# I. Project Identification

**Project Title:** Connecting Families and Teachers through Technology

**Agency Name**

Education

**Agency Business Unit**

Performance

**Your Name** (Submitter)

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# II. Project Details

### A. Project Dates

**Proposed Start Date** (MM/DD/YYYY)

06/01/2013

**Expected Completion Date** (MM/DD/YYYY)

06/30/2018

**Project Duration** (in months)

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B. **Project Description -** This information will be used for listings and report to the Governor and General Assembly on capital funded projects.

The Connecticut State Department of Education (CSDE) seeks to develop a technology platform/portal and mobile application (app) to enhance family engagement and school-home communication. Recognizing that family engagement contributes to children's success in school, this platform/portal and app will provide a means for parents to access data on their child (e.g., longitudinal assessment scores, discipline and attendance) and engage in frequent, two-way interaction with teachers to share information about progress, school events and other matters.

C. **Summary**

| Summary -  Describe the high level summary of this project in plain English without technical jargon |
| --- |
| Though family engagement contributes to children's academic success, schools and families struggle to develop and maintain productive relationships and lack integrated systems for reliable, frequent and meaningful two-way communication.<br><br>Technology provides new opportunities for providing important information and enhancing school-home communication.  A growing number of families in all demographic groups are accessing digital technologies including use of the Internet and mobile phones.  The goal of this project is to promote schools' use of digital technology to share information and build two-way communication with families to engage parents as learning partners.<br><br>The CSDE seeks to develop a technology platform/portal and app, which will allow families and teachers to have ready access to information about students and to communicate more easily.  The platform/portal and app will give families the ability to decide what information they would like to receive, how often they would like to receive it and initiate conversations with their child's teacher, which often proves difficult.  The platform/portal and app will also make it easier for teachers to share information sitting in existing school applications (e.g., attendance, homework completion or grades) automatically and send generic and student-specific messages via existing, social media technologies. The intent is to make it easier for both families and teachers establish meaningful relationships and increase families' participation in their children's education.<br><br>Once completed the platform/portal and app will be accessible to parents and teachers across the State. The CSDE will initiate targeted training in selected communities where parent/teacher communication has been identified as crucial to improving or sustaining student performance outcomes and where broad base support exists for new and innovative methods of connecting teachers and families. |

| Purpose – Describe the purpose of the project |
| --- |
| Family engagement in their children's education is an ongoing struggle for schools across the state. The purpose of this project is to use technology to improve the ability of schools and families to communicate about student learning and improve student achievement, especially in Connecticut's lowest performing schools. Recognizing that family engagement contributes to children's success in school, this project will develop a platform/portal and app to provide a means for sharing information about students and enabling frequent, two-way interaction between families and teachers.<br><br>The platform/portal and app will be easy to use and flexible with an engaging, user-friendly interfaces and multi-language capability (e.g., translation tools). The platform/portal and app will be compatible with common mobile technologies/devices, will seamlessly integrate with existing school technologies and will connect with a variety of widely available and free platforms (such as text messaging or social media applications) to minimize barriers of usage. Parents and teachers will be able to remove barriers to communication and more easily share information about student progress, school events and other matters. |

| Importance – Describe why this project is important |
| --- |
| Connecticut is embarking on an ambitious education reform agenda to improve schools and ensure that all students are ready for college, career and life.  Family engagement has been shown to be a crucial element of successful school reform.  Through this innovative platform/portal and app, the CSDE is improving the likelihood that broader education reforms will be successful.  This platform/portal and app purposefully enlists parents' participation and creates more opportunities for busy families and teachers to see data, share information and partner with one another to ensure student success. |

| Outcomes – What are the expected outcomes of this project |
|---|
| The CSDE will review participating schools and districts for evidence of improvements that are known indicators of improved parent engagement. These areas include, but are not limited to attendance, homework completion, credits earned on time, graduation on time and meeting requirements for college entry.  The CSDE will immediately look for enhanced satisfaction among parents and teachers through surveys. |

