

(C) Data Systems to Support Instruction

State Reform Conditions Criteria

(C)(1) Fully implementing a statewide longitudinal data system (24 points – 2 points per America COMPETES element)

The extent to which the State has a statewide longitudinal data system that includes all of the America COMPETES Act elements (as defined in this notice).

In the text box below, the State shall describe which elements of the America COMPETES Act (as defined in this notice) are currently included in its statewide longitudinal data system.

Evidence:

- Documentation for each of the America COMPETES Act elements (as defined in this notice) that is included in the State’s statewide longitudinal data system.

(C) DATA SYSTEMS TO SUPPORT INSTRUCTION

Introduction

Over the past four months Connecticut has been awarded two federal education reform grants, all of which rely on a robust and accessible longitudinal data system to support instruction and other key functions of the Connecticut State Department of Education (CSDE): policy development, operations, management, resource allocation and overall effectiveness (see Race to the Top criteria and guidelines). These new funding awards are: a State Fiscal Stabilization Fund (SFSF) grant and a Title 1(g) School Improvement Grant (SIG). We have examined and coordinated the data development and reporting requirements of each and will reference the various grants throughout this section as we work to ensure complete data and policy integration across them.

To address data development from PK through postsecondary education, Connecticut established in December 2009 a P-20 Council Data Working Group to create an inventory of data needed and policy questions to answer in order to better inform and improve the educational system. The P-20 Council Data Working Group works closely with the Interoperability System Council (ISC)

which is comprised of members from the CSDE, Department of Higher Education (DHE) and the Department of Labor (DOL). The ISC was created initially to address the work outlined in the federal Institute of Educational Sciences (IES) Statewide Longitudinal Data System (SLDS) Grant Connecticut received in August 2009; specifically, to develop a plan and protocol for sharing data from PK-12 education, into postsecondary education, and the workforce.

In addition, Public Act No. 10-111 included in Appendix (A)(1)(c) passed by the Connecticut General Assembly and signed by the Governor in May 2010, includes several new sections that further define information to be collected by Connecticut’s (SLDS), how that information is to be used, and how it is to be made accessible to the public and educators. We summarize these new statutory requirements in Section (C)(2). We also launched our redesigned Connecticut Education Data and Research Web site (CEDaR) in May 2010. Finally, having identified the Connecticut Accountability for Learning Initiative (CALI) along with Scientific Research-Based Interventions (SRBI) as our core instructional improvement processes, we include references throughout Section C related to the fundamental role of data development, analysis and use in both. A summary of our progress between our Phase 1 and Phase 2 Race to the Top (RTTT) application is presented in the table below.

State Progress on Data Systems Development and Use January through May 2010		
Action/ Result	Date	Responsible Party
<u>Federal Grant Awards</u>		
<ul style="list-style-type: none"> • SFSF grant • SIG grant 	April 2010 April 2010	CSDE
<u>Statutory Change</u>		
Public Act No. 10-111 adds new data requirements	May 2010	CT General Assembly
<u>CT Education Data and Research Web site</u>		
Launch expanded site	May 2010	CSDE
<u>P-20 Council Data Working Group</u>		
	December 2009	P-20 Council Working Group, including CSDE and DHE
<u>Coordination of Data Requirements across Grants</u>		
RTTT, SIG, SFSF	May 2010	CSDE

Connecticut Race to the Top Phase 2 Application

(C)(1): FULLY IMPLEMENTING THE STATEWIDE LONGITUDINAL DATA SYSTEM

Connecticut has accomplished six of the 12 America COMPETES requirements and has made significant progress in implementing the six remaining requirements, all of which will be completed by the end of the 2011-12 school year. Evidence is provided below for each of the 12 requirements. In addition, statewide actions to be taken as part of Section C include: developing a student growth measurement model; completing SLDS modules linking teacher and principal records to student information; developing a professional development system that enables educational professionals as well as parents and community organizations to make better use of available data; and increasing the availability of state data to better engage academic and applied researchers evaluating the efficacy of newly implemented programs relative to their effectiveness in improving the performance of high-needs students. The table below provides evidence of completion or progress for each requirement.

Status of Connecticut’s Completion of the Twelve America COMPETES Data Requirements		
Requirements	Status	Evidence
#1. Unique SASID	Complete	Connecticut General Statute (CGS) section 10-10a requires the department to assign public PK through grade 12 students a student identification number (SASID). (See Appendix (C)(1)(a) for this statute.) Annually, each new student entering the state’s public school system is assigned an SASID. In 2007, the statute expanded to include all preschool students who were in nonpublic school programs who received state and/or federal funds. This is now being accomplished through the prekindergarten information system (PKIS).
#2. Student demographic, enrollment and program participation information	Complete	For Connecticut PK-12 public school students, the Public School Information System (PSIS) collects enrollment data, demographic information (gender, race/ethnicity, free/reduced-price lunch status, special education status, English language learner status, date of birth). Program information is also collected on the PSIS for all students enrolled in public schools and publicly-funded school programs. The SASID is included in every PK-12 state data file collected at the individual student level (assessment, discipline, special education, etc). Recognizing the importance of collecting data about a student’s prekindergarten experience, beyond that provided in the public schools, the CSDE created the PKIS (see element 1) to obtain information

