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Adjusted Allocation: 0.00

Remaining: -996,000.00
### A) APPLICANT INFORMATION - General Information

1. **Project Title:**
   
   K to Industry: Workforce Exploration, Engagement and Immersion

2. **Executive summary:** Please limit your responses to no more than three sentences.

   *K to Industry is an innovative comprehensive approach to workforce development that encompasses exploration of career fields, engagement with experts and industry immersion. The overarching goal of K to Industry is to populate the workforce with employees rich in contextual, technical and career skills. This goal will be achieved through the following objectives: 1) Design collaborative workforce-focused problem-based learning opportunities for student, teacher and working professionals in a safe user environment; 2) Establish opportunities for students to be immersed in work-based learning, youth internship and industry mentorship; 3) Create and implement teacher and student resources including online professional development, industry mentors, design challenges and a disciplinary literacy content library (i.e. Community Connect Portal); 4) Build in efficiencies to the program and organizational structure that promote maximum output with minimum staff time; and 5) Develop an Information Technology Pathway to serve as a model industry pathway to guide students along the continuum from Kindergarten to Industry. This is an ultra-concise description of the overall project. It should not include anything other than a brief description of the project and the goals it hopes to achieve.*

14800 3. **Total Students Impacted:**

   *This is the number of students that will be directly impacted by implementation of the project. This does not include students that may be impacted if the project is replicated or scaled up in the future.*

4. **Please indicate which of the following grade levels will be impacted:**

   - Pre-K Special Education
   - Kindergarten
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10
   - 11
   - 12

5. **Lead applicant primary contact:** - Provide the following information:

   - **First Name, last Name of contact for lead applicant:** Kimberly Clavin
   - **Organizational name of lead applicant:** Dublin City Schools
   - **Address of lead applicant:** 7030 Coffman Rd., Dublin, Ohio 43016
   - **Phone Number of lead applicant:** 614-760-7385
   - **Email Address of lead applicant:** clavin_kimberly@dublinschools.net

6. **Are you submitting your application as a consortium?** - Select one checkbox below

   - Yes
   - No

   *If you are applying as consortium, please list all consortium members by name on the “Consortium Member” page by clicking on the link below. If an educational service center is applying as the lead applicant for a consortium, the first consortium member entered must be a client district of the educational service center.*

   [Add Consortium Members]
7. Are you partnering with anyone to plan, implement, or evaluate your project? - Select one checkbox below

- Yes
- No

If you are partnering with anyone, please list all partners by name on the "Partnering Member" page by clicking on the link below.

**Add Partnering Members**

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

8. Describe the innovative project: - Provide the following information

The response should provide a clear and concise description of the project and its major components. Later questions will address specific outcomes and the measures of success.

The current state or problem to be solved; and

There is a need to promote and expand academic and technical knowledge throughout student development and to introduce students to many career options to ensure they are college and career ready. In a National Association of Colleges and Employers survey (2013), employers' top priorities in a candidate were to be a team player and problem solver. An American Express study (2013) highlighted lack of soft skills in communication, time management, and teamwork in young workers. -Eighty percent of college freshmen are uncertain about a major and half will change majors before graduation (NY Times, 2012), which results in more time and tuition dollars spent for students and decreased completion rate for colleges. Undecided undergraduates may be "at risk" for lower performance and lower retention rates than students who have declared majors (Tampke, 2013). -Teachers lack time and resources to transition from traditional teaching to incorporation of real world community-driven experiences in the classroom. In a recent Dublin School District survey, teachers identified community engagement and professional development opportunities as a top priority and key to making the "District and educators so strong." The District has one staff member to support 1,200 teachers in industry-centered problem-based learning (PBL), resulting in just 10 projects per year across the District. Impacts at the local level are clear. Student PLAN test data showed that 51% of Dublin 10th graders were interested in going into a STEM field. Columbus 2020 (2014) reported a deficit of 1,000 graduates per year in information technology (IT) and computer science. Careers related to IT are approximately 12% of the employment base in the City of Dublin, and companies are having a difficult time finding skilled employees. There is a need to develop a program that is effective, easy to use, includes teacher training, and engages community/industry partners to improve student achievement at all levels.

The proposed innovation and how it relates to solving the problem or improving on the current state.

K to Industry's innovation is creation of an online tool, the Community Connect Portal (CCP), that synthesizes instructional approaches proven for student success while providing shared classroom resources and replicable delivery methods that will result in long-term spending reductions. The CCP will allow all District students (14k) and teachers (1.2k) to engage with industry to collaborate with ease and efficiency. Software will have five focus areas: exploration of careers through company and professional profiles, student and teacher engagement with industry, and teacher professional development. The CCP improves education in new and under-explored ways by providing information on industry partners and career profiles; workplace learning opportunities including events, internships, and job shadowing; virtual repository of content offered by leading business/research organizations; mentor/subject matter expert matching; virtual collaboration tools (groups and individuals); professional development (PD) for teachers through virtual media; and online student/parent resources. The portal will model an existing tool with a mentor matching component that has been called a "seedbed for disruptive innovation" (Coolhub, IMSA). Exploration and engagement with industry opportunities can range from teachers seeking help to identify a PBL activity to a real life application of a specific content standard. -With the CCP, industry infusion in K-12 will be a catalyst to place students on career pathways. For example, there is a workforce need for technical and career proficiency in employees in the information technology (IT) field (Columbus 2020, 2014). The CCP will be for all career fields, but in this program an IT Pathway will be piloted. Starting in Kindergarten, students will have opportunities to experience many career fields, including IT, with teacher and industry mentors. High school students who choose the IT Pathway will enroll in shared delivery dual enrollment courses, be immersed in work experience through unpaid internships, and graduate with an IT certificate. After high school, students will have multiple exit points from the Pathway at a certificate, two-year or four-year degree. Students staying on the Pathway through college will remain connected with industry via a paid work-study and opportunities for advanced degrees. -With K to Industry, K-5th grade students experience the following: interdisciplinary PBL development using real world examples (i.e., playground redesign); workplace-oriented 21st Century Skills assessments (i.e., job review rubric); virtual/in-class visits and field trips with professionals (i.e., city planners, engineers, lawyers, accountants, artists, professors); videos linking core content to specific career fields (disciplinary literacy); and expanded extracurricular opportunities to enhance learning (i.e., Robotics, STEM clubs, author panels). Fifth to twelfth grade students additionally experience: student-driven open-ended research in core content classes with industry mentors; an academic and work-based learning pathway; and workplace experiences. -K to Industry's support for teachers will focus on establishing industry connections and PD through the CCP, in-person/online train-the-trainer modules, and a set of industry-centered PBL activities. K to Industry will ensure teacher success by strengthening their repertoire of teaching tools in a well-packaged and well-supported program that will include industry externships, classroom projects guided by industry professionals, and resources that link core content to specific career fields. Dublin students, parents and staff have indicated a desire for community involvement. City of Dublin businesses already have expressed interest in K to Industry concepts by assisting with career preparation and community projects. K to Industry will be skillfully designed to match these desires and needs into a robust and replicable program.

