

RFP Response Form

Innovative Ways to Use Data to Improve Outcomes for High-Need Students

REQUIREMENTS

Please respond to the following. The maximum score a Proposal can receive is 55 points. Your response to this section should not exceed 10 pages.

Initiative Design and Implementation (40 points)

- 1. The data sharing agreements between DHS and local school districts provides opportunities for innovative programming. Describe your proposed Initiative and how sharing data between DHS and your district can be used to directly impact student success academically, socially and economically.**

Elizabeth Forward School District (EFSD) will partner with OnHand Schools, Inc. (OHS) to implement an extension to the OHS EdInsight system and their Targeted Learning Moments (TLM) initiative. The new focus, on “Targeted Interventions” will be designed to use OHS technology to provide real-time visibility and accelerate the intervention process by automatically “pushing” time-sensitive information about academic or related issues (attendance, behavioral incidents) to the care management team (DHS Case Managers, the EFSD SAP Coordinator, and the district’s Director of Student Services). This will be accomplished through a software alert “agent” that will monitor the student’s performance across a range of early warning indicators and when specific triggers of high risk activity occur, the care management team will be immediately contacted via an email notification. These targeted interventions are a natural next step for both the EdInsight system, an academic management/student data warehouse used by school districts throughout Allegheny County, and TLM, a three-year regional collaboration among EFSD, other Allegheny County school districts, Allegheny Intermediate Unit, OHS, and several Pittsburgh-area foundations.

Focused primarily on academic achievement, EdInsight and TLM push out timely test results, reports, and instructional options to classroom teachers, students, and parents. OHS has had early stage discussions with DHS about an extension of the student information available in EdInsight that would include DHS data (subject to privacy protections) so educators with the right security clearance would know that a student was receiving DHS services. In phase one, as covered by this grant, the EdInsight system could be modified to indicate a “DHS Client” status in the Student Profile. As the implementation progresses down the road, further integrations could be implemented into the criteria and weighting factors that drive our current Early Warning system. A student’s participation in DHS services should not only be noted, but their risk score should be adjusted to reflect increased concerns associated with specific DHS services.

The grant dollars will be used to implement and test a pilot of this integration. In addition to the DHS indicator in the EdInsight Student Profile noted above, EFSD will set up an attendance monitoring alert for all students identified as currently receiving DHS services that will immediately notify the care management team (plus parents and teachers), when a student is absent for (2) or

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more consecutive days. The goal is to act quickly to avoid persistent attendance issues that both impede academic performance and lead to truancy proceedings or a higher risk of a drop-out.

The pilot will allow EFSD to validate the feasibility of the approach while collecting input from both educators and the care management team on how the model can be extended to include other risk factors. At the conclusion of the pilot, EFSD will evaluate if the immediate visibility and notifications led to a reduction in absenteeism and truancy for high risk students.

2. Describe how the Initiative incorporates data into district practice and procedures, and how the award amount will help accomplish this goal.

Over the past twenty years, the amount and type of education and social services data have dramatically grown in size and complexity, to the point where a student's information "lives" on many different web sites. To remain up to date with trends in their students' progress, district personnel have been expected to access and interpret this far-flung information on a daily basis. In a fortuitous convergence, DHS and OHS have responded to that challenge by creating the DHS Integrated Data Warehouse and EdInsight, respectively. The elements and functionality of the former are well known to readers of this proposal. The latter — EdInsight by OHS — is a web-based technology that brings students' testing and other information together in one location and reports on it with interactive tables and graphics. Although it makes retrieving and utilizing student data far more convenient, EdInsight must be regularly accessed in order to yield solutions to learning problems. Many school teachers are willing and able to do so; many more, because of their heavy daily responsibilities, are not. Over the past two years, the Targeted Learning Moments initiative — TLM — has begun to address this reality of 21st century education by streamlining the way teachers interact with assessment data and translating those interactions into tangible, data-informed instructional strategies customized for each student. The Targeted Interventions Pilot proposed here, will build on that experience, but now with DHS and district social service providers in addition to teachers. Instead of expecting Case Managers and district personnel to sift through large, complex, longitudinal data sets to check their students' progress, a software "agent" will automatically deliver notifications of the most recent assessment and other information into providers' hands through email and other kinds of electronic alerts, all tailored to meet the demonstrated needs of each student. Thus, funding through this project leverages significant "sister" funding by four Pittsburgh-area foundations and builds on the work that that earlier funding has advanced. As a matter of fact, that earlier work has advanced to the point where this project will not represent a voyage into uncharted territory but an exploration of new applications for technology that has already gone well beyond the testing stage.

