Budget

Electronic Classroom Of Tomorrow (133413) - Franklin County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (57)

U.S.A.S. Fund #:
Plus/Minus Sheet (opens new window)

Purpose Code / Object Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support Services	150,431.00	74,093.00	2,725,277.00	0.00	0.00	0.00	2,949,801.00
Governance/Admin	1,310.00	644.00	0.00	0.00	0.00	0.00	1,954.00
Prof Development	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Family/Community	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transportation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	151,741.00	74,737.00	2,725,277.00	0.00	0.00	0.00	2,951,755.00
						Adjusted Allocation	0.00
						Remaining	-2,951,755.00

Application

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Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title:A Personalized Learning Roadmap for Every Student Grade 6-12 - Math

2.Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

Academic achievement in mathematics will improve by providing teachers a comprehensive assessment and instructional platform that provides the functionality necessary to design and deliver a truly personalized education for students in grades 6-12 math. The assessment functionality of the platform includes formative and summative testing with real-time, detailed standard's based analytics identifying specific instructional needs, while the instructional functionality of the platform uses these results to automatically search for and deliver content options aligned to individual standards. ECOT will be able to increase academic achievement in grades 6-12 math by having an enhanced assessment and instructional technology platform that automates many cumbersome diagnostic and rote tasks which consume a large portion of school and classroom resources.

9000 3. Total Students Impacted:

4. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant: Kristen Kask, Associate Superintendent

Organizational name of lead applicant: The Electronic Classroom of Tomorrow (ECOT)

Unique Identifier (IRN/Fed Tax ID): 133413

Address of lead applicant: 3700 South High St., Columbus, OH 43207-4083

Phone Number of lead applicant: 614.333.2285

Email Address of lead applicant: Kristen.kask@ecotoh.org

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: Not Applicable

Organizational name of secondary applicant: Not Applicable

Unique Identifier (IRN/Fed Tax ID): Not Applicable

Address of secondary applicant: Not Applicable

Phone number of secondary applicant: Not Applicable

Email address of secondary applicant: Not Applicable

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

Greg Dye/Vice President, Operations/IQ Innovations, LLC/Fed Tax ID [redacted] /580 North 4th St, Suite 560/Columbus, OH 43215/(614) 564-1050/greg.dye@iq-ity.com

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

UploadGrantApplicationAttachment.aspx

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

Electronic Classroom of Tomorrow (ECOT) serves 15,000 predominately at-risk students. Administration at ECOT has successfully managed large-scale program implementations such as RttT, RTI, CCSS, OTES and OPES. These multi-year and sometimes multi-million dollar initiatives were geared towards improving instructional capacity and student outcomes. Rick Teeters, Superintendent, has 26 years of experience in education. Prior to working as Superintendent at ECOT, Rick spent 3 years as a Director at the Virtual Community School of Ohio and 16 years as an administrator in Waverly City School District (Assistant Principal, Intermediate Principal, K-12 Curriculum Director, EMIS Coordinator, Director of Continuous Improvement, and other teaching and administrative roles). Rick is a graduate of Ohio U. with a BS in elementary education. He completed his M.Ed. in administration from Ashland U. Bert Wiser, Executive Director of Accountability and Assessment, has held the position of Executive Director of Accountability and Assessment for 24 years. Bert has served as a member of the Ohio Technical Advisory Committee (TAC). In addition, he has taught graduate courses in stats, research design, and measurement at OSU as well as at the State U. of New Jersey. Wiser has also served as Director of Applied Research for the Education Measurement Division of Harcourt, Brace Jovanovich in New York, Cleveland and San Antonio. Prior to working for Harcourt, Wiser was psychometric fellow at ETS in Princeton and survey director at U. of Chicago. Jill Dannemiller, Director of Program Evaluation and Testing, has provided leadership at several levels of education administration for 12+ years. She is the Director of Program Evaluation and Testing overseeing the logistics and compliance with administering statewide required assessments, as well as conducting research to measure the impact of programs and policies. Jill has a BA in philosophy from Bowling Green State U., a MSW in social work and has completed coursework for her PhD at OSU. Jeremy Scott is the Director of Ed-Tech and Innovations at ECOT. He holds a BS in computer information systems and has spent the majority of his career working in the field of online and charter education. He has worked with Management Information Systems for the Ohio Department of Youth Services, Consolidated Computer Center, a division of Park National Bank, and eSchool Consultants. His past responsibilities include Director of Technical Services, Tech Director, Network Administrator, and PC/LAN Analyst. IQ Innovations is ECOT's partner for the grant. In addition to providing ECOT's LMS, IQ has led statewide tech initiatives in California (CaliQity), Ohio (ilearnOhio), and South Carolina to enhance online and blended learning. Greg Dye, Vice President, Operations, has 20 years of experience in IT systems development and implementation, business management, operations, quality assurance, customer service and project management. He has a proven ability to select, train and lead cross-functional teams to achieve goals on time and on budget from large scale enterprise-wide ERP builds and implementations to small business 3rd party software configurations. Greg completed his BS in geophysics and MBA at U. of Akron. Xavier Webb, Psychometrician, has 10 years of experience as an educator. Prior to becoming the Psychometrician for IQ, he worked for the U. of Kentucky focusing on linking educational research and innovations to issues faced in P-12 schools. Xavier has also served in various administrative and teaching roles in K-12 public education. Xavier holds a BA in Secondary English Ed. from Eastern Kentucky U., a MEd in school administration from the U. of Kentucky, and an EdD in educational leadership with a PME of quantitative research methods, assessment, and evaluation from the U. of Kentucky.