Status of Connecticut’s Completion of the Twelve America COMPETES Data Requirements

		about the type of prekindergarten program in which the student is enrolled, the length of time the student spends in the program and other basic demographic characteristics of the student.
#3. PK-16 Student transition information (enter, exit, transfer, dropout, graduate)	Complete for PK-12. In progress for post-secondary. Target completion date for Higher Education: August 2012	<p>The PSIS has a “real time” register/unregister module. When a student leaves a school/local education agency (LEA), the LEA must unregister that student and specify a reason for leaving. LEAs must register new entrants into the PSIS when they arrive. This allows the state to track student transfer patterns within and across LEAs. The system does not contain postsecondary education information. With support from a second IES grant, data sharing will become possible between the CSDE, public higher education institutions and DOL. A memorandum of agreement (MOA) with each entity has been developed for this project.</p> <p>In addition to the work detailed above, the CSDE is working together with the Department of Higher Education (DHE) to contract with the National Student Clearinghouse (NSC). The NSC project will provide data to the SLDS regarding postsecondary student enrollment, program participation and completion. By June 2010 the contract with NSC will be finalized, with the first data upload to NSC occurring in July 2010. The NSC data will be loaded into the SLDS in August 2010, using the SASID as the key. Analysis will occur from August to October 2010, with public dissemination in November 2010. This process will be repeated annually.</p>
#4. Capacity to communicate with higher education data systems	In progress. Target completion date: September 2011	With support from the second IES grant, the ISC consisting of the CSDE, DHE, public higher education institutions and the DOL will develop a data interoperability framework. Working through the ISC and to ensure this assurance under SFSF is achieved, the state’s public institutions of higher education agreed in April 2010 to incorporate the SASID as a field in their student information systems. This will allow for the linking of student information longitudinally from PK-12 through higher education and across higher education institutions. With the SASID included in postsecondary data systems, the SDE and DHE will be able to link student-level data between the two.
#5. Audit system to ensure data quality	Complete	The CSDE applies a set of validation rules to the data before they can be formally accepted for all data collections, does statistical checking and produces reports for LEAs that identify outliers in their data, including significant changes from the previous year as well as missing data. LEAs must address their data exceptions prior to the CSDE officially accepting their data. The CSDE also invokes penalties under the Individuals with Disabilities Education Act (IDEA), where applicable, for those data LEAs do not submit in a timely and accurate fashion.

Status of Connecticut's Completion of the Twelve America COMPETES Data Requirements

<p>#6. Yearly test records for assessment required under the ESEA</p>	<p>Complete</p>	<p>The CSDE maintains test records for all required assessments, and the SASID is a field in all state assessment files. Connecticut has a fully federally-approved system of grade-level standards and assessments (Connecticut Mastery Test (CMT) and Connecticut Academic Performance Test (CAPT)) for mathematics, reading and writing for grades 3 through 8 and 10, and for science in grades 5, 8 and 10. An alternate assessment system (Skills Checklist) exists for the state's most cognitively-disabled students, based on alternate achievement standards in the same subjects and grades. Together these constitute the foundation of the state's approved accountability plan under NCLB.</p> <p>A modified achievement standards (MAS) assessment in mathematics and reading became operational in March 2010 for a second group of students with disabilities and will undergo the federal peer review process. In addition, the CSDE has created online grade-level Connecticut Benchmark Assessment System (CBAS) tests for grades 3 through 8 in mathematics and reading, which teachers may use to chart student progress against the grade-level expectations identified in the pacing guides for the state's curriculum frameworks (see Section (B)(3) and Section (D)(2).</p>
<p>#7. Information on students not tested by grade and subject</p>	<p>Complete</p>	<p>The student assessment file contains SASIDs for each student tested so the state can identify annually, by grade and subject, any students not tested.</p>
<p>#8. Teacher identifier to match students to teachers</p>	<p>In progress. Target completion date: April 2011</p>	<p>In 2008-09, the state upgraded its educator certification system to begin collecting the Social Security number of each certification applicant and then assigning a unique educator identification number (EIN). The EIN will be included in the CSDE's upgraded, annual certified-staff data file of the professional staff members who work in the state's public schools and programs beginning in late 2010.</p> <p>Interim plans are in place to match mathematics and language arts teachers to their students, and the EINs will be included in the testing file for the 2010 administration of the CMT and CAPT. Districts will have student performance level and vertical scale growth associated with the children in each teacher's class in 2011.</p> <p>The final step is to link the teacher identifier with the student identifier (the SASID) for <i>all</i> students and all subjects. One of the objectives of the IES SLDS grant awarded in August 2009 is to pilot the matching of teachers to students, <i>and in addition, link students to the courses in which they are enrolled.</i> This grant and pilot project are spread out over three years. To speed up the timeline and</p>