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

Applicants should select any and all goals the proposal aims to achieve. The description of how the goals will be met should provide the reader with a clear understanding of what the project will look like when implemented, with a clear connection between the components of the project and the stated goals of the fund. If partnerships/consortia are part of the project, this section should describe briefly how the various entities will work together in the project. More detailed descriptions of the roles and activities will be addressed in Question 16.
Student achievement (Describe the specific changes in student achievement you anticipate as a result of this innovation (include grade levels, content areas as appropriate) in the box below.)

PBL makes the shift from a focus on teaching to a focus on learning, emphasizing real-world application of knowledge and skills. Studies comparing learning outcomes for students taught via PBL versus traditional instruction show that when implemented well, PBL increases long-term retention of content, helps students perform as well as or better than traditional learners in high-stakes tests, improves problem-solving and collaboration skills, and improves students' attitudes towards learning (Strobel & van Barneveld, 2009; Walker & Leary, 2009). PBL experiences will be aligned with Ohio’s new learning standards so that students are prepared to meet the expectations of the new assessments and improved academic achievement. -Project partners will work collaboratively with educators to develop academic rigor such that students gain a pragmatic and deeper understanding of core content and become college and career ready. Industry partners will provide students and teachers with clear information about the workplace, the expectations, and the requisite skills for their future. Workforce and education will develop PBL student assessments that look and feel like an industry job review and will focus on desired career skill criteria. Partners will promote individuals to take part in the mentoring matching program within the CCP. Once this program grows to more districts, K to Industry alumni and existing mentors will serve as mentors for underrepresented, underserved populations. Research in Disabilities program and NSF have identified mentoring as a promising practice. When commenting on equity within the District teachers stated, “When we allocate resources, we need to consider…equitable opportunities among all schools regardless of demographics.” The CCP will be an online platform that provides teachers rich authentic projects, mentors for students, collaboration with experts, usage data analytics, and equity for schools. The Educational Service Center of Central Ohio (ESC) will offer educational consultancy to provide customized services to leverage resources that maximize each student's potential and each school’s results. In the past, industry infusion was primarily delivered through classroom visits. Classroom visits can be difficult for many reasons: all day commitment for greatest impact; presenter materials not suited for student grade and/or are not dynamic; and lack of teacher resources to find presenters. To allow for maximum career exposure while avoiding these issues a virtual interview process will be made available for individuals wishing to get involved. This approach is a way of vetting speakers and gives teachers a resource for disciplinary literacy that they currently are not comfortable presenting. -In 2013, the District participated in the "Hour of Code" (code.org). Teachers were to teach just one hour of code to students that week. Over 30 teacher across 14 buildings (of 20) participated and many continued the curriculum. Designing a PBL unit can be daunting. An "Hour of Industry" sounds do-able. Having career profiles for teachers to tinker with allows for more teacher usage and student viewing. As noted in the Hour of Code, once teachers got started they kept going deeper just as we expect teachers to gradually dive deeper into the K to Industry features. -The IT Pathway is a work-based program that will provide an opportunity for students to earn dual enrollment Columbus State Community College credit while participating in a paid work-study that can be used for a portion of tuition. A student can work part time and earn approximately $16-20/hour (payscale.com) for an intern level position which will be enough to pay for tuition. Students will be able to continue on a pathway to a 2-year or 4-year degree with 100% transfer of college credits. Increased career exposure provides the student streamlined education and motivation to career.

Spending reductions in the five-year fiscal forecast or positive performance on other approved fiscal measures (Describe the specific reductions you anticipate in terms of dollars and spending categories over a five-year period in the box below or the positive performance you will achieve on other approved fiscal measures. Other approved fiscal measures include a reduction in spending over a five-year period in the operating budget approved by your organization's executive board or its equivalent.)

The Tolles Career and Technical Center will provide a classroom teacher for the Columbus State Community College (CSCC) Information Technology dual enrollment digitized courses as an in-kind contribution to this project, which reduces salary and benefits cost to the Dublin City School District ($405,000 savings over 5 years). Tolles also will provide a part-time employee to help market and administer the IT Pathway ($50,000 over five years). A train-the-trainer model for implementation of industry-centered PBL will be designed to build internal capacity and ensure K to Industry's sustainability (see the shared services delivery model narrative below). The train-the-trainer model and online PD offerings increases operational efficiency and, hence, cost savings. To implement K to Industry without grant support, it is estimated that the District would have to hire two industry liaisons to bring in industry projects at a cost to the District of $200k dollars/year ($1 million/5 years). -Over the long term, a spending reduction will occur as a result of K to Industry. As just one example, the District can leverage the existing communication channels through established partnerships in the community. A partnership with the City of Dublin will enable the District to be publicized through "It's Happening in Dublin", the City’s monthly television show and through the City's e-newsletters and employer outreach. Additionally, the District will be publicized in Dublin City School's existing communication channels, including social media, electronic newsletters, parent/student communication and guest columns in "Dublin Villager", a weekly neighborhood newspaper. This type of marketing will help to grow the K to Industry program and keep it sustainable over the long term.

The estimated total cost savings of the marketing strategy partnership to be $76,000 dollars per year for the District ($380,000 savings over five years).

Utilization of a greater share of resources in the classroom (Describe specific resources (Personnel, Time, Course offerings, etc.) that will be enhanced in the classroom as a result of this innovation in the box below.)