3. Describe the target population for the Initiative and why you chose that population.

The EFSD Comprehensive Plan for July 2016 – June 2019 indicates that the district struggles to meet the needs of its economically disadvantaged students, which represent thirty-three percent of the student body. Certainly, EFSD has taken steps to address these needs. It has a long-standing agreement with

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Mon Yough Mental Health Services, which provides individualized counseling. In addition, the district has hired an intervention specialist who provides one-on-one and group counseling. In 2015, the district entered into an agreement with DHS to become a Data-sharing Partner in order to focus additional attention on its neediest students and families. At the elementary level, EFSD employs a full-time social worker, but this individual must split her time among four buildings. Plans to add an additional social worker at the elementary level have stalled because of state funding cuts. At the Middle and High Schools, Student Assistance Teams meet on a weekly basis to identify students who are at risk for drug and alcohol abuse, family crisis, or mental health crisis. The district has considered adding a secondary guidance counselor but, again, funding difficulties have proved insurmountable. Secondary students exhibit the greatest needs, especially in the areas of drug and alcohol abuse and coping with these difficulties among family members, especially parents who are themselves afflicted. Students facing these crises exhibit poor attendance habits, poor behavior patterns, and academic failure. It is for these reasons that the district offers this proposal to target secondary students, specifically those students identified as facing substance abuse crises.

4. Describe the area of focus or academic metric(s) that the Initiative aims to improve and why you chose it.

As noted above, secondary students facing substance abuse crises exhibit poor attendance habits, poor behavior patterns, and academic failure. An increasingly rich scholarship in the area of so-called “early warning” systems for students who are at risk of dropping out or not graduating on time has identified the following metrics for flagging such risk. It is the district’s expectation that 10%-25% fewer targeted students will exhibit these indicators when contrasted with the archived records of a matched subset of current or former EFSD students who were not Targeted Intervention participants:

- ✓ Absenteeism: Ten percent absenteeism in grades 6-12 during any semester, grading period, or school year, including both excused and unexcused absences
- ✓ Suspension: One suspension in grades 6-12 during any semester, grading period, or school year
- ✓ Office Referrals: Two office referrals in grades 6-12 during any semester, grading period, or school year
- ✓ Retention in grade 9, failing grade 9, or not earning enough credits to be promoted to grade 10
- ✓ Course Failure 1: Final failing grades in English or Math (semester or full year, depending on length of course) in grades 6-8, and final failing grades in a core course (semester or full year, depending on length of course) in grades 9-12
- ✓ GPA: End-of-Year GPA equal to or less than 2.0 on a 4-point scale in grades 6-9

Please note, the focus for the pilot will be on absenteeism but the longer term goal is to extend the system to address the other risk factors. Also, projected outcomes in a complex technical initiative spanning a single year must be regarded as tentative, especially given that actual implementation among providers and students will go forward only after a development and training phase. However, EFSD fully expects to observe similar or superior improvements in student outcomes during subsequent years as project processes and components are refined.

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5. Describe how the conclusions drawn from your proposed Initiative could be used or replicated in other schools/districts.

The project proposed here will result in a synergistic relationship between DHS and the school districts in Allegheny County where the OHS suite of software solutions is in use. These districts include the City of Pittsburgh Public Schools and 33 of the 42 districts served by Allegheny Intermediate Unit. This relationship will result in a service-delivery and reporting model that is greater than the sum of the individual efforts of the two organizations. Through the seed funding provided by this initiative, OHS and DHS will take steps toward developing technology and shared reporting capabilities that can be brought to scale throughout Allegheny County — at no additional cost to the districts either organization serves — as well as serving as a model for similar partnerships elsewhere in Pennsylvania, where OHS has a presence in thirty-six percent of districts.