B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

- [x] Student achievement
- [ ] Spending reductions in the five-year fiscal forecast
- [ ] Utilization of a greater share of resources in the classroom

10. Which of the following best describes the proposed project? - (Select one:)

- [ ] New - never before implemented
- [ ] Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments
- [x] Mixed Concept - incorporates new and existing elements
- [ ] Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. Describe the innovative project.

Problem: ECOT serves over 15,000 predominately "at-risk" students. Approx. 75% qualify for free/reduced lunch, 20% have special needs, and 64% are older than expected for their grade level. Unsurprisingly, many ECOT students enter two academic years behind with 28% being in the bottom 10% in math achievement. Even with significant intervention, not having the requisite foundation

prevents many students from being successful, especially in math which inherently builds on prior learning. Solution: To directly address this problem, the funding will faciliatate the creation of a customized comprehensive assessment and instructional platform that integrates with ECOT's learning management system (LMS). The Personalized Learning Platform (PLP) will provide formative and summative testing with real-time, detailed standards based analytics identifying specific instructional needs, and automatically search for and deliver content options aligned to those individual standards needed to meet each student's needs. As such, the platform will automate many cumbersome diagnostic and rote tasks consuming teachers' time; therefore, teachers will have more time to focus directly on students. To accomplish these goals, the new platform will build and utilize: Knowledge Precedence Maps: The scientific process of knowledge precedence mapping will be used to create research-based curriculum maps that will be horizontally and vertically aligned across courses and grade levels. Knowledge precedence maps (KPMs) in education are sequences of learning wherein concepts follow a general order of learning precedence. In the context of the Common Core, they model relationships and dependencies among and between individual domains, clusters, and standards. Understanding these complex relationships when building curriculum maps is critical to student success. Comprehensive Item Bank: In order to create valid formative and summative assessments, a large item bank will need to be purchased from a nationally-recognized assessment vendor. Diagnostic Assessment, Gap List, and Learning Pathway: Students will take computer-based diagnostic assessments and results will produce a Gap List report. The Gap List is a standards-based analytic report that graphically displays student mastery at the domain, cluster, and individual standard level. The report will be color-coded for easy interpretation and can be aggregated and disaggregated at multiple levels (student, classroom, teacher, school, etc.). These easy to interpret analytic reports will allow teachers to design a personalized mastery learning pathway for each student. Using these tools, teachers maximize instructional time and resources by focusing on those standards and concepts a student has not yet mastered. This personalized approach dramatically improves student engagement and self-efficacy as students are being challenged and progressing at a pace commensurate with their ability and learning needs. The Gap List will also be used to provide parents with standards-based report cards and as an internal tool for growth metrics. Content Alignment and Use: A content team will be needed to align and vet all content. Content will be housed in single repository that teachers can access. Teachers will be able to search for and locate, as well as drag and drop standards-aligned content from the Gap List into a classroom for all students, or assign it to an individual student. This individually aligned content will also be made available to all students in Ohio via ilearnOhio. Automated Content Search and Delivery: With the PLP system, teachers will only need to load their course KPM into the system (or a personalized curriculum for individual students) which will auto generate up to 5 content options for each standard identified. Included in this proposal is the development and delivery of training so that teachers can easily navigate this new system.

12. Describe how it will meet the goal(s) selected above. - If school/district receives school improvement funds/support, include a brief explanation of how this project will advance the improvement plan.