Cybervation Inc. will develop the web-based CCP to facilitate communication and leverage community partners. The program provides resources for classrooms that were not available in the past. The CCP will have the following functions: 1) Business/industry company profile page; 2) Career information through asynchronous and synchronous virtual videos and interviews of industry professionals, including Dublin parents; 3) Workplace learning resources to include company events (such as open houses and tours), internships, externships and job shadowing opportunities; 4) Content repository to include business and research links and related PBL challenges for teachers and students. In many cases the activities will be real industry issues that need to be solved; 5) Mentor/subject matter expert matching (modeled after CoolHub Mentor Matching). One could present a question like "Can human DNA be simulated through augmented reality?" and identify the relevant subject areas such as computer science/biology. The system will then email all mentors within that selection criteria and ask if they will accept or decline a mentoring option. If accepted, they are placed into a virtual collaboration platform that includes document share, virtual video collaboration, project calendar, blogging and discussion forums. This feature will link to capstone and open-ended projects embedded in existing core academic courses rather than adding specific capstone courses to student coursework requirements. Collaboration pages may be formed by a group requesting mentors. For instance, STEM Sisters, a district group for girls interested in STEM, could send out a call for female role models in STEM to collaborate with their group; 6) Training and education. PD modules will include education and industry concepts such as product deliverables and workflow, academic standards and adolescent behavior, and industry-centered PBL. Available online, PD combined with trained teacher leaders in each building increases classroom resources across the District; 7) Learning Analytics. Measurements, analysis and data collection about learners, can be used for student differentiation, program improvements, decision making; 8) Student/parent resources. A year ago, 41% of boys and 21% of girls had interest in STEM careers. In 2014, only 30% of boys and 16% of girls indicated some interest in STEM careers (2013 Teens and Career Survey). Parents not familiar with...
STEM fields are not sure how to encourage their child. Providing parent education to help support student education on careers is vital to getting students into the STEM workforce. The IT pathway will increase course offerings and will utilize a digital learning and hackerspace lab that will be housed at Scioto High School. The lab will be have 30 computers and a Hackerspace dedicated to "learn by doing". Hackerspace allows students to get hands-on experience, building objects such as computers, wearable technologies, robots, and etc. The computer lab will be equipped with webcams and badge access for use any time when the building is open. Students in the program can use the room for collaboration or if they do not have computer access at home. These features not only increase resources for the individual classroom but also can be shared between classrooms. They can easily be replicated and scaled to provide resources statewide or nationally via a shared delivery model that will allow even more students and teachers to explore and engage with industry via authentic learning experiences, career exploration and industry engagement.

Implementing a shared services delivery model (Describe how your shared services delivery model will demonstrate increased efficiency and effectiveness, long-term sustainability, and scalability in the box below.)

The CCP will be developed and piloted in Dublin City Schools; however, in order to incorporate a variety of career options, the CCP will extend beyond the District and City limits and beyond Ohio. For instance, few naval architects are present in the City of Dublin. Through the CCP, a Dublin City Schools student can explore and engage with a naval architect located in Virginia. Having a shared delivery method also reduces redundancy. There is no need for all schools in Central Ohio to have their own platform for achieving the objectives of this grant. It is best if we all share resources, including mentors, to bring the program to full potential. -CSCC offers digital dual enrollment courses to high school students. If this grant is funded, up to 6 courses in the IT field will be digitized and available for any district to use as a dual enrollment option. In this fairly new delivery model, CSCC provides an instructor of record for the digital course. A teacher is facilitating in the classroom (Tolles Career and Technical Center teacher). This approach eliminates the issue of high school teachers not having the appropriate certification to teach dual enrollment courses (Master's in the course content area vs. in education), which enables many dual enrollment opportunities that did not exist previously. This delivery method benefits the District as it does not have to train or provide a teacher and CSCC is able to offer a course to thousands of students. -Dissemination of industry-centered PBL will be delivered through an organizational structure where Clavin will serve as an advisor to a PBL teacher council. Teachers serving on the council, one from each building (20), will be trained in PBL, curriculum design, instructional coaching and PD facilitation. The council, plus an additional 10 teachers along with industry and Clavin will participate in a Summer Externship Academy towards the end of the grant year. This group will be considered Cohort 1 of the train-the-trainer model. The council, paid by stipend, will then support and train teacher leaders in their schools for at least 5 years beyond the grant year. Online PD resources and training modules also will be available to teacher leaders and teachers. This train-the-trainer structure provides a standardized and centralized educational pedagogy, a delivery approach resulting in consistent dissemination of information, increased productivity and collaboration, and ensures programmatic sustainability. It is important to note that teacher resources will be standardized, but the content delivery to students will remain authentic and relevant due to the nature of PBL. This example of a shared delivery model and increased classroom resources is designed to fit within Dublin's existing organizational structure and it is a model that can be replicated, scaled or adapted to achieve the highest productivity within other school districts.

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

- New - never before implemented
- Existing: Never implemented in your community school or school district but proven successful in other educational environments
- Mixed Concept: Incorporates new and existing elements
- Established: Elevating or expanding an effective program that is already implemented in your district, school or consortia partnership

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

11. Financial Documentation: - All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 11-14.

* Enter a project budget in CCIP (by clicking the link below)

Enter Budget

* If applicable, upload the Consortium Budget Worksheet (by clicking the link below)

* Upload the Financial Impact Table (by clicking the link below)

* Upload the Supplemental Financial Reporting Metrics (by clicking the link below)

Upload Documents

For applicants without an ODE Report Card for 2012-2013, provide a brief narrative explanation of the impact of your grant project on per pupil expenditures or why this metric does not apply to your grant project instead of uploading the Supplemental Financial Reporting Metric.

The project budget is entered directly in CCIP. For consortia, this project budget must reflect the information provided by the applicant in the Consortium Budget Worksheet. Directions for the Financial Impact Table are located on the first tab. Applicants must submit one Financial Impact Table with each application. For consortium applications, each consortium member must add an additional tab on the Financial Impact Tables. Partners are not required to submit a Financial Impact Table.

Applicants with an "Ohio School Report Card" for the 2012-2013 school year must upload the Supplemental Financial Reporting Metrics to provide additional information about cost savings and sustainability. Directions for the Supplemental Financial Reporting Metrics are located on the first tab of
the document. If your organization does not have an "Ohio School Report Card" for the 2012-2013 school year, please provide an explanation in the text box about how your grant project will impact expenditures per pupil or why expenditure per pupil data does not apply to your grant project.

Educational service centers, county boards of developmental disabilities, and institutions of higher education seeking to achieve positive performance on other approved fiscal measures should submit the budget information approved by an executive board or its equivalent on the appropriate tabs of the Financial Impact Table. Educational service centers should use the "ESC" tab and county boards of developmental disabilities and institutions of higher education should use the "non-traditional" tab.

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

Responses should provide rationale and evidence for each of the budget items and associated costs outlined in the project budget. In no case should the total project expenses in the budget narrative exceed the total project costs in the budget grid.

* Provide a brief narrative explanation of the overall budget.