| Approach and Success Evaluation – Provide details of how the success of the project will be evaluated |
|---|
| The CSDE is already in the process of overhauling its state longitudinal data system (SLDS).  Creating a platform/portal for teachers and for parents, as well as developing mobile apps, are critical aspects of this overhaul.  State and district data have limited value if they are not made readily available and in consumable form to these groups.<br><br>CSDE will hire one or more vendors to develop the platform/portal and app that will connect with existing technology and devices that are widely available and easily accessible to users, such as text messaging and social media applications. The contractor(s) will include training and ongoing technical support content for parents, so they can use the technology to support their children's learning, success and include professional development content for school and district staff and administrators so they can best use the technology effectively for engaging families.  In addition, the contractor(s) will conduct research during the initial implementation to assess different aspects of the platform/portal and training (e.g., user interface or auto-generated messages) and then, make appropriate changes to improve broader implementation and develop a plan for effectively marketing this new platform/portal to teachers and parents.<br><br>Vendor(s) will work with participating schools and districts to collect information to evaluate outcomes.  The vendor(s) will survey parents and school staff from pilot communities to determine access, usage and satisfaction.  Targets will be developed with participating districts for these, as well as other indicators of improved parent engagement.  These areas include, but are not limited to attendance, homework completion, credits earned on time, graduation on time and meeting requirements for college entry. |

C. **Business Goals**.  List up to 10 key business goals you have for this project, when (FY) the goal is expected to be achieved, and how you will measure achievement, must have at least one.  Please use action phrases beginning with a verb to state each goal.  Example: "Reduce the Permitting process by 50%".  In the Expected Result column, please explain what data you will use to demonstrate the goal is being achieved and any current metrics.

| Business Goal (Action Phase) | Target FY for Goal | Current Condition | Expected Result |
|---|---|---|---|
| Provide an easy to use and flexible system for sharing data/ information and enabling school-home communication | Expected FY 2016 | Not available currently; to be developed. | Survey of parents and school staff from pilot communities will show teacher and parent access of at least 50% and satisfaction of at least 75%. |
| Determine type and content of digital communications that are most successful in engaging families | Expected FY 2016 | Not available currently; to be developed. | Survey of parents and school staff from pilot communities will show a differentiation between the |

| | | | type and content of digital communications that are more and less successful. |
|---|---|---|---|
| CSDE will work with participating districts in the pilot project to determine appropriate targets for improvement | Expected FY 2018 | CSDE will work with participating districts in the pilot project to determine baseline status and begin collecting/aggregating appropriate data | Improvements in student performance that are known indicators of improved parent engagement. These areas include but are not limited to attendance, homework completion, credits earned on time, graduation on time and meeting requirements for college entry. |

D.  **Technology Goals**.  From a technical perspective, following the above example, list up to 10 key technology goals you have for this project, in which Fiscal Year (FY) the goal is expected to be achieved.  Please use action phrases beginning with a verb to state each goal. Example:  "Improve transaction response time by 10%".

| Technology Goal | Target FY for Goal | Current Condition | Expected Result |
|---|---|---|---|
| Provide the lowest state and district cost solution | FY 2014 | Disparate communication systems across all districts. | Lowest implementation cost solution. |
| Provide the lowest state and district support cost solution | FY 2016 | Disparate communication systems across all districts. | Lower support costs. |
| Provide the most flexible technology solution | FY 2014 | Disparate communication systems across all districts. | Increased flexibility to enhance the system in the future. |
| Leverage the use of common communication tools (i.e., social media, smart phones, etc.) | FY 2015 | Disparate communication systems across all districts. | Increased usage through common tools. |
| The ability to seamlessly interoperate with all communication technologies | FY 2015 | Disparate communication systems across all districts. | Improved communications. |
| Provide enhanced user security and directory services | FY 2014 | Disparate communication systems across all districts. | Easy system management for district staff. |
| Create a simple Graphical User Interface | FY 2014 | Disparate communication systems across all districts. | Easy to use interface for a wide range of users' skills. |
| To deploy a common system used by all districts across the state | FY 2016 | Disparate communication systems across all districts. | Lower support costs, lower  training time/cost, lower Total Cost of Ownership; enhance ability for state-level agencies (e.g., Early Childhood and Health) to provide key information to districts. |