6. Provide an implementation plan, including a timeline and management plan that details when Initiative activities will occur and who is responsible for each activity.

Implementation Plan: The DHS-EFSD Targeted Intervention Pilot DHS: Allegheny Department of Human Services EFSD: Elizabeth Forward School District OHS: OnHand Schools TIP: Targeted Intervention Pilot			
Time Line	Activity	Responsible Personnel	Work or Work Products
October 2016	(1) Collaboration among stakeholders about “push” reporting elements, types, and styles of greatest potential use in provision of services. (2) Collaboration among stakeholders about metric benchmarking, sampling, and statistical analyses that seek evidence of the relative effectiveness of project components.	DHS Case Managers and Data Analysts, EFSD Pupil Services staff, and OHS senior staff/consultants	(1) Formal agreement delineating targeted reporting elements, reports, and timing of “push” reporting. (2) Formal research protocol delineating metric benchmarking, sampling procedures, and analyses of raw data.
October 2016	(1) Collaboration among DHS and OHS Data Analysts and Programmers about software interfaces that allow blending of DHS and EdInsight reporting elements. (2) Establishment of follow-along data-gathering and	DHS and OHS Systems Analysts, Data Analysts, and Programmers	Design, build, mock up, and refine components of a new software interface for DHS and OHS Data Warehouses allowing sharing of demographic, assessment, behavior, and other relevant project data.

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	data-storage protocols and tools.		
November 2016	(1) Identification of student project participants. (2) Collection of baseline data from both the DHS and OHS data systems in the areas of attendance, behavior, academic growth, and social service provision.	DHS Case Managers, EFSD Pupil Services staff, utilizing OHS data-gathering and data-storage protocols and tools put in place in October 2016	(1) Student participants and DHS Case Managers are identified, utilizing protocols and tools developed in October 2016. (2) Project data bases are populated and maintained.
December 2016 – January 2017	(1) Development, refinement, and beta testing of “push” reports (2) Training of DHS and EFSD personnel in the use of “push” reports.	OHS Systems Analyst, Programmer, and Professional Development Specialist	(1) Refactor and revise code originally developed for “push” reports. Existing EdInsight code will be refactored and revised — i.e., repurposed — for use by DHS and EFSD Social Service Providers. (2) Develop and implement professional development protocols for use among DHS and EFSD end users.
February – June 2017	(1) Continuation of data collection, benchmarking analyses, and “push” reporting, including reporting of social services provisions and outcomes. (2) Continue to refine software interface and “push” reporting processes and software.	OHS programmers	(1) Transparent inspection by DHS of all student participant data bases and archives of “push” reporting and outcomes collection. (2) Periodic announcements by OHS personnel of refinements.
May 2017	(1) Delivering a beta test technology platform that will allow automatic alerts and associated links to be pushed out automatically to DHS and EFSD staff. (2) Integrating the software “agent” with the current OHS data warehouse software to allow for better searching and dissemination of key outcomes and resources.	OHS programmers	(1) Release of beta version of technology. Note that this project component is not expected to be in field use during the project year. (2) Periodic release notes BY OHS personnel concerning integration of SW agent with current EdInsight reporting functionality, especially with the EdInsight Response to Intervention (RTI) module. Note that

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			this integration will not be designed for general use by EdInsight subscribers unless and until agreements have been executed between DHS and OHS, an eventuality not expected during the project year.
August – October 2017	Conducting final data analyses and completing final reporting to DHS	EFSD Project Coordinator and OHS Project Coordinator and Program Evaluation Specialist	(1) Final project report, including process and outcomes evaluations. (2) Face-to-face reporting and debriefings among EFSD, DHS, and OHS staff. Note that such face-to-face and electronic reporting and debriefings are expected on an ongoing basis throughout the grant period.

7. Describe how you will partner with the Department of Human Services (DHS) and any other outside agencies to support the Initiative.