The industry infusion component of this program will require $475,500 to create the Community Connect Portal (CCP: $200K; Cybervation, Inc.; purchased service), develop the online PD including online instructional material ($165K; Xcelerate; purchased service), and hire a PBL subject matter expert ($25K; ESC; sal/ben). The CCP is the heart of K to Industry and is the platform to establish innovative partnerships and a replicable and scalable delivery method. The PBL teacher council will help with planning and development during the grant year and will attend the summer externship academy. Teachers will receive a stipend of $1K each in the grant year ($20K; DCS; sal/ben) for 30 hours outside of contract hours. Two days of meetings will be held during contract hours of which 20 subs will be provided at $107/day ($4.3k; DCS; sal/ben). Cohort 1 teachers (30 teachers of which 20 were a part of year 1 council) participating in the externship academy will receive a stipend for externship work hours ($30K; DCS; sal/ben). The summer externship will require 45 hours of coursework per student that results in a 3 credit hour course for Cohort 1 teachers ($16.2K; tuition; purchased service). ESC’s formally trained employees in PBL will assist Clavin in this training ($15K; ESC; sal/ben). - IT Pathway development requires $382,500. Costs primarily will be incurred by CSCC during the grant year. This includes a part-time project manager ($25K; sal/ben) to development of dual enrollment courses, course approval, and assist 4-year institutions in developing a bachelors degree pathway. Other costs include: digitizing the courses necessary for the dual enrollment offerings ($150K; purchased service); 5-year subscription service for teacher PD on dual enrollment teaching methods ($10K; purchased service); and 5 years of CSCC-required college entrance testing (COMPASS) for 30 dual enrollment students per year ($2.5K; purchased service). COMPASS will provide benchmarking data for project evaluation. Funds also have been allocated for a DCS counselor to update course planning guides to reflect the new IT pathway ($2.5K; DCS; sal/ben). The new course handbook design will inform students of career options, course opportunities and obtaining college credit. Capital expenditures include the digital learning lab ($150K; DCS; equipment) and a Hackerspace ($42.5K; DCS; equipment) for the IT Pathway. The lab will be fully equipped for course offerings as well as for in class activities such as building and fixing computers and community education classes. Because the IT Pathway is a Tolles satellite offering, Tolles will provide, in kind, a full-time teacher facilitator (-$405K)/5 years; sal/ben). They also will provide, in kind, help with IT Pathway logistics and implementation during the grant year and five years beyond to fit within their vision and scope (-$30K/6 years; sal/ben). -Program communication, awareness and marketing to increase enrollment, mentors and teacher participation will require $123k. Costs include marketing plan development and launch ($90K; MurphyEpson; purchased service), video creation ($18K; Xcelerate; purchased service), 2 events ($5K; DCS; supplies) and printing materials ($10K; DCS; supplies). Tolles will provide a marketing person, in kind, to assist with the marketing plan and maintenance for the IT Pathway (-$30K/6 years; sal/ben). Materials will include information on Tolles website, brochures, and social media aimed at students and parents to support enrollment. -Program evaluation of short-term implementation and long-term impact for continuous improvement and sustainability will require $15k (ESC; purchased service). Evaluation of collected data and milestone checkpoints will occur 3 times during the grant year (beginning, midpoint, and) and then once per year for 5 years. The evaluator will give feedback and will work with Clavin on reporting and making recommendations for modifications.

13. Will there be any costs incurred as a result of maintaining and sustaining the project after June 30th of your grant year?

Sustainability costs include any ongoing spending related to the grant project after June 30th of your grant year. Examples of sustainability costs include annual professional development, equipment maintenance, and software license agreements. To every extent possible, rationale for the specific amounts given should be outlined. The costs outlined in the narrative section should be consistent and verified by the financial documentation submitted and explained in the Financial Impact Table. If the project does not have sustainability costs, applicants should explain why.

- Yes - If yes, provide a narrative explanation of your sustainability costs as detailed in the Financial Impact Table in the box below.

- No - If no, please explain why (i.e. maintenance plan included in purchase price of equipment) in the box below.

The following items will be completed by June 2015 and have no ongoing costs after the grant period: industry infusion software development, online PD development and PBL teacher externship and college credit; IT Pathway CSCC project manager, digitized course development, stipend for course handbook redesign; lab equipment purchases; communications and marketing plan, launch, events including supplies and videos. Maintenance plans/service (5 year) paid during the grant period include: CCP software (Cybervation), online PD module updates (CSCC and Xcelerate), IT Pathway digitized dual enrollment course updates (CSCC), collect entrance exam for up to 150 students over 5 years (CSCC), and an ESC evaluator (ESC). ESC training personnel will provide 3 years of service. -The following costs will be offset by in kind contributions and/or funding already included in the forecast: equipment maintenance, student dual enrollment fees, continued marketing, and teacher PD. The equipment will be placed in an existing computer lab/shop space. New equipment will replace old equipment that was already being serviced by DCS and will not add any cost. As a satellite program, Tolles will provide assistance with necessary maintenance and upkeep of equipment and replace supplies used for classes; student dual enrollment fees ($25/credit hours, 12 credit hours, 150 students totaling $45K/5 years); and a part-time staff to continue marketing the program ($5K/year for 6 years totaling $30k). Continuous awareness/marketing also exists as a portion of Clavin’s position and therefore this is not an additional effort for the District. The STEM Initiatives program will pay the yearly cost of the PBL teacher council ($10.1K/year plus $4.3K) and for substitute time ($107/day totaling 71.5K over 5 years), which is currently allocated in a DCS general fund that was earmarked upon Clavin’s arrival (8/13) for teacher stipend and
14. Will there be any expected savings as a result of implementing the project?

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<th>Yes</th>
<th>No</th>
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</table>

If yes, provide details on the expected savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If no, please explain:

The first year that the IT Pathway is implemented there will be up to 30 students enrolled for 3 periods of the day. In the second year, up to 60 students will be enrolled across six periods of the day; 30 from the first year and 30 from the second year. Tolles’ will provide, in kind, classroom facilitator support that is equivalent to half of a full-time salary ($45K, FY16) and 1 full time salary ($90K, FY17-20), which totals $405K over 5 years. By students attending the Pathway and Tolles offering instructional support, DCS equivalently reduces their staff time by one person for 5 years after the grant year. Tolles also is supplying part-time staff members for the IT Pathway satellite program planning ($5K/year) and marketing efforts ($5K/year) totaling $50K for 5 years. In total, Tolles is providing an average of $91K/year for five years beyond the grant ($455K/5 years). This in kind contribution will result in a savings of $81K/year ($405K/5 years) for Dublin City Schools. -Clavin, concurrent with other assigned duties, can support approximately 10 industry-centered PBL activities across the DCS per year, which depends on the time it takes to find, interact and train with experts to work with teachers. The PBL teacher council organizational structure will enable this effort to extend to more buildings across the District and more activities completed throughout the year. Establishment of the CCP and a cadre of teachers that can coach and facilitate training on industry-centered PBL is a strategic effort for operational efficiency. Staff members’ productivity will increase greatly due to teachers and industry interacting with each other rather than through just one person and by having a trained support person located in each building. To operate without the CCP and the online PD, the District estimates it would have to hire two liaisons to bring in industry projects and support teachers. By obtaining the grant, Dublin City Schools will see a spending reduction of $200K/year dollars totaling $1 million dollars over the 5 year period. -Marketing and communication will leverage existing communication channels and employer relationships. The annual value of: 2 appearances on "What's Happening in Dublin" TV show is $10K; 2 guest columns in the Dublin Villager (30,000+ readers) is $15K; 2 e-newsletters distributed to 3,300 City of Dublin subscribers is $2K; 4 e-newsletters using existing Dublin City Schools newsletters (xx subscribers) is $4K; City of Dublin and Dublin City Schools social media coverage (7,000 to 8,000 on City of Dublin FB and Twitter sites) is $10K; Piggybacking on existing speaking opportunities with Dublin Chamber/City of Dublin economic development outreach is $25K. The expected cost savings for these marketing pieces is $76K per year for a total savings of $380K over the 5 years beyond the grant period. -In summary, the project has an average annual savings of $357,000.00 if yes, specify the amount of annual expected savings. If no, enter 0.

If yes, specify the amount of annual expected savings. If no, enter 0.

15. Provide a brief explanation of how the project is self-sustaining.

All Straight A Fund grant projects must be expenditure neutral. For applications with increased ongoing spending as documented in question 11-14, this spending must be offset by expected savings or reallocation of existing resources. These spending reductions must be verifiable, permanent, and credible. This information must match the information provided in your Financial Impact Table. Projected additional income may not be used to offset increased ongoing spending because additional income is not allowed by statute. Please consider inflationary costs like salaries and maintenance fees when considering whether increased ongoing spending has been offset for at least five years after June 30th of your grant year. For applications without increased ongoing spending as documented in questions 11-14, please demonstrate how you can sustain the project without incurring any increased ongoing costs.
Explain in detail how this project will sustain itself for at least five years after June 30th of your grant year.

K to Industry is self-sustaining because of the formation of a Grant Advisory Board and PBL teacher council, Tolles Technical Center’s commitment to the project, and the organizational structure and commitment of Dublin City School’s administration. The Grant Advisory Board (members: STEM Manager-Clavin, PBL teacher council, City of Dublin Economic Development, ESC, CSCC, Tolles, Cardinal Health, Honda, Cybervation, MurphyEpson (vendorOptional), Xcelerate (vendorOptional)) will meet regularly through the grant year and 5 years after to perform reviews, provide feedback and determine modifications for program improvement. The PBL teacher council will comprise of 20 teachers in the District. The council will be a teacher resource and will identify goals related to benchmarking data for project evaluation, program modifications and long-term sustainability. Tolles Technical Center is a key partner in this program and is vital to its sustainability. Not only will they manage the IT Pathway as a satellite offering but they also can help with the expansion of the CCP through the seven districts they serve. The CPP platform will be built with plans for expansion at the outset. The more DCS uses the CCP, the more sustainable the platform will be by creating a larger pool of businesses and mentors. More mentors means more available support and unique opportunities for teachers and students. Clavin has worked with DCS administration to develop a STEM strategic plan using a decision matrix with ranked evaluation criteria, feedback from parents, stakeholders (industry and higher education), and staff. K to Industry already is a large component of the District strategic plan. This funding would put the plan into action. Once the grant year has ended, Clavin will allocate 35% of her time to K to Industry over the next 5 years to work closely with Tolles Technical Center on the industry infusion, PD training, awareness and the IT Pathway as well as expand pathway offerings and plan for expansion of the program in other districts. Clavin will use currently allocated STEM budget funds to support teacher training for 5 years beyond the grant year. Any unexpected funds will be paid for out of the project savings. Clavin’s experience and the District’s dedication will keep this program growing and sustainable. -Partners currently involved in this project are enthusiastic about assisting with the planning, implementation, and success of the program. Student achievement, spending reduction, increased classroom resources and shared delivery methods are the utmost priority for the all, however, each of the partners have additional incentives to get involved and stay involved. The support they provide will make this an outstanding long-lasting program. Examples of incentives for each partner are: Columbus State will increase enrollment, higher completion rates, and expand their digitized dual enrollment offerings; Tolles Technical Center will increase their attendance from Dublin City Schools; ESC will benefit from having access and knowledge to professional development materials they could use for fee-based PBL courses with industry and educators in the future; Tolles must obtain funds for packaging to future entrants as desirable and are giving back to their community. The program also helps to enhance DCS, which can attract high profile employees; Xcelerate Media, Cybervation, Inc., and MurphyEpson will get paid for services (a customer); City of Dublin will help raise student achievement and, therefore, DCS scores. This attracts more business and residents and keep good employers local; Dublin City Schools benefits from all aspects of this project.

D) IMPLEMENTATION - Timeline, scope of work and contingency planning

16. Please provide a brief description of the team or individuals responsible for the implementation of this project, including other consortium members and/or partners.

This response should include a list of qualifications for the applicant and others associated with the grant. If the application is for a consortium or a partnership, the lead should provide information on its ability to manage the grant in an effective and efficient manner. Include the partner/consortium members’ qualifications, skills and experience with innovative project implementation and projects of similar scope.

Enter Implementation Team information by clicking the link below:

Add Implementation Team

For Questions 17-19 please describe each phase of your project, including its timeline, scope of work, and anticipated barriers to success.

A complete response to these questions will demonstrate specific awareness of the context in which the project will be implemented, the major barriers that need to be overcome and the time it will take to implement the project with fidelity. A strong plan for implementing, communicating and coordinating the project should be outlined, including coordination and communication in and amongst members of the consortium or partnership (if applicable). It is recognized that specific action steps may not be included, but the outline of the major implementation steps should demonstrate a thoughtful plan for achieving the goals of the project. The timeline should reflect significant and important milestones in an appropriate and reasonable time frame.

17. Planning - Activities prior to the grant implementation

* Date Range: Jul 2014 - Nov 2014

* List of scope of work (activities and/or events including project evaluation discussions, communication and coordination among entities).