The Personalized Learning Platform (PLP) will improve academic outcomes by providing analytic reports identifying gaps and deficiencies in students' performance and providing content commensurate with their ability. As a result, teachers will be able to focus their time on only those skills and concepts that need reinforcement. The PLP will also automate many cumbersome diagnostic and rote tasks that consume a large portion of school resources, and specifically teachers' time which is better spent working directly with students. The PLP therefore increases teacher efficiency and empowers them with the necessary tools to personalize instruction and improve academic outcomes for every student. Our proposal also accelerates core strategies of ECOT's OIP focused on increasing student achievement in mathematics. Given the magnitude of the teaching paradigm change required, this project also includes teacher Professional Development on content creation and delivery to fully realize the tools and resources available. ECOT administration and IT personnel will work with our technology partner, IQ Innovations, to implement required LMS customizations and develop appropriate user-training modules during the grant timeframe. Chief factors driving improvement in student achievement include: *Providing students differentiated instruction tailored to their academic ability within a KPM regardless of their age or grade while advancing along a learning pathway as they develop mastery; *The standard-aligned formative assessment feature will reduce the need for teachers to spend extensive time diagnosing students' academic strengths and weaknesses. This will allow teachers to spend more time focused on individual student needs; *Results from diagnostic assessments produce a standards-based analytic report (Gap List) that graphically displays student mastery at the domain, cluster, and individual standard level. Administrators and teachers are provided the necessary data to accurately place and/or group students respective of their ability, and allocate resources accordingly. This personalized approach dramatically improves student engagement and self-efficacy as students are being challenged and progressing at a pace that best meets their personal learning needs. The system will thereby improve instructional efficiency and re-allocate student time to more productive work that results in learning; The PLP system will auto generate up to five content options for each standard on the KPM. Similarly, when a teacher designs a personalized learning pathway for individual students, the PLP will auto populate content recommendations consistent with each student's individualized pathway. Having content pre-populated will greatly reduce teacher preparation time, thereby further increasing time focused on students' needs. The proposal also addresses the core goals of ECOT's School Improvement Plan: 1. Implement new learning standards - Implementing the CCSS is a critical piece of this program. 2. Implement data based instruction - Data informing instruction is a critical element of this program. 3. High quality Professional Development (PD) - PD will be tailored to technical and pedagogical elements for successful implementation by teachers. 4. Intervention and differentiation - Teaching students at a level commensurate with their actual ability is the basis of the program. 5. Using technology - The PLP features detailed in this proposal infuse proven psychological and pedagogical theories and are on the cutting edge of educational technology.

C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

13. Financial Documentation - All applicants must enter or upload the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget

b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

c. If subsection (b) is not applicable, please explain why, in addition to how the project will demonstrate sustainability and impact.

Not Applicable

14. What is the total cost for implementing the innovative project?

2,952,000.00 * Total project cost

* Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RttT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

Development of the Personalized Learning Platform will require internal resources from conceptualization, project management, through implementation by both ECOT and its partner IQ Innovations. ECOT salaries and benefits are estimated at $226,478, which consists of project management, program evaluators, and internal communications staffing. In addition, ECOT will contract with IQ Innovations for the project term for services covering project management, infrastructure evaluation, development and quality assurance. The project budget includes the cost of development for creation of Knowledge Precedence Mapping specific to grades 6-12 math and creation of high quality math aligned content that will be made available to ECOT and ultimately to all educators in the state through the ilearnOhio platform. This cost is estimated at $527,250. Costs include services of subject matter experts and HTML editors provided by IQ Innovations. Assessment items are included at a cost of $210,000. Additionally, IQ Innovations will be responsible for securing the services of a nationally recognized content alignment service provider at an expected cost of $140,000. IQ Innovations will provide infrastructure planning at $190,000, programming and development for delivery of the assessments and the methodology to provide teachers with suggested curriculum through the iQity LMS at an estimated cost of $1,603,000. This cost includes psychometric staff to build valid assessments from the item bank, quality assurance, standards-based report card, gap list, content search, assessment engine upgrades, uploading content learning objects into the content repository, and data warehouse infrastructure adjustments. Implementation of the program will require comprehensive training for multiple grade levels. Provision has been made for a skilled trainer for a 3 month period at $35,000. Additionally, online resources will be developed for individual review and for delivery through ilearnOhio for subsequent implementation at other districts. Production costs for online resources are budgeted at $14,000. IQ Innovations will provide assistance to ECOT staff with program evaluation. Contracted rate for this portion of the project is $6,000.

15. What **new/recurring costs** of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

0.00 * Specific amount of new/recurring cost (annual cost after project is implemented)

* Narrative explanation/rationale: Provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If there are no new/recurring costs, please explain why.

ECOT has an existing relationship with our technology provider IQ Innovations. Priorities and deliverables for our partner are constantly evolving based on our current needs. There will be initial costs associated for the creation of the Personalized Learning Platform (PLP). However, upon completion, recurring costs will be absorbed by IQ Innovations and not result in higher costs for ECOT per our service agreement. PLP development will be supplemental to the existing agreement, but the platform's ongoing costs will be absorbed by our partner.

16. Are there **expected savings** that may result from the implementation of the innovative project?

0.00 * Specific amount of expected savings (annual)

* Narrative explanation/rationale: Provide details on the anticipated savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.)

While implementation of our project will lead to greater efficiency of existing human resources, until the project has been fully implemented, we will not be able to speculate on fiscal savings.

17. Provide a brief explanation of how the project is self-sustaining. If there are ongoing costs associated with the project after the term of the grant, this explanation should provide details on the cost reductions that will be made that are at least equal to the amount of new/recurring costs detailed above. If there are no new/recurring costs, explain in detail how this project will sustain itself beyond the life of the grant.

