have on state and/or local funding mechanisms?
- 6. *Postsecondary Linkages* How will flexible credits be handled on high school transcripts for internships, virtual courses, etc. and be received by postsecondary institutions?
- 7. Business and Community Roles/Extended Learning Opportunities - What roles can business and community leaders play in promoting and facilitating competency-based programs in their local districts and schools?

The Leadership Team has identified Data and Postsecondary Linkages as priority areas where in-depth research should begin. The complete *Pennsylvania Credit Flexibility Draft Research Agenda* is found in the Supporting Documents section of this report.

3. Learning from Other States

Currently, one-half of all the states have policies that provide schools flexibility in awarding credit, allowing students to earn credit based upon content mastery rather than hours spent in the classroom (State Strategies for Awarding Credit to Support Student Learning National Governor's Association [2012]). During the credit flexibility planning period, the Leadership Team was charged with compiling information on the competency-based learning approaches underway in other states. The following are state examples where students can earn credits through learning experiences tailored to their individual needs and interests, and can pursue alternative career pathways.

How are states adopting competency-based education?

State policy regarding the Carnegie Unit often is referred to as the greatest barrier to creating competency-based pathways. Chris Sturgis, a leading community engagement expert, examined efforts across the United States. Ms. Sturgis indicates that there is significant activity underway among states that are addressing this issue. In examining those states, three approaches have emerged: redesign, credit flexibility and waiver.⁶

Redesign Approach

 A few states are moving ahead, designing policies that advance competency-based learning. These efforts provide excellent building blocks for designing comprehensive state policy frameworks. Drawing upon the lessons learned from the most advanced states, an initial starting point for policy redesign is outlined below:

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

States leading redesign efforts include Maine, New Hampshire and Oregon.

Credit Flexibility Approach

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

States implementing credit flexibility approaches include Alabama, Iowa and Ohio.

Waiver Approach

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

They also can create credit flexibility policies or design comprehensive policy frameworks.

States using a waiver process include Michigan, Kentucky and South Carolina.

How have states approached adopting competency-based education?

In 2010, MetisNet and the International Association for K-12 Online Learning (iNACOL) convened approximately 100 national policy makers and practitioners of competency-based education. At the time of this event, The Council of Chief State School Officers (CCSSO) was at the forefront of supporting the advancement of student competency-based education. The brief entitled "Success is the Only Option," funded by the Nellie Mae Education Foundation, has been used as a roadmap for policy makers and practitioners. Many charter schools and private schools have used competency- or proficiency-based approaches quite successfully.⁷

Schools often move from traditional instructional delivery to 21st century learning in response to the unique needs of their learners. In urban areas, high failure and dropout rates have been the impetus for many charter schools with particular missions or the development of programs, which better meet the needs of their students. Many of these situations provide different settings for learners and can offer some alternative pathways for credit attainment. For example, Boston Day and Evening School, a competencybased high school in Boston, Massachusetts, provides community-based learning opportunities in a blended learning environment.

Alaska

In Alaska, the Reinventing Schools Coalition focused its redesign of a public school district by innovating an instructional delivery system that is notable for its' 'move on when ready' K-12, community-based learning model. The district used many different approaches yet repeatedly failed to meet Annual Yearly Progress. They undertook an extensive examination and chose to go down a new path. They redesigned their system by only moving students forward when the student demonstrated mastery of the required learning standards. It required an intensive professional development effort and a close examination of their resources but it was their way to meet the needs of their students.

Colorado

Colorado passed the Innovation Schools Act of 2008, which allows a public school or group of public schools to submit to its school district board of education an innovation plan to allow a school or group of schools to implement innovations within the school or group of schools. The innovations may include, but are not limited to, innovations in delivery of educational services, personnel administration and decision-making, and budgeting. The Act requires the local board to review each submitted plan and either approve the school as an innovation school (or a group of schools as an innovation school zone) or reject the plan. Adams 50, a school district in Colorado, has been at the forefront of the competency-based education model. Students move on when ready and thus far have shown good progress using several different indicators.

lowa and Kentucky

lowa and Kentucky have immersed themselves in competency education by creating greater capacity for understanding the change process, the elements of competency education and policy changes by involving state legislators, education and business leaders, and educators. Small task forces share their work while creating connections to what is currently underway in curriculum, assessment and instruction. Their plans for further development of competency-based education are to continue to educate themselves while creating dynamic systems of educator and community understanding for competency education. lowa has also created a Forum on Competency-Based Education, a space for networking, deliberating, sharing and organizing within the state. The Forum is largely self-organizing.