As noted throughout this proposal, EFSD will partner with DHS and OHS, developer of EdInsight, a suite of advanced data analysis tools providing comprehensive, relevant, and up-to-date information to school personnel via an intuitive, point-and-click, web-based interface. EFSD personnel have utilized EdInsight for several years and rely on it for bringing together in one web site virtually all of the data necessary to plan and carry out instruction, including:

- ✓ A Data Window that offers analysis of every assessment students participate in, including locally developed instruments.
- ✓ An Assessment Builder, with item banks.
- ✓ An RTI Manager which automatically tiers students and tracks interventions.
- ✓ A Risk-Score Early Alert system.
- ✓ A Curriculum Manager and integrated Lesson Planner.
- ✓ A resource tracker tool that enables users to archive virtually any document, including Individual Education Plans, and link those documents to individual students.
- ✓ A point-and-click, query based Data Analyzer tool that generates raw data in CSV files to facilitate locally designed data mining.

Throughout the Implementation Plan above, the nature of this partnership has been detailed, including: (1) Collaboration about “push” reporting elements, types, and styles. (2) Collaboration about metric benchmarking and statistical analyses for the purpose of establishing the relative effectiveness of project components. (3) Collaboration about software interfaces that allow blending of DHS and EdInsight reporting elements. (4) Ongoing collection of outcomes data from both the DHS and OHS data

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systems in the areas of attendance, behavior, academic growth, and social service provision. (5) Participation in all training activities carried out by the OHS Professional Development Specialist in the use of the EdInsight “push” reports.

8. Describe your plan to collect, track and store data about the Initiative.

EFSD will rely entirely on OHS for collecting, tracking and storing project data. OHS has been meeting the data warehousing, reporting, educational consulting, and training needs of public school districts since 2004. In support of its software, OHS offers extensive, ongoing, on-site professional development. The organization’s full-time staffers and large cadre of senior consultants, with hundreds of years of classroom and administrative experience among them, have facilitated professional development workshops and seminars for thousands of teachers and administrators in diverse urban and rural settings, in small schools and large, focusing on using data to inform instruction, curriculum alignment and development, assessment, Response to Intervention, and interpreting value-added outcomes. Its consultants include senior assessment and program evaluation specialists experienced and skilled in the analysis of complex data bases.

OHS leases a secure, key-entry data facility that is connected to a Gigabit network and provides 24/7 access and uptime. The server infrastructure is monitored continuously, and resources are allocated dynamically during periods of peak usage. Software development takes place within several development environments, including Visual Studio 2013 for Windows, XCode for iOS, and Eclipse for Android/Java development. It leverages several key pieces of Microsoft server infrastructure, including Windows 8, SQL Server 2012, and Active Directory Foundation Services (ADFS). Development is tested on a variety of machines and configurations, including desktop PCs, laptops, ultrabooks, and iOS, Android, and Windows Mobile phones. Several tools are used for software testing, including SVN for code source control, Automated Build Studio for daily and weekly builds and release management, Beyond Compare for code synchronization, OnTime defect tracking for issue management, Telerik Test Studio for automated testing, and Kaseya server manager software for remote software deployment.

Districts may host OHS applications. Alternatively, OHS will host. When a district hosts, OHS requires that it provide passwords to its student information systems, plus network access. OHS installs software to execute extraction nightly and move data to its servers. Districts provide at least one, but perhaps up to four, machine(s) running the most up-to-date Windows Server OS with the most recent version of SQL Server. The OHS assessment platform runs in ASP.NET, so the most up-to-date version of .NET Framework and IIS will be required. Servers with 8GB+ RAM, quad core at 2GHz+, and 1TB+ storage space are recommended. Larger districts require multiple servers with dedicated workloads to facilitate load balancing, specifically two or more servers with one being the database server and the others being the web front-end servers. A current OHS partner district in Florida with 66,000 students runs OHS applications on two servers, one database server with 27GB RAM and 4 processors at 2.6GHz, and one web server with 16GB RAM and 4 processors at 2.6GHz. In addition, some partner districts virtualize the assessment platform.

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When OHS hosts a district’s applications, clients are set up on a VM server with 8GB RAM and 4 processors set at about 2.6GHz. Additional resources are allocated as needed. OHS hosts through Expedient Data Centers, which have extensive fail-safe resources in place, including redundancy in servers, networking, power, and server backup routines. Further information about Expedient can be found at <http://www.expedient.com/>, and details about Expedient data centers can be found at <http://www.expedient.com/>. The OHS data center is hosted at Pittsburgh Allegheny Center.