Once the grant is awarded two groups will be formed: a Grant Advisory Board that consists of all partners, and a PBL Teacher Council that consists of 20 teachers from the District. The Grant Advisory Board will hold 6 meetings during the planning phase. The first meeting will be within two weeks of the award notification. By the second meeting, 4 project teams (industry infusion CCP, industry infusion online PD, IT Pathway, marketing and evaluation) along with schedules and grant deliverables for each team will be established. Key actions throughout the planning phase are: PBL teacher council applications and selection (Aug 2014); first PBL teacher council meeting to identify benchmarking data and council goals (Sep 2014); and workforce/community/parent open house (Oct 2014). The following actions, benchmarks and deliverables (with listed responsible organization) will be due at the planning phase milestone checkpoint (Nov 2014): communication and marketing plan including message strategy (MurphyEpson); IT Pathway design with courses identified via documented pathway (CSCC); baseline data report for project evaluation (ESC); storyboards for 50% of online instructional materials (Xcelerate); presentation of CPP software design (Cybervation); updated course handbooks include the IT pathway (DCS). Handbooks must be ready for publication by Dec 2014. Communication throughout the project will be made possible via email, face-to-face and virtual meetings, and free Google Apps collaboration tools. The Grant Advisory Board, PBL Teacher Leader Council, and project teams will have Google Plus accounts and will be put into Google circles for collaborative efforts.

* Anticipated barriers to successful completion of the planning phase

The primary barrier is the amount of time available for project partners to plan a high quality, complex program that is sustainable and scalable. To address this, partners have been strategically selected. Clavin and the ESC will work collaboratively to maintain accountability and ensure benchmarks and deliverables are met. Clavin will assign members to teams to align strengths and schedules. Clavin will serve
18. Implementation - Process to achieve project goals

* Date Range: Nov 2014-Jun 2015

K to Industry Grant Advisory Board meetings will be held twice per month through Jan 2015 and then monthly through June 2015. Meeting minutes and team updates will be documented and shared in common Google Apps. A proposed process to achieve project goals is: An interim measurement of the following deliverables (with listed responsible organization) will be presented at a milestone check in March 2015: A) 4 teacher council meetings (Dublin City Schools (DCS)/Clavin); B) pilot version CCP software (Cybervation); C) 25 mentors/5 companies recruited/added in the CCP (DCS/Industry); D) 80% online PD modules delivered (Xcelerate); E) 80% dual courses digitized (CSCC/Clavin); F) 80% learning lab/hackerspace equipment purchased (DCS/Clavin); G) communication strategy launched, data collection on program awareness (M/FlybyLight); H) IT Pathway completed, course handbook updated. An interim measurement of the following deliverables will be presented at a milestone check in June 2015: A) teacher council evaluates/refines project goals/progress with Advisory Board input (DCS/Clavin); B) recruit 50 mentors/10 companies to CCP (DCS/City of Dublin); C) train 3 teachers/90 students in pilot CCP (DCS/Esc); modify based on pilot, target CCP launch in June 2015 (Cybervation/DCS/Esc); D) 100% dual courses digitized, teachers trained (CSCC/Clavin); E) 90% learning lab/hackerspace equipment purchased, installed (DCS/Clavin); F) 100% online PD completed (Xcelerate); G) PBL train-the-trainer cohort 1 (30 teachers) Summer Externship Academy; each design 1 PBL for the 2015-16 school year (DCS/Esc); H) 20 students enrolled in IT Pathway for 2015-16 (Tolles/DCS).

* Anticipated barriers to successful completion of the implementation phase.

Primary barriers include mentor recruitment and teacher adoption of PBL and technology in the classroom. Developers of Coolhub stated they had no problems with the technology, but rather with adoption of technology. Numerous mentors participated in the portal, but teacher usage was low. The train-the-trainer model is designed specifically to address this issue. A group of teacher leaders that are knowledgeable about and use the CCP will demonstrate its ease and benefits. Teacher leaders who support other teachers and PD, trainings, and the summer academy will facilitate inquiry, experimentation, and integration of the CCP into the classrooms. The communications events like "Hour of Industry" will introduce the CCP to teachers in a supported way. The IT Pathway presents potential barriers as identified by district staff at program buy-in meetings. One is student transportation. DCS currently offers 5 academies similar to the IT Pathway but without the work-based program or dual enrollment. Currently, students start their day at the school in which the academy is housed and then self-drive to their home school. Similarly, students will provide their own transportation for the IT Pathway. A second barrier is student enrollment in a new program. Predictions of enrollment are based off student interest data which indicates 51% of students in Dublin are interested in Science and Technology as a career field. Also, CSCC was the first, second and fourth most attended college among Scioto, Coffman, and Jerome High School graduates, respectively. Decreased student enrollment in AP/IB classes due to increased course options through the Pathway also is a concern. A possible solution is to offer certification courses during the school day and at night so students have access Pathway and AP/IB courses. The marketing and communication plan will be key in overcoming barriers to recruitment, adoption of technology, and enrollment.

19. Summative Evaluation - Plans to analyze the results of the project

* Date Range: May 2015-Jun 2015

Project evaluation will be led by ESC. Evaluation data provided throughout the project will be used to improve effectiveness in reaching goals and inform decisions on future programming. To ensure that milestones are met the Grant Advisory Board will serve as an evaluation team, set expectations, review the logic model and determine data gathering instruments during the planning phase. A proposed plan to analyze the summative results of the project is: FY15 review: Conduct a front-end survey of program participants and stakeholders (measure attitudes and perceptions of STEM subjects, industry/career connections, and instructional practices). Evaluate initial PBL PD to measure quality, changes in knowledge and attitudes. Implement pre- and post- tests to assess student gains in content knowledge when a PBL is implemented in classroom. Collect quantitative benchmarking measures for number of mentors/industries, completion of Community Connect Portal, PBL designs, digitized course design, student interest and enrollment for IT pathway. A evaluation summary will be prepared at the end of FY15 to include both narrative information and benchmarking information. -FY16 review: Additional data to be collected insure project success include: Collect pre- and post program standardized test scores for IT Pathway students. Conduct post surveys and focus groups for stakeholders. Narrative information will be collected throughout the planning and implementation phases through focus groups, surveys, interviews, classroom observations, industry observations and close-ended surveys. Annual progress measurement reports will be updated for the next 5 years. Programmatic elements such as efficacy of career skills assessments, efficiency of the industry portal, quality of PD and PBL activities, student achievement, replicability, scalability, change in teacher/student behavior and practice, and partner communication and collaboration will be evaluated and reported.

* Anticipated barriers to successful completion of the summative evaluation phase.