Maine

In early 2012, Maine's education commissioner released his strategic education plan, which promotes personalized learning and multiple pathways for learner achievement. Through a proficiency-based system, students can choose how they learn and earn credit for demonstrating mastery of standards in multiple ways, including traditional classes, internships and online learning. Assessments will be adjusted to measure both academic and non-academic skills, including problem-solving and critical thinking. Maine's Department of Education has established a Center for Best Practices, supported by the Nellie Mae Education Foundation, to focus on research and reporting related to proficiency-based systems in Maine. The Center serves as a clearinghouse for materials, support and case studies related to learner-centered instructional practices.

Massachusetts

The Massachusetts High School Program of Studies, an initiative of the Massachusetts Department of Elementary and Secondary Education, recommends a rigorous course of study for high school students that includes traditional core coursework as well as "additional learning opportunities" in which students can earn credit for out-of-school learning such as online courses and service or work-based learning opportunities. Massachusetts, does not provide detailed guidance on how schools and school districts should implement additional learning opportunities or how credit should be assigned.

Michigan

Michigan recently charged a Collaborative Think Tank for Change group to recommend a new school finance formula based on competencies to the Governor and State Superintendent. If enacted, the state would no longer base its educational funding formula on school attendance at a particular school on a particular day. The new formula would honor students learning in different settings (e.g., online, hybrid) and measure student growth using a plan for meeting required competencies.

New Hampshire

New Hampshire has fully embraced proficiency-based learning, meaning the state requires all high schools assess students based on their ability to demonstrate mastery of core competencies. In addition, New Hampshire high schools have the flexibility to award credit for ELOs in areas such as journalism, technology and social studies that occur outside the classroom and the school day. These learning experiences include apprenticeships, community service projects and independent studies. Four schools that began piloting credit-bearing expanded learning opportunities in 2008 have shown success in increasing student engagement and persistence in school.

New York

While there is no explicit credit flexibility policy in New York State, the Board of Regents passed a new regulation on blended and online learning in July 2011. The new regulation clarified guidance for learning that takes place outside the traditional classroom and school day, helping to broaden students' options for earning credit. Nontraditional learning experiences must be aligned with state standards and overseen by a certified teacher-ofrecord from the school the student attends. Students must demonstrate mastery of learning outcomes. These creditbearing opportunities serve as alternate pathways for students to earn the 44 credits necessary to complete New York State's general education and diploma requirements.

Ohio — An in-depth look

To obtain an in-depth state policy perspective, the Leadership Team took a closer look at the competencybased work underway in the state of Ohio. Ohio was selected because it began its competency-based learning work in 2006, has similar economic and social demographics to PA, and is a strong local control state. Policy officials from the Ohio Department of Education (ODE) and researchers from the Great Lakes East Comprehensive Center (Regional Education Laboratory) shared details and learning from their work with Leadership Team members, through a WebEx meeting platform. The following are highlights from the presentation:

- In 2007, the governor of Ohio signed into law the
 Ohio Core Curriculum Act, which requires districts to
 broaden the ways that students can earn high school
 credit. Rather than a one-size-fits-all approach, Ohio's
 "Credit Flex" policy allows schools and teachers to
 experiment with different credit-bearing models,
 including online courses and internships that provide
 real-world experiences and customized learning to
 meet individual students' needs. A scheduled rollout to
 local public school districts occurred during the 2009 2010 school year. The legislation exempted private
 schools from adopting credit flexibility and allowed
 school districts to request relief from credit flexibility.
 Participating schools adopted a local district policy that
 fits within the scope of the state policy.
- ODE convened a representative group of stakeholders to develop the credit flexibility policy and guidelines that were adopted by the Ohio State Board of Education. State officials conducted workshops across the state to provide guidance to local school districts, who then adopted local policies that mirrored the state level policy.
- Ohio also established an appeals process to: 1) appeal the ability to do credit flexibility and 2) appeal the grade given in a flexible credit course.
- Ohio limited the awarding of flexible credits to high schools students. The credits are given for high school course work, advanced placement work or credit

recovery work. Credits come from any course that the school or the student could access that the school did not offer.