Budget (10 points, not included in page count)

9. **Provide a detailed budget that clearly supports the Initiative and corresponding plan. Provide details on staff and administrative costs, material costs, in-kind services, student costs, transportation expenses and other costs. You may attach budget files if necessary (e.g., Excel file).**

Proposed Budget: Elizabeth Forward School District DHS Targeted Intervention Moment Project

	DAYS		RATE	TOTAL
NOTE: Number of days below are equivalent days				
<u>Labor</u>				
<u>TBD</u> , Elizabeth Forward School District Overall Project Coordinator and Liaison among the project’s institutional partners: 12.5 days @ \$400 per day	12.5	x	\$400	\$5,000
<u>Toby Basalla</u> , OnHand Schools Coordinator and Systems analyst: 5 days @ \$400 per day	5	x	\$400	\$2,000
<u>TBD</u> , OnHand Schools Programmer: 20 days @ \$400 per day	20	x	\$400	\$8,000
<u>Christy Fowler</u> , OnHand Schools Professional Development Specialist and End-User Contact: 12.5 days @ \$400 per day	12.5	x	\$400	\$5,000
<u>Daniel Morrow</u> , OnHand School Data Analyst and Program Evaluation Specialist: 12.5 days @ \$400 per day	12.5	x	\$400	\$5,000
TOTAL COST				\$25,000

10. Provide a budget narrative that justifies costs associated with the Initiative.

All costs associated with the Project will be labor expenses for project planning and collaboration among institutional partners, project follow-along, programming, and reporting.

TBD, Elizabeth Forward School District Overall Project Coordinator and Liaison among the project’s institutional partners: 12.5 days @ \$400 per day. For the Project, he will: (1) Serve as the primary contact person with DHS and OHS and as the liaison between EFSD and its institutional partners. (2) Serve as Project Manager, ensuring time line compliance and compliance with spirit and letter of proposed activities. (3) Oversee the writing of the EFSD final report to DHS.

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Toby Basalla, OnHand Schools Coordinator: 5 days @ \$400 per day. Mr. Basalla is OHS Co-Founder and Chief Technology Officer. For the Project, he will: (1) Serve as the primary contact person with DHS and EFSD. (2) Serve as the OHS Systems Analyst with responsibility for software design and refinement decisions. (3) Oversee the activities of the OHS Programmer, Professional Development Specialist, and Data Analyst and Program Evaluation Specialist.

TBD, OnHand Schools Programmer: 20 days @ \$400 per day. For the Project, he will: (1) Write and revise new code. (2) Refactor and revise code originally developed for “push” reports developed during Years 1 and 2 of the Targeted Learning Moment Project (TLM).

Christy Fowler, OnHand Schools Professional Development Specialist and End-User Contact: 12.5 days @ \$400 per day. Mrs. Fowler is the Assistant Director of the Performance Insight Institute (professional learning) team. For the Project, she will: (1) In consultation with DHS personnel, develop training protocol(s) and materials. (2) Carry out training for participating DHS and EFSD personnel. (3) Document training outcomes and plan for follow-up training as needed. (4) Serve as the primary contact person for DHS and EFSD personnel with end-user questions.

Daniel Morrow, OnHand School Data Analyst and Program Evaluation Specialist: 12.5 days @ \$400 per day. Dr. Morrow is an independent consultant to OHS in the areas data analysis and program evaluation. For the Project, he will: (1) Accept ultimate responsibility for the design and execution of the OHS in-house evaluation, with full knowledge that DHS will also conduct an evaluation of project outcomes. (2) Identify a “control” subgroup. (3) Maintain all measurable data in separate, secure data bases. (4) Carry out formative and summative evaluation activities. (5) Assist in writing the OHS final report.

CERTIFICATION

Please read the below statement and check the box to indicate agreement with its content.

By submitting this proposal, I certify and represent to the County that all submitted materials are my work and that all responses are true and accurate.