E.   **Priority Alignment.** The criteria in this table, in concert with other factors, will be used to determine project priorities in the capital funding approval process. Briefly describe how the proposed projects will align with each criterion.

| Priority Criterion | Y/N | Explanation |
|---|---|---|
| Is this project aligned with the Governor's Key Priorities? | Yes | Through this platform/portal and app, the CSDE will actively promote accessibility and transparency—families, irrespective of income, will be able to more easily see their children's data/information and connect with their children's teachers to have a better understanding of what is happening at school.  The CSDE and other state agencies will also be better able to provide key information to districts for families.  These connections are crucial to ensure the success of broader education reforms. |
| Is this project aligned with business and IT goals of your agency? | Yes | This platform/portal and app will help schools/districts provide greater coherence and improve efficiency when sharing information with families.  This will not only arm parents with more timely information, but also give them the means to ask questions and take action sooner if a child is struggling (e.g., shows early signs correlated to dropout).

By designing, implementing and maintaining a common platform/portal and app at the state level, the CSDE will lower overall costs, reduce complexity and ensure equal access for all schools/districts. |
| Does this project reduce or prevent future increases to the agency's operating budget? | Yes | This creates a streamlined means of providing data/information to teachers and parents from the State and sophisticated means of connecting teachers to families via technology.  Establishing a cohesive system from data/information delivery and communication now will free up district and school-level resources devoted to this for other important initiatives, which the State currently funds. |
| Will this project result in shared capabilities? | Yes | CSDE development of this platform/portal and app will benefit school districts statewide, particularly those smaller districts that would not otherwise have the resources to develop and maintain such a system on their own. District participation in this project will alleviate the burden on districts to evaluate and modify the platform/portal and app for maximum performance over time.  This platform/portal and app will also provide a common and efficient means for other state agencies to communicate key messages with districts and parents. |
| Is this project being co-developed through participation of multiple agencies? | No | This platform/portal and app is currently a CSDE initiative and seen as an integral part of realizing the Agency's ambitious education reforms, which includes closing achievement gaps.  While the CSDE's target population is specific (families and schools), we can see additional opportunities to leverage similar applications across the state.  At such time as new uses are identified/developed |

| | | in other agencies, the CSDE anticipates developing collaborative relationships. |
|---|---|---|
| Has the agency demonstrated readiness to manage project of this size and scope? | Yes | CSDE has a track record of successfully managing large-scale, complex information management-oriented projects and overseeing the work of consultants and contractors.  The CSDE is already in the process of overhauling is SLDS.  This initiative will build on that work and leverage many of the same staff. |
| Is the agency ready to deliver the business value proposed? | Yes | CSDE is ready to develop and support a platform/portal and app that will provide a means for sharing data/information and frequent, two-way interaction between families and teachers to share information about student progress. |

F. **Organizational Preparedness**. Is your agency prepared to undertake this project? Is senior management committed, willing to participate, and willing to allocate the necessary time, energy and staffing resources? How will the project be managed and/or governed and who will make the key project decisions?

The Commissioner of Education, Stefan Pryor, is fully committed to making sure families are full partners in their children's education. This project is a key asset of the agency's mission to improve communication between schools and homes to support student success. The project is led by the Performance Office and attached to the department's ongoing School-Family-Community Partnerships project. As the nature of the project intersects other major sectors of the agency's education reform agenda, such as school improvement, curriculum and professional development, key decisions for this project are brought to the Commissioner's full Leadership Team.

G. **Project Ramp Up**. If capital funds are awarded for this project, how long will it take to ramp up? What are the key ramp-up requirements and have any off these already been started? For example, has a project manager been identified? Has an RFI been issued? Is a major procurement required such as an RFP?