A primary barrier to summative evaluation is the short time-frame from award notification to planning to implementation. FY15 will consist of mostly planning activities and foundational development so evaluations of project impact on students and teachers will be indirect. To
address this barrier, the project outcomes are directly related to the foundational elements to ensure long-term impact on student achievement, shared delivery, cost savings, and workforce development. Additional barriers are related to evaluating success in the areas that are difficult to measure directly. This might include student engagement, mastery of 21st Century Skills, and long-term success of students after completion of the Pathway. K to Industry will develop targeted rubrics to assess 21st Century Skills and PBL design quality much like those from the Buck Institute for education and ONET Innovation Program Rubrics. K to Industry also will focus on building positive student-teacher-mentor relationships to encourage students to maintain contact with educators and mentors long after graduation.

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

The response should illustrate the critical instructional and/or organizational changes that will result from implementation of the grant and the impact of these changes. These changes can include permanent changes to current district processes, new processes that will be incorporated or the removal of redundant or duplicative processes. The response may also outline the expected change in behaviors of individuals (changes to classroom practice, collaboration across district boundaries, changes to a typical work day for specific staff members, etc.). The expected changes should be realistic and significant in moving the institution forward.

Please enter your response below:

| Tolles Career and Technical Center (TTC) is vastly underused in Dublin City Schools (DCS), only 3.5% of 11th and 12th graders attend TTC. Students are hesitant to leave their DCS and travel by bus for 30 minutes to TTC. K to Industry will build a foundation to provide additional dual enrollment programs (IT Pathway) for DCS high school students, allowing them to remain in DCS boundaries. Partnering with TTC will build greater collaboration between the two entities and their teachers through a shared service model; expand shared service to new programs for TTC to reach a greater body of students; reduce spending, and increase availability of career technical education in the District. Additionally, K to Industry should change misconceptions by students and parents of Career Technical Centers as "vocational education" to an understanding that Career and Technical Centers provide rigorous academics with opportunities to earn dual enrollment credit from two- and four-year colleges and universities and prepare high school students for college and STEM industry careers. K to Industry's instructional design is project-based learning (PBL) with industry experts and educators collaborating. PBL represents a paradigm shift from traditional teaching and learning. While student achievement increases with PBL, transitioning teachers from traditional instruction to a PBL environment can be intimidating especially when you add in authentic content connections through direct industry relevance. K to Industry is designed to provide teachers and industry mentors with professional development and curriculum design experience so that PBL is central, not peripheral, to the curriculum. Currently, teachers may use projects for practice, application or enrichment. K to Industry will focus on PBL where students learn the content via the project and the project is the central teaching strategy. The PBL teacher council on industry-centered PBL will include at least one teacher from each building. In the long term the hope is to have enough teachers trained to be a coach and facilitator that the council members can rotate and there will be numerous teachers within a building available as a resource. This growth in resources will add to the operational efficiency of K to Industry. Utilizing Clavin's position to collaborate and collect information from teacher leaders on classroom projects consistency, accuracy and efficiency will be prevalent. Many projects are happening throughout the District in which teachers from other buildings are not aware. Clavin is currently working on identical authentic projects at multiple schools which removes duplicate and redundant work as well as opened lines of communication between buildings. For instance, Clavin is assisting with a PBL activity on reducing noise in the cafeteria in two fifth grade classes at two different schools. She is also working on an energy conservation project which will result in a building to building competition. -Columbus State's digitized dual enrollment courses is a new delivery model. Once established successfully within the District more pathways and al la carte dual enrollment courses can be offered with ease using digitized courses created from funds provided by the Fall 2013 Straight A Fund to Marysville Early College and Pathways to Prosperity. The Columbus State courses will be offered simultaneously to many districts which will result in student and teacher collaboration across districts. For instance, a student in Cleveland and a student in Dublin will be taking a specific digitized course at the same time can collaboration virtually. Students often have projects they are working on for extracurricular groups or hobbies. The digital learning lab and hackerspace will provide as a learning space as well as a "tinker" space. |

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

The responses in this section are focused on the ability to design a method for evaluating the project's capacity for long-term sustainable results. Therefore, the questions focus on the method of defining the problem(s) the project hopes to solve and the measures that will determine if the problem(s) have been solved.

21. 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.

The response should provide a concise explanation of items which provide rationale that will support the probability of successfully achieving the goals of the project. Answers may differ based on the various levels of development that are possible. If the proposal is for a new, never before implemented project, the response should provide logical, coherent explanations of the anticipated results based on some past experience or rationale. For projects that have been implemented on a smaller scale or successfully in other organizations, the response should provide the quantifiable results of the other projects. If available, relevant research in support of this particular proposal should also be included.

Please enter your response below:

| The U.S. Dept. of Commerce reports that STEM occupations are projected to grow by 17% by 2018 and there is a lack of skilled labor to fill open positions in the City of Dublin (Columbus 2020, 2013). Practices identified in promoting student interest and engagement include: hands-on learning activities; projects having real-life context and relevance; opportunities for collaborative work; increasing confidence in STEM fields; contact with role models and mentors; parental involvement; and providing career information (Project Tomorrow, 2008). K to Industry was developed with these in mind. There is a high likelihood of achieving our goals based on the following: 1) Dublin's current Prof. Internship Program (PIP) in existence for 20 years and has demonstrated positive results in student achievement. A study presented from the Nat'l Acad. Foun. stated that high quality internships results in motivation, career preparedness, self-awareness, financial awareness, strength and ability to improve. One hundred percent of PIP alumni continue on for a post-secondary degree. In alumni surveys, 80% state that the participants feel the program increased their awareness of the importance of networking and planning for the future and they gained skills in public speaking, time management, organization and interpersonal skills. 2) DCS offered a teacher externship program that was at capacity each year it was held. In a recent District wide survey, teachers expressed a strong desire to provide resources to increase |
22. Describe the overall plan to evaluate the impact of the concept, strategy or approaches used in the project.

This plan should include the methodology for measuring all of the project outcomes. Applicants should make sure to outline quantitative approaches to assess progress and measure the overall impact of the project proposal. The response should provide a clear outline of the methods, process, timelines and data requirements for the final analysis of the project’s progress, success or failure. The applicant should provide information on how the lessons learned from the project can and will be shared with other education providers in Ohio.

* Include the name and contact information of the person who will be responsible for conducting the evaluation and whether this will be an internal or external evaluation.