- To facilitate communication with Ohio's 614 school districts, ODE created a networking directory of those school districts implementing credit flexibility and released a series of case studies that illustrated emerging practices. Case studies were rolled into webinars to address issues and situations encountered during implementation.
- ODE established a state team with representatives from different content areas to answer questions on credit flexibility. This prevented the dissemination of inconsistent answers to questions that were asked. There was a strong desire from local schools and the community at large to have available and focus on best practices. Additional information on Ohio's credit flexibility efforts can be found at www.education.ohio.gov.
- ODE worked to ensure that there was equity across school districts and among stakeholders. Credit flexibility is available in Ohio to all students, not just at-risk students, accelerated learners or students who can afford it. Equity issues arise due to the geographic location of the school district and their access to outside resources, such as colleges, museums, etc.
- Teachers use tools such as state performance-based assessments to inform decisions about whether to award credit for a learning experience. There is no limit to the kind of course work or number of credits that students may earn outside the classroom.
- Communication and outreach to stakeholders, especially parents and faculty, remains important.
 ODE has worked with postsecondary institutions to increase their comfort level with the concept and with the handling of credits on school transcripts,

especially to meet requirements of the National Collegiate Athletic Association (NCAA).

 Ohio received technical assistance from the U.S. Department of Education, Ohio's Parent Information Resource Center (PIRC) and the Institute for Educational Sciences - Midwest Regional Educational Laboratory.

Oregon

Oregon has been using a proficiency-based learning model and standards-based approach that uses depth of knowledge as performance indicators for proficiency. Oregon has a state-level policy that is guiding the transition. In 2004-2006, the Oregon Department of Education invested in seven district pilots, gaining insights into implementation that affected revisions to the Oregon diploma and credit options policy. In 2009, the policy was expanded to require all in-class and equivalent work to be tied explicitly to demonstration of proficiency or mastery of identified standards.

The Oregon Department of Education is supporting school districts in the development and implementation of credit for proficiency policies. Through the Oregon Proficiency Project, the Department is working with two schools, to explore the development and implementation of proficiency-based learning. The Department has also developed guidelines, tools and resources to support other Oregon schools that are experimenting with proficiencybased approaches.

Rhode Island

In 2003, the Rhode Island Board of Regents, which governs education in the state, passed regulations requiring "graduation by proficiency" as a component of Rhode Island's Diploma System. Rather than completing a certain number of course hours to earn a high school diploma, all high school students are required to demonstrate academic mastery by successfully completing a variety of assessments, including exhibitions and portfolios. With a focus on demonstration of mastery, several districts have started broadening opportunities for students to earn credit. For example, the Providence After School Alliance and Providence Public School system have partnered to establish a credit policy and model for expanded learning opportunities that allows students to earn credit for project-based learning and other work they complete through collaborations with local partners, such as community organizations and universities.

What has been learned thus far?

What is most important in many of the state efforts that are underway is that each school, school district or state has different entry points in competency education for different reasons. Emergence of online learning opportunities, response to student assessment data and creation of statewide policies that either redefine or no longer use the time-based Carnegie Unit can be the prompts for transitional redesign. For this reason, it is important that the vision for success is clear to all shareholders in moving education to a new, more dynamic and responsive model for 21st century learners.

Because school reform often requires several years, data is not readily available to assess competency-based learning. Assessment itself can be challenging. In Michigan's Adams 50 district, where students move on when ready, students are forced to take the grade level assigned student test despite the fact that some students are learning a higher grade level curriculum or have not reached the grade level curriculum for the test being administered. In New Hampshire, a cohort of students entered the 9th grade at one high school using competency-based courses and a new grading system to accurately reflect student achievement on their course competencies. When this cohort took their 11th grade state assessment test, the high school made Annual Yearly Progress for the first time.

Moving from traditional practices and systemic design to transformational practices in redesigned systems requires hard work by all shareholders, visionary leadership and



Moving from traditional practices and systemic design to transformational practices in redesigned systems requires hard work by all shareholders, visionary leadership, and educators committed to moving forward in meeting student needs.

educators committed to moving forward in meeting student needs. What has been found is that strong leadership is essential to carry this change process forward over time. Finding new solutions to old problems means that educators have to think outside the box to make better use of community resources, prioritize student engagement in their learning, and set aside the 20th century industrial model of learning that exists in high schools today.