Status of Connecticut’s Completion of the Twelve America COMPETES Data Requirements

		<p>meet this same assurance under SFSF, and expand this to all districts outside of the pilot, the following milestones and timelines are planned:</p> <ul style="list-style-type: none"> • August 2010: LEAs ingest the EIN into their local data system. • August 2010: Business requirements document and functional specifications documents are created. • August-November 2010: Districts conduct the crosswalk to match their course identification numbers with the NCES course codes. Using National Center for Education Statistics (NCES) course codes will ensure consistency across districts. • September 2010-December 2010: Development of system to collect student-teacher-transcript (schedule) data from every district in Connecticut. • January 2011: Pilot the collection system; teachers matched with students and their courses. • February-April 2011: Training and roll-out.
#9. Student-level transcripts containing courses and grades	In progress. Target completion date: April 2011	<p>Elements 8 and 9 are closely related, and the work is occurring simultaneously to achieve completion. The department will be adopting NCES course codes and conducting a pilot effort to match students to courses to teachers as a Phase II IES grant (awarded August 2009) component. The grant will be used to develop and pilot a scheduling module that will connect teachers to students, create a transcript of the courses students took and explore integrating the grades students earn. This will create the state’s capacity to track student course-taking patterns and grades by LEA, school and teacher. To accelerate this work and meet the SFSF assurance, the timeline articulated in Element 8 will be implemented for Element 9.</p>
#10. Student scores on college readiness tests (Scholastic Aptitude Test/Advanced Placement)	In progress. Target completion date: September 2011	<p>This is in place for students planning to attend colleges and universities that require a college entrance exam such as the Scholastic Aptitude Test (SAT) or American College Test (ACT) or Advanced Placement (AP) exam. The state receives individual student results for the SAT and AP tests annually for Connecticut public school graduates. To improve efficiency, the CSDE is requesting that the College Board add a field to its registration form for the SASID. At present, the SASID is not part of the form that students must complete to register for these assessments. Currently, the CSDE is able to connect these college readiness assessments to the SASID and then to other data in our system by creating a pseudo-identifier using first name, last name, date of birth and high school/LEA. Addition of the SASID will increase efficiency and reduce the need for additional matching efforts.</p>

Status of Connecticut’s Completion of the Twelve America COMPETES Data Requirements

		The CSDE has prepared a plan to develop a mathematics and English language arts standard for “on-track to college and career readiness” based on the grade 10 CAPT. In order to have a statewide on-track to college and career readiness standard for all graduates of its public schools, not just those who take the SAT or AP assessments, the department will collaborate with the Partnership for High School, College and Workforce Alignment to develop a plan for college and career standards based on the CAPT, administered to all grade 10 students in the state’s public high schools and grade 11 and 12 students who elect to retest in subsequent years (see Section (B)(1) and (B)(3).
#11. Transition data from secondary to higher education, including remedial course-taking	In progress. Target completion date: Fall 2010	CSDE is providing funds from the Phase II IES grant to the DHE to match the PK-12 longitudinal data to postsecondary and workforce data. The CSDE has developed an MOA with the DHE and the DOL to collaborate on this work. The linking of student longitudinal data from PK-12 to college, and then to the state’s workforce, will permit researchers to examine which programs are most effective in preparing students for success beyond secondary schools. As a result of the work of the ISC and the P-20 Data Workgroup, the Connecticut State University System and the Connecticut Community College System will be providing data at a high school level on the numbers of students arriving in the fall placing into remedial or developmental mathematics, English or both. This will be provided on an annual basis beginning in the fall of 2010.
#12. Data on the alignment and adequacy of student preparation for postsecondary education	In progress	This work will be undertaken with the Partnership for High School, College and Workforce Alignment and the RTTT Knowledge Network. Together, the groups will assist the department to identify research studies that will inform stakeholders how well students who enter either postsecondary education or the workforce are prepared for success.

Appendices Referenced in Section (C)(1)

Appendix (C)(1)(a) Connecticut General Statute on Public School Information Systems

Reform Plan Criteria

(C)(2) Accessing and using State data (5 points)

The extent to which the State has a high-quality plan to ensure that data from the State’s statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (*e.g.*, parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness.¹

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

(C)(2): ACCESSING AND USING STATE DATA

Introduction

The CSDE has long embraced the value and power of data to drive education reform, improve instruction at the district and classroom level, and support both local and statewide accountability. Enormous amounts of student achievement data are already online at the CSDE’s CEDaR Web site, and in May 2010, the CSDE deployed the first iteration of this newly enhanced public web resource. CEDaR allows Internet users to access the department’s aggregate school and LEA data to perform basic search and compare functions. Online reports are now available as a traditional report format or by using a series of new graphing capabilities. This public access to various types of education data to inform and engage key stakeholder groups such as parents, community leaders and practitioners, researchers and policymakers in decisions related to policy, operations, management, and resource allocation will dramatically improve with the launch of the redesigned CEDaR Web site.