After the software customizations required for the Personalized Learning Platform (PLP) are completed for ECOT, IQ Innovations will make the base PLP available at no cost to all Ohio K-12 schools and districts using ilearnOhio. All reoccurring costs for ECOT's use will be paid for by IQ Innovations; therefore, the PLP will be sustainable without requiring additional funding.

D) IMPLEMENTATION - Timeline, communication and contingency planning

18. Fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline for implementation and your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

* Proposal Timeline Dates

Plan (MM/DD/YYYY): 08/01/2012-01/01/2014

* Narrative explanation

Many ECOT students arrive in academic distress with low levels of academic achievement, particularly in math. Recognizing a need for more personalized instruction, the groundwork for the PLP vision began in 8/12 with discussions on how to personalize student learning. These talks continued into 5/13 and a conceptual plan was developed, but there was no way to fund the PLP until the grant. While the timelines may intuitively seem aggressive, in ARRA terms, this is a "shovel-ready" project. 1. 10/7/13: Communication-ECOT personnel discussed the grant opportunity and outlined the vision for the PLP during meetings with parent and teacher stakeholders, the OIP District Leadership Team, and the RttT Transformation Team. At these meetings stakeholder buy-in was overwhelmingly positive as all groups saw the collective value of the PLP components and understood the changes needed to execute it. 2. 12/13-1/14: ECOT and IQ Innovations (IQ) translate the PLP conceptual plan into an implementation plan with timelines outlined and required resources determined. This includes: staffing requirements, SME KPM development, SME content review and creation, LMS software customizations, assessment planning and creation, content loading into the LMS, PLP user training development/implementation, system piloting, data infrastructure/collection and program evaluation. 3. 12/17-1/14: Comprehensive continuing communication plan designed and implemented. Communication: The PLP communication plan informs and engages administrators, teachers, parents and students of the PLP components of the system and what it means for students and teaching. ECOT staff will be notified of the grant award for the PLP and its benefits through official channels such as announcements at regularly scheduled PD days, general employee announcements, and MS Sharepoint. These engagement channels will continue to be used once the grant is awarded and adjusted if deemed appropriate. The vision of the PLP and what it means to students will be communicated to parents and students via school newsletters, open houses, and the Parent Portal. Additionally, ECOT offers a "Facebook" called "ECOT Connect". Barriers: One barrier to the planning and implementation of the PLP is the timeline outlined by the grant. To ensure success a project manager (PM) experienced with educational technology initiatives will be assigned to guide the PLP implementation process, serving as the tactical point of communication and coordination between ECOT and IQ. The PM will outline LMS customizations with ECOT and translate them into deliverables for IQ. IQ will create feature prototypes that will be tested by ECOT to ensure they meet expectations. When a change to customization scope is requested, the PM will work with ECOT administration and the IQ team to determine what the change should be and communicate them to stakeholders. Another barrier which affects all three stages is that the PLP is a significant change for teaching math at ECOT and will be present throughout planning, implementation and evaluation of the PLP. Teachers are often wary of change due to its unknown elements and comfort with what is familiar. Because of this, ECOT intends go beyond "informing" our teachers and administration of the PLP, to "engaging" them to ensure there is fidelity of implementation that is keeping the focus on improving student outcomes and instructional efficiency. ECOT administration plans to educate teachers early and often regarding what the PLP is and how it will directly benefit their students and teaching effectiveness while completing rote tasks for them automatically. This information will be disseminated during scheduled PD days with speakers outlining the system features and its blending of technology with proven theories, demos, and hands-on training. Outside of scheduled PD days teachers will be able to access a comprehensive suite of online training materials to support implementing the PLP.