A case in point – commonly at the high school level, the only recourse for a student who fails a course is to recover the whole course. Some students take the same Algebra course over four times and still fail. After the first failure, the questions that should be asked are "Why is this student failing, what areas of the course led to that failure, and what can be done to provide a different pathway for this student to meet with success?" Some students only struggle with certain course content, that result in them being unable to achieve overall success. Providing modular learning opportunities for these students to repeat only the areas where they have not demonstrated proficiency would focus time and resources on the content that still needs to be mastered and would result in overall student success. This content could be delivered in various ways including modular online learning opportunities.

Other students may struggle with the conceptual nature of the course and require a more hands-on content delivery approach. A possible option for these students could be the completion of an engineering course that provides handson application, while meeting Algebra requirements. Yet another option would be to allow this type of student to meet the Algebra requirements while working as an intern in an engineering firm. Moving to a competency-based system would allow for these types of learning options to be put into place and enable students to demonstrate competencies in ways that engage the student without being restricted by time in the traditional Carnegie system.

Spaulding High School in Rochester, New Hampshire, goes even further by intervening before failure occurs so that students can recover just the competencies that they struggled to master. By providing alternate pathways to support struggling learners, students do not lose hope and stay engaged.

Maine's student-centered proficiency-based instruction effort has yielded several observations. There is a high level of transparency about learning targets and rubrics between students and what schools provide teachers. Students work at their own pace with choices about how they will pursue and build evidence of their learning. Teachers work collaboratively and organize themselves to support their students. Therefore, teachers strive to give their students what they need and allow them to work at their own achievement level to experience success.

Are resources available?

To further explore alternatives to the Carnegie system, one tool that is very helpful to schools and school districts is the Q.E.D. Foundations' Change Model. This model enables schools to assess themselves on a continuum from traditional, to transitional, to transformational practice. This tool is also helpful in deciding the best approach to move forward. This tool can be found on the Q.E.D. Foundation website at www.qedfoundation.org.

A rich resource for the most current information on competency education is *CompetencyWorks*. This website seeks out contributors from innovators around the country, keeping all educators involved in any aspect of competency education up-to-date on the policy and practices that are being implemented nationally. The site also spotlights innovative practices and practitioners. *CompetencyWorks* also gathers information on student achievement as innovators in competency education share their results. *CompetencyWorks* can be found at www.CompetencyWorks.org.

Leadership Team Recommendations

Credit flexibility options should be open to all students throughout the commonwealth, with primary emphasis on upper elementary, middle and secondary students. The Leadership Team puts forth seven recommendations to guide the development of the state's credit flexibility plan and increase state and local stakeholder interest and support. These recommendations seek to foster strong integration of PDE initiatives and to support schools and school districts as they consider implementing credit flexibility options. Before any recommendations (found below) are considered, the Leadership Team believes that adoption of/agreement on key elements of the Credit Flexibility Framework (e.g., definition, parameters, principles, purpose, etc.) should occur. The Leadership Team also recognizes that these recommendations have fiscal implications which can impact their implementation.

Policy

 Direct state agencies to conduct a policy audit to identify opportunities and barriers to implementing credit flexibility.

Research and Data

- 2. Develop a process of assessment, including benchmarks, to ensure credit flexibility goals are being achieved and to make appropriate modifications overtime.
- Conduct further in-depth policy and practice research based upon the agenda areas and guiding questions outlined in the Pennsylvania Credit Flexibility Draft Research Agenda.
 - Conduct further research into other states' credit flexibility policies and practices that align and support those strategies under consideration by the commonwealth.

- Consider focusing in-depth research on models and practices that are consistent with the parameters and design principles offered by the Leadership Team.
- Use the research data to guide policy and practice changes and offer recommendations to schools and school districts.
- 4. Conduct a data collection systems audit to identify what data are currently being collected and determine what data will need to be collected to evaluate the overall impact of credit flexibility at the state-, local- and student-levels.