¹ Successful applicants that receive Race to the Top grant awards will need to comply with the Family Educational Rights and Privacy Act (FERPA), including 34 CFR Part 99, as well as State and local requirements regarding privacy.

LEA access to secure student, staff and facility data through an online portal, one of the most salient features of Connecticut's Statewide Longitudinal Data System, is under development and is described in more detail later. In addition, the Connecticut General Assembly included in Public Act No. 10-111 a series of expanded data requirements to be implemented no later than July 1, 2013 (see Appendix (A)(1)(c)). The new law also requires the Commissioner of Education to report by July 1, 2011, (and annually thereafter) on the status of implementation progress including those remaining data elements to be added and accessible by July 1, 2013. A summary listing of new data requirements follows:

- Track and report data related to student, teacher, school and district performance and make that information available to boards of education for evaluating the educational performance and growth of teachers and students (see Section (D)(2) for more information).
- In addition to state mastery assessment scores, include in the student data collection information on, for example, primary home language, student transcripts, attendance and mobility and entry to kindergarten readiness.
- Teacher-related data will include teacher credentials, preparation programs completed, certification levels and endorsement areas, along with teacher performance assessments related to "effectiveness" criteria (see Section (D)(2)). Other data to be collected and reported include presence of substitute teachers and/or teacher aides in the classroom and class absenteeism.
- Data related to school districts will include student enrollment in and graduation from post-secondary education.
- Develop the means for access to and data sharing with the data systems of higher education in the state.

Finally, as described at the beginning of Section C, Connecticut has established a P-20 Data Working Group that interfaces closely with the CSDE's ISC to identify leading data issues and recommend a P-20 data development agenda.

Over the period January through May 2010, we have expanded the goals we seek to accomplish related to Section (C)(2). Phase 2 goals are summarized below with dates and responsible parties. Detailed information for each goal follows:

Connecticut's Plan to Support Broad Data Access and Use				
Goal	2010-2011	2011-2012	2012-2013	2013-2014
Goal 1: LEA access to CMT and CAPT Data <ul style="list-style-type: none"> • Assessment Forum • Student Growth Data 	Complete	Reading & math data delivered	Annual Updates	Annual Updates
Goal 2: LEA secure access to data and its use improved through new CEDaR Web site; LEA feedback survey	May 2010 Ongoing	Ongoing	Ongoing	Ongoing
Goal 3: Expanded LEA training on CALI data components and use	Ongoing	Ongoing	Ongoing	Ongoing
Goal 4: Parent and public CEDaR orientation, training and outreach	Ongoing	Ongoing	Ongoing	Ongoing
Goal 5: P-20 Data Working Group supports data development efforts	Ongoing	Ongoing	Ongoing	Ongoing

The Plan for Section (C)(2) in Detail

Goal 1: The CSDE will improve access to CMT and CAPT data available to LEA personnel to provide constituents with the data necessary to improve instructional effectiveness.

As a result, LEA district personnel will be more knowledgeable in the use of data, including as related to assessment. LEA personnel will also have access to reading and math information on student growth in grades 3 through 8.

Activities for LEA Personnel

- The Bureau of Student Assessment will conduct an Assessment Forum on August 12 and 13, 2010, to provide district personnel with training in new features of the Web site and strategies for using the data more effectively. Assessment staff members will also continue to work with the Regional Educational Service Center (RES-C) Alliance to provide a series of assessment workshops annually on customizing the use of testing data to meet district needs, including providing resources for teachers and parents (see Goal 2 in Section (B)(3)).
- Consistent with Connecticut's State Fiscal Stabilization Fund Phase 2 Application, to improve access and use of these data to improve instruction, the department will require LEAs to provide teachers with student growth data on their current students and the students they taught in the previous year. Beginning in 2011, the CSDE will provide these data to each LEA which, in turn, will share the data with its reading/language arts and mathematics teachers in grades in which the state administers assessments in those subjects, in a manner that is timely and informs instructional programs.

Timeframe: August 2010 through July 2011, with annual updates each year thereafter

Responsible Parties: CSDE Bureau of Student Assessment; Measurement Incorporated (testing vendor); eMetric (CTReports contractor); RES-C Alliance

Goal 2: CSDE will improve the access to the education data in the SLDS via the CEDaR Web site; LEAs will have access to secure data on the CEDaR Web site; LEAs and other constituents will have the opportunity to provide feedback.

As a result, new data and types of analysis will become possible, including ability to provide for in-depth analysis of student performance on state standardized tests, additional student-level variables (e.g., discipline, attendance) and aggregate facility and LEA information.