Implement (MM/DD/YYYY): 12/23/2013 - 8/01/2014

* Narrative explanation

1. 12/13: Inform all stakeholders of the grant award with methods outlined in communication plan. The communication of PLP will be a continuous effort throughout the project. 2. 12/13: Math KPM SME development will outline the learning precedence of mathematics and learning dependencies. 3. 12/13-4/14: Content learning objects reviewed/created/aligned to CCSS to provide up to 5 pieces of content per standard meeting every student's needs in a manner consistent with iNACOL standards. 4. 12/13-Early 6/14: LMS Customizations to adjust some LMS features to accommodate the PLP functionality as envisioned. Areas with customization development work include: a. User Interface adjustments. b. Gap list reporting developed. c. Standards-based report cards. d. Content search. e. Assessment engine upgrades. 5. 1/14: Acquire NWEA item bank featuring 70,000 rigorously developed items aligned to the Common Core designed to measure student knowledge and learning. 6. 2/14-4/14: Assessments created based on KPMs using NWEA item bank to identify a student's academic level and measure learning. 7. 4/14: Content learning objects uploaded into LMS reactor repository by the IQ Innovations Development team. 8. 6/14-7/14: Teacher, administrator, and help desk PLP user training. 9. 7/14-8/14: PLP piloting, quality assurance, and refinements. 10. 8/14: School begins. System goes live to ECOT. 11. During the school year PLP adjustments executed as needed. 12. Summer: 2015 PLP becomes available statewide via ilearn Ohio. The first step of implementation will be to operationalize the Continuing Communication plan to keep stakeholders informed of project progress. Communication: During implementation ongoing communication plan will move beyond informing and engaging administrators, teachers, parents and students regarding the PLP, but also empowering them. ECOT staff will be notified regarding the PLP, its benefits and progress through official channels such as announcements at regularly scheduled PD days, general employee announcements, and MS Sharepoint. If appropriate these engagement channels will be adjusted. During implementation PD to properly use the PLP will be a part of regularly scheduled training. The vision of the PLP and what it means to students will be communicated to parents and students via school newsletters, open houses, and the Parent Portal. Additionally, ECOT offers a "Facebook" called "ECOT Connect". Barrier: A barrier that will impact planning, implementation, and evaluation is a need for more CCSS aligned math content readily available in our LMS content repository. ECOT would like to have up to 5 standard-aligned learning objects per academic standard to allow for multiple means of representation, expression, and engagement consistent with the Universal Design for Learning Framework so that all students receive content tailored to their strengths and preferences. This will be remedied by assigning a content team of mathematics curriculum design SMEs to review existing content from a variety of premium and open-source resources and creating additional content where content is missing. These SMEs will use a rigorous content review and creation rubric that will ensure content utilized is consistent with the iNACOL National Standards for Quality Online Courses. This content will be loaded into the system upon completion of the vetting process.

Summative evaluation (MM/DD/YYYY): 08/01/2015

* Narrative explanation

Throughout implementation feedback from stakeholders will be utilized. Adjustments to customizations and the PLP may be implemented if appropriate. 1. 1/15-2/15 Interim program evaluation. a. Teacher-administrator surveys concerning features, functionality, and educational value of the PLP. b. Review of help desk record logs to examine the nature of PLP assistance requests to inform potential system adjustments. c. ECOT will use the following specified measurement periods and preliminary success points to validate successful implementation: Analysis of quarterly assessments, pre- and post-tests to ensure academic growth throughout the year. 2. 5/15-9/15: Final program evaluation a. Teacher-administrator surveys concerning features, functionality, and educational value of the PLP. b. Qualitative feedback from teachers, students, parents. c. ODE Academic measures including: mathematics achievement as measured by the State of Ohio assessments in grades 6-8, 10 and 11; Value Added growth measurement as computed and reflected in Ohio's accountability model, AMO targets for each student group, and the AMO target for graduation, as well as the 5-year graduation rate. To meet the over-arching goals and track our progress, ECOT has established a set of rigorous annual academic goals. Each year we aim to meet or exceed the following expectations: grades 6-8, 3% aggregate increase in math proficiency rates, overall composite value-added measure rated as meets or above for high school: Meet state indicators in 10th and 11th grade math, increase the graduation rate to earn points on the AMO targets, and increase the average tenure of ECOT students by 5%. The source of benchmark comparative data points will be length of student engagement, tenure, and graduation rates in the immediate three years prior to the grant award. The evaluation will include process and outcome indicators and the method will use the triangulation of evidence from administrative data analysis, survey research, and observational records obtained from classroom walk-throughs. The process indicators will measure the initial degree of program fidelity to ensure that teachers and students are implementing the program as intended. This data collection is through the LMS, teacher observations, teacher surveys, and student surveys. Communication: Communication of evaluation procedures and implementation will be provided to teachers, administrators and ODE by the evaluation expert and project manager. Project goals and milestones achieved as measured by results will be communicated to parents and students via school newsletters, open houses, and the Parent Portal. Barriers: The biggest barrier to evaluation will be data collection from all sources so that substantive baseline data exist to measure the impact of the project. To address this ECOT will utilize the Executive Director of Accountability and Assessment, the Director of Program Evaluation and Testing as well as the IQ Innovations Psychometrician. Combined these professionals have nearly 40 years of experience conducting program evaluations for educational initiatives.