Technical Assistance and Support

 Develop technical assistance tools and resources that encourage and support schools and schools districts when implementing credit flexibility approaches for their students.

Outreach and Engagement

- Craft an outreach strategy, messaging and communications plan for PA's credit flexibility effort.
 - Increase understanding of PA's credit flexibility effort among school districts, key stakeholders and constituents.
 - Develop a strategy that places credit flexibility in the context of broader education reforms that are underway or planned within PDE.
 - Adopt common language and operational framework for PA's credit flexibility effort.

- Engage key constituents and constituent groups in understanding and supporting credit flexibility efforts statewide.
 - Host a Legislative breakfast or briefing event for legislators and staff to increase awareness of the state's credit flexibility efforts, demonstrate why credit flexibility is important and what needs to occur legislatively.
 - Convene a Credit Flexibility Summit for legislators, legislative staff, school superintendents, school board members, higher education administrators, staff of statewide educational associations, providers of afterschool and alternate education, etc. to engage stakeholders. This statewide summit should be video streamed during the live event, recorded and archived for post event web-based viewing. Summit proceedings should be produced and electronically distributed statewide.
 - Conduct a series of online sessions (focus groups) for select constituencies (e.g., students, school board members, school administrators, parents, out-of-school time/ extended learning opportunity providers, etc.) to obtain input, observations, feedback, etc.

5. Supportive Documents

Supportive Document A Pennsylvania Credit Flexibility Framework

Preamble

Having a well-prepared and educated workforce is beneficial to the commonwealth of Pennsylvania, its citizens, industries, businesses and employers. By 2018 nearly two-thirds of all American jobs and more than half of Pennsylvanian jobs will require some form of postsecondary education and training. Recent expansion of the commonwealth's manufacturing and natural gas industries means many of those jobs will require workers who are skilled in the areas of science, technology, engineering, and mathematics (STEM). Educating students to be successful in the workplace and providing appropriate career readiness pathways must be a priority if students are to acquire the skills necessary for 21st century careers. Students must have access to appropriate education and training opportunities to be career-ready and must reach that critical first milestone - a high school diploma.

The commonwealth faces the opportunity, and necessity, to develop multiple options for students to earn the credits they need to graduate. A "just in time" economy needs "just in time" educational options that are available to all students, especially those most at risk of dropping out and those seeking to re-engage with school. These options, including students' ability to earn credit at their own pace and in settings other than traditional classrooms, will enable them to have the competency-based education needed to compete in this changing work environment.

Such options should be available to all students throughout the commonwealth, offered through and overseen by local districts and schools. State- and district-level policies and resources must be designed and implemented to support schools and ensure that rigorous, high-quality credit options are being provided to students. These credit options must be competency-based and support the seamless transition of all students from educational settings to businesses and industries.

By providing students more options for demonstrating the knowledge and skills they need to compete in the 21st century workforce, Pennsylvania will take a strong and creative step toward lowering dropout rates, increasing graduation rates, re-engaging students and closing critical gaps in career readiness skills.

Multiple forms of credit flexibility should be available to enable students to earn credit toward graduation based upon demonstration of content mastery.

Definition

"Credit flexibility" refers to the ability of PA students to earn academic credit requirements toward graduation by demonstrating competency outside the prevailing Carnegie Unit (seat time) requirements of traditional school settings.

Scope

Credit flexibility is open to all upper elementary, middle and secondary students. All disciplines/courses are eligible for credit flexibility. Although, any credit flexible disciplines/ courses must be taught by appropriately credentialed instructional staff. The Leadership Team believes that Pennsylvania's credit flexibility effort should be guided by five principles.

- Address the unique needs of all participating students. Credit flexibility is student-focused and designed to align learning with a student's individual academic needs and non-academic challenges/barriers.
- 2. Focus on subject area mastery. Student learning is based on demonstrating subject area mastery in the classroom and expanded learning opportunities. Rather than advancement based upon mastery within a defined period of time, credit flexibility allows students to advance as they demonstrate competency in the subject area.
- 3. Provide explicit and measurable learning objectives. Students must achieve clearly articulated goals and objectives in order to demonstrate mastery in a subject area. These goals and objectives are the same as those for students taking the same course in a traditional classroom setting.
- 4. Require assessment against academic standards. Evaluation of subject area mastery attained through credit flexibility is formative and summative (i.e., interim and final), and developed and administered by appropriately credentialed instructional staff.
- Provide supports for students and parents, educators, district/school leadership and key stakeholders.
 Effective credit flexibility programs must have forms of support for:
 - Students' individual credit flexibility education plans map out their courses, as well as "just in time" learning tools and aids that help them to stay on track toward accomplishing their learning objectives.