Activities

- To ensure LEA constituents know how to access and use CEDaR, regional training sessions, conducted by CSDE staff members from the Bureau of Data Collection, Research and Evaluation, will teach participants how to access the enhanced CEDaR Web site and how to use the various data tools to meet their needs, whether policy or research related. The RESC Alliance will work with staff from the Bureau of Data Collection, Research and Evaluation to develop resources to support data interpretation and manipulation through training modules, both for online and in-person workshops, for educators, parents and the public (See Section (B)(3) SLDS/CEDaR Training).
- Through the secure portal, the bureau will provide LEA leaders, principals and teachers with the ability to control, query and summarize educational data specific to the students they educate, in a secure, user-friendly environment. The portal will include the ability to provide for in-depth analysis of a student's educational history, including type of PK program attended, student performance on state standardized tests, additional student-level variables (e.g., discipline, attendance) and aggregate facility and LEA information.
- The Bureau of Data Collection, Research and Evaluation will survey its LEA and statewide education constituents annually to determine the level of use of the CEDaR site, how the Web site is used and how it could be improved. The results of this feedback from constituents will be used to inform CSDE staff about the enhancements needed for CEDaR in order to better meet the needs of users.

Timeframe: May 2010 and ongoing annually through 2014

Responsible Parties: CSDE's Bureau of Data Collection, Research and Evaluation; the Bureau of Information Technology; Choice Solutions Group (the SLDS vendor); Regional Education Resource Center Alliance

Goal 3: Continue to implement the Connecticut Accountability for Learning Initiative (CALI) data-driven decision-making (DDDM) component to ensure LEAs are using available education data to inform practice.

As a result, LEAs will know the data that are available to them and how to use these data to improve their policies, instruction and overall effectiveness.

Using data to inform policy and practice is a key component of the CALI Program. CALI is designed to provide a comprehensive model for instructional improvement, based on the use of data, at the LEA and state level. The key components of the CALI training and technical assistance that support the use of data to improve instruction include: (1) Data-Driven Decision-Making (DDDM) which requires ongoing review of data by LEA leaders, building leaders and teachers to determine the strengths in areas that need improvement at the LEA and school level; and (2) local Data Teams which conduct ongoing analysis of data from state, benchmark and common formative assessments to identify strengths and weaknesses in student learning (particularly in areas in reading, mathematics, and science), and identify instructional strategies that will best address student learning objectives in the classroom. This feature of CALI is described even further in Section (C)(3).

Activities

- As noted later in (C)(3)(i), participating LEAs will sign the required Memorandum of Understanding (see Appendix (A)(1)(f)) requiring and supporting their full participation in the CALI beginning in year one of the RTTT reform agenda. Not all LEAs will start in year one.

- The RESC Alliance and SERC will provide professional development on Data-Driven Decision-Making and CALI modules for 280 schools in year one, 560 schools in year two, 280 schools in year three and 580 schools in year four of the RTTT effort.

Timeframe: Beginning September 2010 and then ongoing

Responsible Parties: Bureau of Accountability and Improvement; RESC Alliance, and State Education Resource Center (SERC)

Goal 4: Parent and public CEDaR training and outreach.

Parents and other interested members of the public will have access to outreach, orientation and training on the use of CEDaR and will have the opportunity to provide online feedback on the usability of the Web site and suggestions for improvement.

Activities

- These activities are part of a larger agenda to inform and involve parents and the community in student learning and public accountability for educational reform. Part of this agenda was presented in Section (B)(3) with regard to educating parents and the community in the new national and state standards and in the state’s evolving systems of student assessment.
- The Bureau of Data Collection, Research and Evaluation will survey its LEA and statewide education constituents annually to determine the level of use of the CEDaR site, how the Web site is used and how it could be improved. The results of this feedback from constituents will be used to inform CSDE staff about the enhancements needed for CEDaR in order to better meet the needs of users.

Timeframe: Beginning in the fall of 2010 and continuing beyond 2014

Responsible Parties: CSDE Bureau of Data Collection, Research and Evaluation, with the Partnership for Family and Community Engagement, the Knowledge Network

Goal 5: Work with P-20 Data Group to improve the capacity to share data across the P-20 continuum, and determine best practices for disseminating the information.

As a result, state and local education leaders have information to make better informed policy and practice decisions.

Activities

- Identify the information needed by key state and local education leaders and the data elements necessary for such.
- Develop MOAs between PK-12, higher education constituent units and labor for the regular and on-going sharing of student level data based on the recommendations of the Interoperability System Council.
- Develop the secure data environment for the sharing of data from PK-12, higher education institutions and labor.
- Develop capacity to analyze, report and disseminate the data. Develop basic metric reports and begin producing the reports on a regular schedule. Design and develop Internet-based dissemination capabilities for these reports, providing drill-down and timeline data views.