19. Describe the expected changes to the instructional and/or organizational practices in your institution.

The PLP will be instrumental to ECOT's ability to foster an improved data-driven decision-making (DDDM) culture in addressing personalized student learning in day-to-day instruction. The PLP will fundamentally change how we teach and operate in the following ways: *Students: Students will receive content and instruction at a level commensurate with their actual ability. Students will see teachers more actively engaged in facilitating the process of learning, not just directing it. Students will see tangible evidence of progress towards mastery and be able to direct their own learning without wasting time on content that is either too easy or too difficult. *Teaching Culture: Fundamental changes to the instructional culture among teachers will become possible with tools the PLP will provide. ECOT administrators have consistently noted that teachers who consciously personalize student learning consistently have students with higher academic achievement. However, the majority of teachers have not been able to do this outside of small groups of students due to limited instructional resources, data, and time. Instead of taking weeks or even months to determine a student's academic strengths and limitations the system will automatically do this through a variety of standard-aligned assessments. Assessment results will place students on a scientifically-based KPM, providing recommended content and learning pathways which meet students' at an academic level commensurate with their ability. * Teacher Professional Development: With the fundamental instructional shift the PLP will bring there will need to be a reallocation of teacher PD resources. The effectiveness of the best 21st technology depends on proper usage; therefore, ECOT will ensure PD programs and resources are readily available to implement the project. *Academic Content: The PLP will significantly change how ECOT purchases, evaluates and uses content. The PLP calls for a more modularized form of content that is largely not in a continuous course textbook format. This will reduce overall expenditures on reading-only material, require more in-house created learning objects tailored to ECOT students, and incorporate other learning objects from various sources (e.g., Kahn Academy) that meet PLP parameters. *Parents: In addition to traditional letter grades or percentages representing student performance, parents will also receive a standards-based report card. These report cards will precisely indicate of how well a student is performing by showing parents at the standard level which concepts their child has or has not mastered. The vision of the PLP and what it means to students will be communicated to parents and students via school newsletters, school open houses, and the Parent Portal accessible to all parents. Additionally, ECOT communicates with stakeholders via a "Facebook" of our own - called "ECOT Connect". *Data Warehouse: The data warehouse infrastructure will be restructured to handle new data demands associated with the PLP. This will call for intelligently reallocating IT resources and databases to ensure the overall demand on the data warehouse remains the same while still maintaining compliance with FERPA. Existing IT project managers at ECOT and IQ Innovations IT personnel will be assigned to the PLP project to communicate customizations, ensure adherence to deadlines and allocate resources as needed. These resources already exist and will not require additional financial support. *Additional Supports: Teacher walk-through data, observations, and professional growth plans will have goals and expectations that teachers master the new system of individualized instruction through the PLP. Individual assistance will be given to teachers through mentors and their supervisor or principal to ensure the implementation is done with fidelity.

E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

Every PLP component combines time-tested, research-based theories and blends them with 21st century technology to create a personalized learning experience for grades 6-12 math students. Highlights of the rationale and research for this project include: Knowledge Precedence Maps (KPMs) (Doignon & Falmagne, 1999): KPMs in education are sequences of learning wherein concepts follow a general

order of learning precedence. KPMs based on CCSS will move along pathways from fundamental to advanced concepts. For example, a student unable to add and subtract will have significant problems learning multiplication. ECOT teachers who systematically teach to a student's academic level to ensure they have mastered foundational concepts before advancing consistently have students with superior academic achievement. The PLP will give teachers automated tools for this purpose. Each of the CCSS in the PLP will have up to five aligned content learning objects automatically populated based on assessment results, saving teachers' time and increasing instructional resources in the classroom. Mastery Learning (Bloom, 1968) and Memory Reactivation (Ebbinghaus, 1913): These theories work together in the PLP to enhance long-term memory retrieval of learned concepts resulting in higher student achievement. After completing modules and demonstrating mastery, additional modules will be unlocked. At the end of a unit students will take a CCSS-aligned summative assessment. On standards that students satisfactorily completed homework or lesson content, but did NOT demonstrate mastery on the assessment, the system will automatically recommend the student revisit those standards. Revisiting these standards will reactivate their long-term memory. This upsets the forgetting process and allows the student to re-master the concept and more efficiently encode it in long-term memory for later retrieval. Fight or Flight and Self-efficacy (Bandura, 1977): Forcing students to attempt new concepts before they have mastered foundational ones can lead to frustration, disengagement, and poor academic achievement as overwhelmed students exhibit a fight or flight response. In the one-size-fits all classroom students who have not mastered foundational knowledge preceding higher levels of knowledge are forced to attempt to learn concepts for which they are unprepared. The PLP will provide data to meet students at their academic level so content and lessons challenge, but do not overwhelm students, thus resulting in increased academic achievement. Data-Driven Decision-Making (DDDM) (U.S. Dept. of Ed., 2012): The PLP will harness student data in a timely manner to inform what educational content a student needs and when to provide it. DDDM addresses Straight A Fund Goal 1 by: *Providing timely instructional data to enhance student achievement.*Automating time-consuming process for teachers, thus increasing instructional resources in the classroom. *Providing instructional content at a level commensurate with a student's ability. Teacher Instructional Time: The PLP will increase quality teacher instructional time. Teachers will spend less time determining a student's academic strengths and limitations. The system will do this critical task for them automatically. Universal Design for Learning (UDL) (Orkwis & McLane, 1998): The wide variety of content that will be available in the ALP repository will allow for multiple means of representation, expression, and engagement from the UDL framework. This will allow for content options tailored to a student's preferences and strengths, thus increasing student achievement.