Activities are well underway to ramp up this project. An RFI was issued in October 2012 and returned in November.  Results from the RFI have informed the development of the RFP that will be issued upon funding approval.  The RFP will solicit the vendor(s) to fully flesh out functional requirements, develop the platform/portal and app and then provide targeting training in pilot school districts.  Responses to the RFP will be returned in approximately 30 days and vendor(s) will be selected by the end of the fiscal year.

The CSDE will recruit 3-5 pilot school districts in June to begin work with the vendor in the beginning of the 2013-14 school year.

A project manager has been identified: Mark Day, Director of Performance Management and Strategic Planning.

The Chief Financial Officer's leadership team is engaged in planning the project, specifically Martin Rose, Bureau Chief of Information Technology and Gary Pescosolido, Fiscal/Administrative Manager.

H. **Organizational Skills**. Do you have the experienced staff with the proper training to sustain this initiative once it is a production system? Do you anticipate having to hire additional staff to sustain this? What training efforts are expected to be needed to maintain this system?

> CSDE staff will manage the selection of the vendor(s), as well as maintain oversight of development and implementation for the overall project (2 current managers at incremental FTEs each and one proposed IT consultant for a single FTE).
>
> CSDE staff members are experienced in developing technological solutions, fiscal performance and accountability, education reform, and developing programs to help families and schools work together for student success.
>
> The vendor(s) selected will be charged with developing and refining the platform/portal and app, creating easy-to-use web-based and mobile training modules for school staff and families and launching a marketing campaign to encourage usage. The training modules will be informed by the experiences of the districts in the initial rollout phase of the project. Schools and districts that take part in future phases of the project will utilize the web-based modules for their training.

I. **Financial Estimates.** From IT Capital Investment Fund Financial Spreadsheet

| Estimated Total Development Cost | Estimated total Capital Funding Request | Estimated Annual Operating Cost | One Time Financial Benefit | Recurring Annual Financial Benefit |
|---|---|---|---|---|
| 3.64M | 2.31M | 295K | n/a | n/a |
| **Explanation of Estimates** | | | | |
| Phase 1 – Requirements/Specifications Definition ($200K): June-Aug 2013 work with vendor(s) to define functional requirements and technical specifications at school, district and state levels<br><br>Phase 2 – Teacher/administrator portals ($520K): Sept-Oct 2013 Issue RFP; Oct 2013 – Mar 2014 Build out teacher and administrator portals, connecting district and state data warehouses and seamlessly integrating frontends. Engage in User Acceptance Testing with educators<br><br>Phase 3 – Parent portal ($985K): Jan – Jul 2014 Build out parent portal; Create or leverage existing identity management system for parents (and perhaps students); Develop 'communications hub' allowing parents and teachers to choose preferred method of communication (e.g., teacher types message into his/her portal and it is directed to parents via hub through text messaging); Mock up mobile app<br><br>Phase 4 – Targeting training, research and refinement ($505K): Jul – Sept 2014 Complete mobile app development; In addition to schools that participated in development, identify schools to receive targeted training and support to enhance teacher/family communication<br><br>Phase 5 – Initiative wrap-up ($100K): Address any final issues | | | | |
| **Assumptions: Please list key assumptions you are using to estimate project development and implementation costs** | | | | |
| Assumptions include engaging the appropriate vendor(s) by 06/13; recruiting the pilot group of 3 to 5 school districts; engaging users among teachers and parents in the pilot districts; developing the platform/portal and app in time to train users in year one | | | | |

# III. **Expanded Business Case**

A. **Project Impact.** Beyond the top business goals identified in Section II, 1) What impact will this project have, if any, in the targeted areas below, 2) What would be the impact of not doing this project, 3) How will the project demonstrate benefits are achieved.