Timeframe: Complete by August 2013

Responsible Parties: P-20 Data Group, CSDE, State Department of Higher Education

<p>Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.</p>	<p>Actual Data: Baseline (Current school year or most recent)</p>	<p>End of SY 2010-2011</p>	<p>End of SY 2011-2012</p>	<p>End of SY 2012-2013</p>	<p>End of SY 2013-2014</p>
<p>No Performance Measures for (C)(2).</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

(C)(3) Using data to improve instruction (18 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan to—

- (i) Increase the acquisition, adoption, and use of local instructional improvement systems (as defined in this notice) that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness;
- (ii) Support participating LEAs (as defined in this notice) and schools that are using instructional improvement systems (as defined in this notice) in providing effective professional development to teachers, principals and administrators on how to use these systems and the resulting data to support continuous instructional improvement; and
- (iii) Make the data from instructional improvement systems (as defined in this notice), together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (*e.g.*, students with disabilities, English language learners, students whose achievement is well below or above grade level).

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note the location where the attachment can be found.

(C)(3) USING DATA TO IMPROVE INSTRUCTION

(C)(3)(i) Support LEAs in acquiring and using local instructional improvement support systems

Connecticut currently provides data support for instructional purposes to local school districts through two core programs: the Connecticut Accountability for Learning Initiative (CALI) and Scientific Research-Based Interventions (SRBI). Each has a somewhat different point of focus but each represents instructional systems accessible to LEAs participating in Connecticut’s comprehensive reform agenda. Each is described below in some detail to support goals associated with Section (C)(3)(i).

CALI as a Data-Driven Instructional Improvement Process

The Connecticut Accountability for Learning Initiative (CALI) has been described throughout Connecticut’s Phase 2 RTTT application as a core component of our instructional improvement process (see Section (A)(1)(i) as well as Sections (B)(3) and (C)(2)). CALI is designed to provide a comprehensive PK-12 model for instructional improvement and accountability based on the use of data at the state, LEA, building and classroom level. The use of district data teams at the LEA, school and classroom levels builds capacity to use data to improve instruction from a variety of resources including state, LEA and school assessment data from the statewide longitudinal data system (SLDS). A prekindergarten CALI model is under consideration for development for 2010-2011.

As the CALI accountability framework is expanded to RTTT participating LEAs, each LEA will be required to have a District Improvement Plan (DIP) with a limited number of high leverage, measurable targets. Data used to set and monitor targets come from both the state and LEA data systems as described above. In addition, data on adults in the system, such as attendance, qualifications, office referrals, years of experience and student progress, are analyzed and used in setting targets. Each LEA is also required to have an LEA Data Team that meets monthly to monitor implementation and progress on the DIP based on interim measures in the DIP. Each school develops a School Improvement Plan (SIP) aligned to the DIP based on an analysis of data for the school. Each *school* is also required to have a School Level Data Team that meets on a monthly basis to monitor implementation and progress on the SIP. The SIP strategies and activities are implemented through instructional or grade-level data teams that meet regularly, at least twice monthly.

The effectiveness of the LEA, school and instructional data teams is monitored using rubrics for effective data teams at each level. In addition, based on district self-assessments, selected schools in LEAs will have a Data Team Facilitator assigned to coach the school- and instructional-level data teams as well as an Executive Coach to work with the leadership team in implementing the accountability system. The state team assigned to each LEA works with the LEA data team to monitor the effectiveness of the data teams. Standards have been identified for each team and state-designed rubrics are used to assess effectiveness and provide ongoing feedback for improvement. CALI training and technical assistance supporting LEAs in the use of data to improve instruction include:

- *Data-Driven Decision-Making* – ongoing review of student data by district leaders, building leaders and teachers to determine strengths and areas in need of improvement at the district and school level.
- *Data Teams* – ongoing analysis of data from common formative assessments to identify strengths and weaknesses in student learning and instructional strategies that will best address student and learning objectives in the classroom.
- *Making Standards Work* – Aligns district and school expectations to state standards by developing classroom based instruction and assessment to improve student performance.
- *Common Formative Assessments (CFA)* – build knowledge and skills of educators on how to develop CFA to inform instruction.
- *Effective Teaching Strategies* – applies the nine research-based effective instructional categories identified in *Classroom Instruction that Works* (Marzano et al. 2001) and nonfiction writing and STEM to develop lesson plans that best meet student needs.
- *Improving School Climate to Support Student Achievement* – Provides both a context and concrete direction enabling teams to gain the understanding necessary to collect appropriate data and create school climate improvement plans and strategies for implementation.