21. Is this project able to be replicated in other districts in Ohio?

☑ Yes ☐ No

22. If so, how?

Our proposal not only takes proven psychological and pedagogical theories and blends them with 21st century technology for ECOT students, but also has the potential to revolutionize how grades 6-12 math is taught across the state of Ohio. Our technology partner, IQ Innovations supports the technology solution that powers ilearnOhio. ilearnOhio is a comprehensive e-learning platform funded by the Ohio General Assembly to ensure that Ohio students have access to high-quality online courses. This statewide platform includes a searchable repository of standards-aligned educational content (courses and digital resources), an e-commerce marketplace, and a learning management system to facilitate the delivery of course content from multiple providers to various end users. ilearnOhio is administered by the Ohio Resource Center, located at the College of Education and Human Ecology at The Ohio State University, under the direction of the Ohio Board of Regents. AFTER THE SOFTWARE CUSTOMIZATIONS REQUIRED FOR THE PLP ARE COMPLETED FOR ECOT, IQ INNOVATIONS WILL MAKE THE BASE PLP AVAILABLE TO ILEARNOHIO USERS AT NO COST TO ALL OHIO K-12 SCHOOLS AND DISTRICTS. The PLP will be available statewide the following school year (2015-2016) with schools permitted to make their own decisions regarding whether or not and when they want to adopt. Costs to make the PLP available statewide will be minimal and paid for by IQ Innovations. New content can be added at the discretion of local districts. Schools will be able to use the PLP using free content. Use of the comprehensive nationally recognized item bank would be available to districts at a nominal cost. Not only do districts gain access to the PLP at no cost, but the costs to align content are borne by the grant. The benefits of having content individually aligned to CCSS for all of Ohio districts are permanent. With ilearnOhio, standard-aligned content can be created within a district, loaded into ilearnOhio, and shared with other schools across the state. This can potentially reduce future textbook expenditures statewide significantly. Additionally, a comprehensive, free suite of training materials already exists in the form of video tutorials and an online training course. In-person training is also available through the Ohio Resource Center.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

Value and Sustainability: The current proposal presents an exceptional opportunity not only for ECOT, but to all school districts in Ohio. IQ Innovations provides our current LMS and is our partner for the project. After the software customizations required for the Personalized Learning Platform (PLP) are completed for ECOT, IQ Innovations will make the base PLP available at no cost to all Ohio K-12 schools and districts using ilearnOhio. ilearnOhio is a comprehensive e-learning platform provided by IQ Innovations and funded by the Ohio General Assembly to ensure that Ohio students have access to high-quality online courses. All reoccurring technology costs will be paid for by IQ Innovations per our existing service contract. Teacher PD to use the PLP will be available free via existing online training courses, resulting in no direct costs for adopting districts even after the grant period. Therefore, the PLP will be sustainable and provide a lasting impact without requiring additional funding. Quantifiable Measures of Student Achievement: -Mathematics achievement as measured by the State of Ohio assessments in grades 6-8, 10 and 11; Value Added growth measurement as computed and reflected in Ohio's accountability model, AMO targets for each student group, and the AMO target for graduation, as well as the 5-year graduation rate. To meet the over-arching goals and track our progress, ECOT has established a set of rigorous annual academic goals. Each year we aim to meet or exceed the following expectations for high school: Meet state indicators in 10th and 11th grade math, increase the graduation rate to earn points on the AMO targets, and increase the average tenure of ECOT students by 5%. We will also track graduation rate, % of graduates accepted to 2 or 4 year higher-education institutions, ACT scores, % of graduates that earn certification in a career/tech program, and whether or not 9th graders are on track to graduate. The source of benchmark comparative data points will be length of student engagement, tenure, state assessment scores, and graduation rates in the immediate three years prior to the grant award. ECOT will use the following specified measurement periods and preliminary success points to validate successful implementation: Analysis of quarterly assessments, pre- and post-tests to ensure academic growth throughout the year. If measured progress is insufficient to meet program objectives, systematic adjustments will be made to the PLP to ensure that appropriate instructional content is being delivered and that students are increasing their levels of achievement.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