- Parents receive clear, reliable and readily accessible information about available credit flexibility options and tools to help their children decide whether credit flexibility is the right option for them.
- Educators have instructional and diagnostic tools, and are appropriately credentialed to enable them to serve students pursuing credit flexibility, including validation of learning.
- District/School Leaders receive clear guidance, technical support and professional development regarding the implementation and administration of credit flexibility, including finance, accountability, evaluation and quality assurance.
- Key Stakeholders are engaged and have strong working relationships with school administrators and leaders to stimulate creative and entrepreneurial thinking and establish an environment for new strategies to be explored and developed.

Forms of Credit Flexibility

Multiple forms of credit flexibility should be available to enable students to earn credit toward graduation based upon demonstration of content mastery. The following forms of credit flexibility should be considered:

- Accelerated coursework (online, on-site, or a combination; may be provided by other schools or institutions of higher education)
- Testing out of standard course offerings
- Portfolios of work, thesis or other project work
- Internships and/or paid employment
- Extended learning opportunities, such as after school programs, summer programs and internships
- Community service
- Workforce certificate programs

Supportive Document B Pennsylvania Credit Flexibility Draft Research Agenda

1. Definitions and Parameters

- What is credit flexibility and what isn't it? How can it be implemented (e.g. permissively or as a mandate)?
- What is the scope of credit flexibility (demonstrative fields v. core curriculum)?
- What do the strategic plans from states that have started implementing credit flexibility include?
- What was the impetus for other states to move toward credit flexibility?

2. Supports

- How are districts and schools equipped to implement credit flexibility and provide supports for:
 - > Students (including individualized learning plans)?
 - Educators (including credentialing/certification to teach and evaluate participating students and professional development strategies)?
 - > Leaders (including rules and regulations, finance, accountability)?
 - > Parents?
- Who are the stakeholders in other states that must be considered?
- What needs to occur with school district staff (e.g., administrators, teachers, special education directors, English as a Second Language educators, guidance counselors, etc.) so they are prepared to work in credit flexible environments?
- How should communication occur with students, parents and the community at large regarding credit flexibility and the opportunities it provides?



3. Quality Assurance and Assessment

- How are learning objectives developed for competencybased work? How do they crosswalk to learning objectives for Carnegie Unit coursework?
- Who performs the assessment of competency-based work? How are these assessments developed?
- How can quality be ensured for courses and educational opportunities where flexible credit is being offered?
- What is the state's role (relative to the school or district's role) in quality assurance?

4. Data

- How will competency-based enrollments work—or not work—with existing data systems at the state and/or local levels?
 - Are there legal and/or regulatory issues that need to be identified and addressed for data to be shared across schools or between schools, systems of postsecondary education and the state?

5. Finance

- What impact do competency-based enrollments have on state and/or local funding mechanisms?
- Should competency-based enrollments be funded differently than Carnegie Unit enrollments?
- What does funding look like when courses are offered 12 months a year and when students are allowed to take greater course loads so that they can graduate earlier?

6. Postsecondary Linkage

- Is there a role for higher education in the design and/ or validation of competency-based curricula?
- How can agreements be developed that will ensure broad postsecondary acceptance of credits earned through competency-based programs?
- How will flexible credits be handled on high school transcripts for internships, virtual courses, etc. and be received by postsecondary institutions?
- Postsecondary education includes apprenticeships, community colleges, 4-year colleges/universities and private licensed schools.

7. Business and Community Roles / Extended Learning Opportunities (ELOs)

- What roles can business and community leaders play in promoting and facilitating competency-based programs in their local districts and schools?
- How might competency-based programs fit within the existing framework or ELOs?