Scientific Research-Based Interventions (SRBI)

SRBI is Connecticut’s framework for Response to Intervention. It emphasizes successful support for teachers and instruction for all students through high-quality core general education practices, as well as targeted interventions for students experiencing learning, social, emotional or behavioral difficulties. Data development and use at the classroom level plays an important role in the identification of differentiated instruction for students at Tier II and Tier III of this intervention process (see Appendix (A)(1)(e) for a description of Tiers in the SRBI Executive Summary). The SRBI process builds on the work of the data teams. During instructional level data team meetings, staff review the results of universal screening and additional student level data to examine the current state of students’ understanding of concepts and application of skills. Once strengths and challenges are assessed, trends and patterns in student performance are analyzed. Students are identified for specific, measurable goals, and the team examines which research-based teaching strategies for intervention, including STEM, will result in the greatest gain in student achievement. Data on progress

monitoring is reviewed frequently throughout the intervention and students are moved up or down through tiers of intervention, as they progress or regress.

CALI training and technical assistance supporting LEAs in implementation of the SRBI process includes:

- School self-assessment on components of SRBI;
- SRBI Basic Training;
- SRBI Implementation; and,
- SRBI for specific cohorts of schools such as SRBI at the Secondary Level.

Through these and other data collection efforts, the CSDE provides access to a rich base of publicly-reported and secure-access information about students, teachers and programs offered in the public schools. We earlier described the secure access features of CEDaR in Section (C)(2). The table below provides a summary of the sources and types of data available to LEA professionals for use in the improvement of instructional quality.

Sources of Data Available to Connecticut LEAs for Instructional Improvement	
Source	Types of Data Available
Connecticut Benchmark Assessment System (CBAS)	State and LEA student performance data (see Section (B)(3))
Statewide Longitudinal Data System (SLDS)	Student indicators such as drop out, graduation, attendance, truancy, student mobility, discipline, special education data
Student Data collected by LEAs	As examples: LEA-developed benchmark assessments, teacher attendance, student involvement and results from AP courses, students attending postsecondary education, students who drop out and enter into adult education system
Staff Data collected by LEAs and Schools	As examples: staff attendance, staff years of experience, staffing demographics, retention of staff, office disciplinary referrals
Family and Community Qualitative Data collected locally and, under Public Act 10-111, reported annually by the SLDS	As examples: parent participation, parent satisfaction, student satisfaction, community surveys
LEA Instructional Data collected by grade or course	As examples: benchmark assessments, common formative assessments, end-of-term and end-of-year course exams, group scoring of student work, progress on implementation of effective teaching strategies, progress monitoring data for students receiving SRBI

As is true throughout Connecticut’s Phase 2 application, we have worked hard over the period January through May 2010 to enrich our goals for Section (C)(3) to accommodate new requirements in state law; modify requirements in the Race to the Top LEA Memorandum of Understanding; and build a stronger emerging relationship with Connecticut’s higher education community. These goals are summarized below and then presented in detail.

Connecticut’s Plan to Support LEA Implementation of Broad Data Access and Use				
Goal	2010-2011	2011-2012	2012-2013	2013-2014
Goal 1: LEAs are trained, adopt and use instructional improvement models <ul style="list-style-type: none"> • CALI • SRBI 	Ongoing Begin Fall 2010	Ongoing	Ongoing	Ongoing
Goal 2: LEAs will use data from the local instructional improvement systems and the SLDS as a means to determine the effectiveness of the CALI Theory of Action and make these results publicly available.	Report due Summer 2010	Ongoing	Ongoing	Ongoing
Goal 3: State and LEA data are available to researchers.	As requested beginning in 2010	As requested	As requested	As requested

(C)(3)(i) The Detail

<p>Goal 1. All participating LEAs will implement the CALI and SRBI instructional improvement processes.</p> <ul style="list-style-type: none"> • All LEAs will participate in CALI professional development and technical assistance on use of data. • All LEAs will establish a three-tiered system of accountability (LEA-school and instructional-level data teams.) • All LEAs will embed the work of their SRBI process into the instructional data teams. • All LEAs will implement a three-tiered system of intervention for students (SRBI).

Activities

- Participating LEAs sign the required Memorandum of Understanding (see Appendix (A)(1)(f)) requiring and supporting their full participation in the CALI, beginning year one of the RTTT reform agenda.

- The CSDE Bureau of Accountability and Improvement will work with the Regional Educational Service Center (RESC) Alliance and the State Education Resource Center (SERC) to increase the capacity of CALI trainers and technical assistance providers within six months of receiving the RTTT grant.
- CSDE and RESC Alliance staff will provide needs assessment in all districts in year one.
- CSDE and RESC Alliance staff will provide CALI professional development based on needs assessment for 280 schools in year one, 560 schools in year two, 280 schools in year three and 580 schools in year four of the RTTT effort.
- LEAs will establish data teams and begin to use data for instructional and management improvement.
- The CSDE Bureau of Accountability and Improvement will provide resources for executive coaches and data teams to select LEAs as part of the CALI model based on district and school assessments.
- CSDE staff (state technical assistance teams assigned to the LEA) and external coaches will support districts in developing a District Improvement Plan with annual targets.
- The CSDE Bureau of Accountability and Improvement will expand the use of the Technical Assistance Services Tracking (TAST) system to all participating LEAs within three months of receiving the RTTT grant.