The Straight A grant will allow ECOT to implement a research-based personalized learning system and individual education program to create an instructional path that meets each student's academic needs. The evaluation of the impact of Straight A funds on student outcomes fits well within the overarching goals of ECOT's overall academic plan and the academic achievement tenet of the Straight A fund. ECOT's long term goals that align with the grant include: 1. Increase graduation rate and ensure that all students are ready for college or career. 2. Solidify ECOT as a high quality on-line educational option that raises student achievement through an individualized mastery and competency-based model. 3. Increase student engagement, retention, and tenure so that students continue their education with ECOT for longer periods of time, thus increasing their academic progress and decreasing the churn in the system. In order to achieve these measures of success, ECOT must annually track progress on a series of short-term indicators toward meeting these long term goals. To that end, the focus of the Straight A grant is congruent with measuring annual progress on these indicators. Specifically, ECOT will track progress on the following indicators: Mathematics achievement as measured by the State of Ohio assessments in grades 6-8, 10 and 11; Value Added growth measurement as computed and reflected in Ohio's accountability model, AMO targets for each student group, and the AMO target for graduation, as well as the 5-year graduation rate. To meet the over-arching goals and track our progress, ECOT has established a set of rigorous annual academic goals. Each year we aim to meet or exceed the following expectations: grades 6-8, 3% aggregate increase in math proficiency rates, overall composite value-added measure rated as meets or above for high school: Meet state indicators in 10th and 11th grade math, increase the graduation rate to earn points on the AMO targets, and increase the average tenure of ECOT students by 5%. The source of benchmark comparative data points will be length of student engagement, tenure, and graduation rates in the immediate three years prior to the grant award. ECOT will use the following specified measurement periods and preliminary success points to validate successful implementation: Analysis of quarterly assessments, pre- and post-tests to ensure academic growth throughout the year.In addition to academic goals, ECOT has established a set of process goals to ensure success over the next five years: -Design, test, and refine the Personalized Learning Platform (PLP); expand program offerings to include career-technical and post-secondary enrollment options; Implement OTES/OPES framework: Clearly explaining goals, supports, consequences to staff while setting measurable goals for all staff; Enhance principal/leadership trainee program to identify and grow strong academic leaders. Continue to engage parents and guardians in the education of their children. -Deploy Ohio Standards-aligned assessments showing concepts a student is lacking, ready to learn, and those mastered with content automatically recommended as needed. -Content loaded into ilearnOhio, which is the statewide platform available at no cost to school districts, potentially reducing textbook expenditures significantly.

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program's progress).

* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

The scholarly basis for the evaluation of this instructional model is Achievement Goal Theory. This is one theory used in educational psychology to discuss research into motivation to learn. It is particularly applicable in this case because the foundation of the Personalized Learning Platform (PLP) is that students' progress through a series of lessons by "unlocking" new material based on mastery. This provides positive motivation through the attainment of goals. These goals of learning are thought to be a key factor influencing the level of a student's intrinsic motivation. As stated in the book Motivation in Education: Theory, Research, and Applications, by D.H. Schunk, P.R. Pintrich, J. Meece (2008), "when students attain learning goals, goal attainment conveys to them that they possess the requisite capabilities for learning. These beliefs motivate them to set new challenging goals. Students who are motivated to learn often find that once they do they are intrinsically motivated to continue their learning." Evaluation Method, Data Collection, and Analysis: The evaluation will include process and outcome indicators and the method will use the triangulation of evidence from administrative data analysis, survey research, and observational records obtained from classroom walk-throughs. The process indicators will measure the initial degree of program fidelity to ensure that teachers and students are implementing the program as intended. This data collection is through the LMS, teacher observations, teacher surveys, and student surveys. The system in place for teacher observations is called the "Teacher Observation and Review (TOR)" which is aligned to the Ohio Teacher Educator Standards and the OTES model. The system in place to conduct surveys is called "SelectSurvey," a web-based product that ECOT currently uses with success. If any gaps in implementation are found, additional professional development for teachers will be provided by ECOT staff. If students are having issues navigating the program, additional technology training will occur. The outcome indicators are higher levels of student engagement, longer tenure at ECOT, higher graduation rates, increased proficiency rates, and an increase in students that matriculate to college or begin a career. This data will be collected through the student information system, surveys, and observations. ECOT will utilize consistent measures/procedures to collect data each year. Measures of project success include student performance on annual standardized tests. We will use the OAA/OGT math achievement tests for grades 6-12. Additional student academic performance measures include: quarterly/benchmark assessment scores, performance Index and Ohio report card grades. We will also track graduation rate, % of graduates accepted to 2 or 4 year higher-education institutions, ACT scores, % of graduates that earn certification in a career/tech program, and whether or not 9th graders are on track to graduate. As the project progresses, the district plans to layer in additional success measures consistent with literature on high-performing on-line school. The baseline will be length of student engagement, tenure, state assessments scores and graduation rates in the immediate three years prior to the grant award. In each subsequent year, it is expected that these outcome measures will improve. If measured progress is insufficient to meet program objectives, systematic adjustments will be made to the PLP to ensure that appropriate instructional content is being delivered and that students are increasing their levels of achievement. Summary Evaluation and Reporting: Results will be compiled by the Office of Evaluation and Testing at ECOT with the assistance of the leadership team into an evaluation report as outlined by the grant and presented to the ECOT board and posted publically on ECOT's website.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter "I Accept" and indicate your name, title, agency/organization and today's date.

I accept, Kristen Kask, Associate Superintendent, ECOT, 10/22/2013