| (1) Impact Area (Vision) | Y/N | Description of Project Impact |
|---|---|---|
| Will this project provide efficient and easily accessible services for all constituents? | Yes | A hallmark of the platform/portal and app described herein is the ease of use for both school staff and families. The requirements of the system are to streamline communication between home and school and provide multiple modalities for teachers and parents to participate in meaningful interaction. |
| Will this project promote open and transparent government with the citizens of the state? | Yes | Through this platform/portal and app, parents will have more real-time information about their children's education. The system will also provide the opportunity to provide residents with information about the public schools in their community. |
| Will this project establish efficient and modern business processes? | Yes | Integrating the platform/portal and app with existing school/district systems will prevent extraneous steps for pulling information to provide to parents.  The platform/portal and app will also reduce, if not eliminate, the need for paper communications from school to home. |
| Will this project increase accuracy and timeliness of data for policy making, service delivery and results evaluation? | Yes | The platform/portal and app provides the CSDE with access to new data.  The Agency will be able to connect family engagement strategies with student performance, which can be used to inform policy decisions in many areas including Turnaround.  Also, the success of this platform/portal and app can help to inform similar initiatives in other agencies. |

| 2) What is the expected impact of NOT doing this project? |
|---|
| Connecticut students' performance has stagnated, and our achievement gap — the worst in the nation — has persisted. With our public schools in this condition, we cannot ensure that students have the skills necessary to match the needs of Connecticut's employers, which means we can't sustain an economy in an era in which fielding a globally competitive workforce is increasingly paramount. CSDE is currently rolling out a number of ambitious reform initiatives; however, without providing schools and families with innovative and powerful tools for sharing data/information and communicating, our students will not achieve at the levels they would have if their parents and teachers were more equipped to share meaningful information to guide their success. This project will not only improve parents' access to information but will also provide more and better options for families to ask questions and be informed, and can act as an early warning system when a student is falling behind so that schools and families can marshal their efforts to support that student's success.  This initiative is an integral part of realizing the state's ambitious education reform goals. |

| (3) How will you demonstrate achievement of benefits? |
|---|
| The CSDE will review participating schools and districts for evidence of improvements that are known indicators of improved parent engagement. These areas include but are not limited to attendance, homework completion, credits earned on time, graduation on time and meeting requirements for college entry. |

B. **Statutory/Regulatory Mandates.** 1) Cite and describe federal and state mandates that this project is intended to address. 2) What would be the impact of non-compliance?

| (1) Statutory/Regulatory Mandates: |
|---|
| There are a number of state and federal laws that include requirements for involving parents in and notifying them about various elements of children's education. Two laws that are particular to school-home communication are listed here. Connecticut General Statutes Sec. 10-221 requires that each local and regional board of education shall develop, adopt and implement written policies and procedures to encourage parent-teacher communication. In addition, Title I of the federal Elementary and Secondary Education Act (Sec. 1118) requires schools and districts to implement programs, activities and procedures for the involvement of parents in their children's education. |

| (2) Impact of non-compliance: |
|---|
| The project that is described herein renders non-compliance, and accompanying sanctions from the state or federal departments of education less likely. |

C. **Primary Beneficiaries.** Who will benefit from this project (citizens businesses, municipalities, other state agencies, staff in your agency, other stakeholders) and in what way?

| |
|---|
| The primary beneficiaries will be the 555,000 students in public schools and ultimately the citizens in Connecticut. By sharing data/information and actively engaging students' families through frequent two-way communication, we increase the odds that students will do better in school, stay in school longer and go on to more advanced post-secondary training and careers. The citizens of Connecticut will benefit by being home to a first-class education system and a highly trained workforce. The CSDE anticipates that there will be additional opportunities to leverage similar applications across the state. At such time as new uses are identified developed, the CSDE anticipates developing collaborative relationships with other state agencies. |

## Important:

- **If you have any questions or need assistance completing the form please contact Jim Hadfield or John Vittner**
- **Once you have completed the form and the** IT Capital Investment Fund Financial Spreadsheet **please e-mail them to Jim Hadfield and John Vittner**

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