Supportive Document C Pennsylvania Credit Flexibility Leadership Team

The six-month National Governors Association Awarding Credit to Support Student Learning Planning Grant enabled Pennsylvania to establish a Leadership Team, chaired by Elizabeth Bolden, Policy Director for the Pennsylvania Department of Education. The initial invited team members represented elected and appointed officials, numerous public agencies, statewide educational systems and associations. Throughout the planning process additional team members were added as needed. The Central Susquehanna Intermediate Unit/Center for Schools and Communities staff served as administrative support to the Leadership Team, fiscal agent for planning grant finds and writers of the final report.

Chair

Elizabeth Bolden, Policy Director Pennsylvania Department of Education

Members

Bill Bartle, Youth Policy Director Pennsylvania Partnerships for Children

Margaret Clark, Executive Assistant Pennsylvania Department of Education

Paul Clymer, State Representative and Chair of the House Education Committee Pennsylvania House of Representatives

Kathleen (Kacy) Conley, Director Pennsylvania Statewide Afterschool/ Youth Development Network (PSAYDN) Kirk Hallett, Member, Pennsylvania State Board of Education and Director, The Joshua Group

James Hartman, Executive Director Pennsylvania Association of Elementary and Secondary School Principals

Kathleen Howley, Senior Associate Vice Chancellor Pennsylvania State System of Higher Education

Julie Kane, Higher Education Associate Office of Postsecondary and Higher Education, Pennsylvania Department of Education

Erica Koser, Policy Analyst Pennsylvania Department of Education

Bernard Miller, Director of Education Services Pennsylvania State Education Association (PSEA)

James Moran, Vice Chancellor Pennsylvania State System of Higher Education

Amy Morton, Executive Deputy Secretary Pennsylvania Department of Education

Shileste Overton-Morris, Senior Program Development and Organizational Manager CSIU/Center for Schools and Communities

David Volkman, Executive Assistant Office of Elementary and Secondary Education, Pennsylvania Department of Education

Technical Consultants

Patrick Byrne, Educational Consultant Byrne Educational Works

Travis Reindl, Program Director, Postsecondary Education, National Governors Association Center for Best Practices

Staff

Amber Carmo, Research and Evaluation Data Management Specialist CSIU/Center for Schools and Communities

Thomas Robel, Grants, Development and Special Projects Manager CSIU/Center for Schools and Communities The Leadership Team met three times throughout the planning period and participated in several scheduled conference calls, where they received credit flexibility information, relevant published print materials and reports. The day long meetings enabled members to provide input on draft documents and obtain access to current credit flexibility research. Credit flexibility case studies were scheduled that engaged team members, stakeholders from Ohio's Credit flexibility effort and administrators from several PA school districts implementing credit flexibility options for their students.

A four-person Core Team comprised of staff from PDE and CSC provided management and oversight for this planning grant and prepared draft documents and meeting materials for members of the Leadership Team. The Leadership Team received technical assistance and consultation from the NGA Center for Best Practices.

References

- Carnevale AP, Smith N, Strohl J. Help Wanted: Projections of Jobs and Education Requirements Through 2018. Washington, D.C.: Georgetown University Center on Education and the Workforce; 2010.
- Carnevale AP, Smith N, Strohl J. "State -Level Analysis." *Help Wanted: Projections of Jobs and Education Requirements Through* 2018. Washington, D.C: Georgetown University Center on Education and the Workforce; 2010.
- Pennsylvania. Governor's Manufacturing Advisory Council. Recommendations to Encourage Growth in Pennsylvania's Manufacturing Sector. 2012. Team Pennsylvania Foundation; 2012.
- 4. Plank S, DeLuca S, Estacion A. Dropping Out of High School and the Place of Career and Technical Education: A Survival Analysis of Surviving High School. National Research Center for Career and Technical Education. Available from: The National Dissemination Center for Career and Technical Education. 1900 Kenny Road, Columbus, OH 43210-1090. Tel: 800-678-6011; Tel: 614-292-9931; Fax: 614-688-3258; e-mail: ndccte@osu.edu; Web site: http://www.nccte.org; 2005 Oct.
- Kulik JA. Curriculum Tracks and High School Vocational Studies. 1994; U.S. Department of Education Publications; 1994.
- 6. Competency-Based Pathways: State Policy Framework (n.d.). 2012. Ref Type: Online Source
- Competency-Based Pathways: State Policy Exemplers (n.d.). 2012. Ref Type: Online Source