Timeframe: Beginning September 2010 and ongoing

Responsible Parties: CSDE's Bureau of Accountability and Improvement, the RESC Alliance and LEAs, in collaboration with the Partnership on Pre-Service Training and Professional Development and the Partnership on Educator Effectiveness and Accountability

(C)(3)(ii) Support participating LEAs and schools that are using instructional improvement systems

Goal 2: LEAs will use data from the local instructional improvement systems and the SLDS as a means to determine the effectiveness of the CALI Theory of Action and make these results publicly available.

This will enable the CSDE to conduct an evaluation study on the fidelity with which CALI is being implemented and the effectiveness of the CALI theory of action.

RMC Corporation Evaluation Study

The CSDE issued a competitive request for proposals for an external evaluation of CALI 18 months ago. This evaluation, being conducted by the RMC Research Corporation, is in the final stages of a two-year evaluation. The evaluation included a review of data from various sources, including statewide evaluation and student data, local student performance data, review of data from the Technical Assistance Service Tracking (TAST) system, and qualitative data from extensive interviews and focus groups with state, LEA central office and school staff, as well as site visits to and observations of LEAs and schools. The evaluation is designed to determine the effectiveness of the CALI Theory of Action. The following questions guided the evaluation study: (1) To what extent and degree of fidelity is CALI being implemented at the LEA and school levels in LEAs identified as being in need of improvement, corrective action or restructuring under NCLB? (2) Do the components/interventions support each other? If so, how and to what degree? (3) What impact is CALI having on LEA, school, teacher and student performance?

A summary of the September 2009 Interim Report is included in Appendix (C)(3)(a). Highlights from the evaluation are promising and include:

- “This first phase of the evaluation focused at the LEA level, where leaders have worked in earnest and made progress in reaching fidelity. The fifteen CALI Partner Districts that are knowledgeable of CALI buy-in to the CALI model as a viable way to bring about school and district improvement and have participated in CALI activities to a degree of depth.”
- “Fidelity of implementation is extremely important at the school level simply because it is in the interactions of teachers and students in classrooms that improvement will ultimately happen or not. The partnership between districts and their schools in

reaching fidelity in using data-driven improvement is the real arena of change, and the second phase of the evaluation will seek insights into how implementation occurs at this level.”

- “The CALI components and interventions support one another in the model as designed. CALI is fundamentally a data-driven, continuous improvement model.... As conceptualized the CALI components and interventions are cohesive and coherent.”

The CSDE will use the findings of the final evaluation report due in 2010 to further enhance and refine CALI. The CSDE will use the resources of the RTTT to issue, within one year, a competitive request for proposals to evaluate the effectiveness of CALI implementation and progress in closing the achievement gap.

Activities

- CSDE will design and contract for an ongoing series of evaluation studies related to the implementation of the CALI and SRBI instructional improvement models.

Timeframe: 2011-2013

Responsible Parties: CSDE’s Bureau of Accountability and Improvement and external evaluator as identified

(C)(3)(iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers.

Goal 3: Ensure data from the statewide longitudinal data system (SLDS) and from LEA-specific sources are available and accessible to researchers.

Attainment of this goal will enable researchers to conduct studies of effectiveness as related to groups of students and to present these data to the CSDE for use in policy, program and funding decisions.

Activities

- Connecticut will deploy its new data dissemination Web site, CEDaR, which will provide public access to all education data the CSDE collects, aggregated to the school, LEA and/or state levels.
- Section 10-10a(e) of the Connecticut General Statutes requires the CSDE to provide within 60 days state student-level education data to tax-exempt non-profit organizations operated for educational purposes. (See Appendix (C)(1)(a)). This statute provides an additional means for researchers to gain access to education data should it not be available on CEDaR.
- As part of the LEA Memorandum of Understanding, participating LEAs agree that any data from their local instructional improvement system that is *not* part of the SLDS (e.g., local benchmark assessments, student satisfaction surveys) will be shared upon request. LEA contact persons for data requests are identified in each LEA's formal RTTT work plans.

Timeframe: Beginning 2010 and continuing beyond 2014

Responsible Parties: Members of the Knowledge Network; CSDE staff members from the Bureau of Data Collection, Research and Evaluation; Bureau of Grants Management; Bureau of Information Technology; and Bureau of School Improvement and

Accountability

<p>Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.</p>	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
<p><i>No performance measures for (C)(3).</i></p>	NA	NA	NA	NA	NA

Appendices Referenced in Section C-3

- Appendix (A)(1)(c) Public Act 10-111
- Appendix (A)(1)(e) Scientific Researched Based Interventions Executive Summary
- Appendix (A)(1)(f) Memorandum of Understanding with Local Education Agencies
- Appendix (C)(1)(a) Connecticut General Statutes on Public School Information Systems
- Appendix (C)(3)(a) Evaluation of Connecticut Accountability and Learning Initiative (CALI)