K to Industry will include a comprehensive evaluation plan to determine success in meeting goals for teaching and learning, shared services, cost savings, and classroom resources through an innovative, comprehensive approach to workforce development. Dr. Thomas Reed, ESC of Central Ohio (external evaluator) will conduct the evaluation of the K to Industry program. Reed has been involved in planning the grant proposal and will meet with the Grant Advisory Board upon award of the grant to determine specific metrics for a statistically valid evaluation. Based on feedback from the Grant Advisory Board, Reed will create pre- and post-measurement tools and administer these to grant participants. Reed will manage the evaluation database, run analytics and synthesize the results. Clavin (project manager), with help from partners, will assist in the collection of information and school data and facilitate dissemination of evaluation information throughout the project period to the Grant Advisory Board, the Board of Education and the Ohio Department of Education, as required or needed for project monitoring. Reed will create intermediate and final reports and present evaluation findings.

* 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 project’s progress).

Considerations for evaluation (short and long term outcomes): 1) Implementation - did we do what we set out to do?; 2) Student achievement - are our students benefitting?; 3) Student growth - how do the impacted students grow compared to students outside the program?; 4) Teacher growth - how has this grant impacted how instruction is delivered and how teachers collaborate?; 5) Financial - has the grant been sustainable and financial goals met?; 6) Workforce development - how has this grant impacted workforce needs?; 7) Dual enrollment - How has the grant increased earning of college credit in HS?; and 8) Management - How are we performing as a collaborative advisory group? Quantitative data FY15 includes: number of industry partnerships/mentors, PD outcomes, number of PBLs implemented, CCP usage, learning analytics, and mentor contacts, pre- and post-PBL assessment data, assessment and survey data for students enrolling in IT Pathway, and survey data. Qualitative data includes: stakeholder interviews, classroom observations, and observation of industry experiences. The evaluation plan incorporates intermediate reports throughout FY15 analyzing the project’s progress against quantitative benchmarks established in the proposal and attainment of grant outcomes (reviewed at Advisory Board meetings) and an evaluation at the end of FY15 (both formative and summative). Data will be collected throughout the grant to monitor and adjust during implementation of IT Pathway courses, sustained PD, and development of resources. The evaluation plan culminates with a summative evaluation at the end of the 5 year period, combining longitudinal data analysis and synthesis of information for long-term sustainability and replication. Components of the ONET Innovation rubrics can be used to measure change over time and attainment of long-term goals. Findings will be presented to the Grant Advisory Board, Dublin City Schools and ODE. Lessons learned will be shared via the CCP.

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

The evaluation design includes both process and product assessment to: better determine the effectiveness of the program for participants; document that project objectives were achieved; provide information about service delivery that will be beneficial to program staff, and enable program staff to make changes that improve program effectiveness. Potential barriers and project milestones have been identified in the project timeline. Grant Advisory Board meetings, collection of data to monitor progress toward milestones, and the engagement of highly qualified partners and service providers will support the monitoring and modification of the project plan if sufficient progress is not made. Three components are critical to the success of the program: 1) the CCP provides access to industry mentors and information, curriculum, communication and professional development and will be accessed by teachers, students and other stakeholders; 2) establishment and maintenance of industry partnerships is essential to development of the resources in the CCP and mentoring; and 3) development of the dual enrollment digitized courses will support the IT Pathway. Clavin will have dedicated time to monitor the progress, development and implementation of these three components on a monthly basis to insure progress during the planning and implementation phase. There is a high likelihood of success in meeting the project goals through consistent progress monitoring and collaborative engagement of the partners. In addition, Clavin and the external evaluator will conduct longitudinal analyses of the impact of K to Industry by compiling formative and summative data annually. Based upon the external evaluator's reports, the Grant Advisory Board will determine the overall effectiveness of the program and make modifications for subsequent years.
23. Describe the substantial value and lasting impact which the project hopes to achieve.

The response should provide specific quantifiable measures of the grant outcomes and how the project will lead to successful attainment of the project goals. Applicants should describe how the program or project will continue after the grant period has expired.

Please enter your response below.

The goal of K to Industry is to develop students that have strong fundamental and 21st Century skills to foster success in college, the workforce, and beyond. By 2020, two-thirds of jobs nationally and 60% of jobs in Ohio will require a college education. Less than 36% of Ohio’s working population (age 25-64) had attained at least an Associate’s degree in 2010 (Complete College America). Central Ohio Compact, a regional strategy for college completion and career success, aims to have 60% of the region’s adults earning a college certificate or degree by 2025. To achieve this, primary and secondary education must develop college- and career-ready students. K to Industry will provide DCS students opportunities for career exploration, engagement with industry professionals, and immersion into the workforce as early as Kindergarten and support them through graduation. Central Ohio Compact identified strategies to reaching the 2025 goal: 1) Planning beyond college. K to Industry aligns with the needs of and access to careers necessary for planning beyond college. 2) Align and prepare students academically. K to Industry’s focus on PBL, mentoring, and career pathways enables students to transition to a college degree through curricular alignment beginning in middle school to give students more opportunities to accelerate their learning, eliminate the need for college remediation, guarantee pathways to college degrees, and strengthen technical and 21st Century Skills. 3) Make college more affordable. K to Industry students can graduate high school with a technical certificate and do a paid work-study to help pay for college tuition. K to Industry also promotes a deeper understanding of core content through industry-centered PBL with a curriculum and assessments based on workforce needs. K to Industry is replicable, scalable and has a lasting impact due to the solid strategic plan; ongoing development, growth, and modifications; collaborative communications; shared resources and delivery; and a strong committed partnership. Success of this program could not happen without teacher support. Many teachers have not worked in the industry and are not familiar with real-life applications of core content. Industry professionals can act as resources, field experts, and mentors. The CCP, a vehicle for collaboration, content delivery and shared resources, is vital to integrating community, industry, and education in a well-planned, teacher-supported environment. The DCS Superintendent, directors, principals and staff fully support K to Industry and are dedicated to ensuring its success. Beginning with the Class of 2028, K to Industry will increase student success in college by 10% (evaluation assistance from CSCC); increase City of Dublin IT and Computer Science workforce by 2.4% (evaluation data gathered from regional workforce reports, City of Dublin and industries); and 3) lower tuition debt for IT Pathway students in CSCC work-study by 50% (evaluation assistance from CSCC).

24. Describe the specific benchmarks, by goal as answered in question 9, which 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 applicant should provide details on the quantifiable measures of short- and long-term objectives that will be tracked and the source of benchmark comparative data points. Responses should include specified measurement periods and preliminary success points that will be used to validate successful implementation of the project. If a similar project has been successfully implemented in other districts or schools, identification of these comparable benchmarks should be included.

* Student Achievement

Short term evaluation will occur Aug 2014 to Jun 2016 and will include pre- and post-implementation data. Baseline data will be collected during program planning (Aug 2014) and when the CPP is initialized in the classroom (Aug 2015). A post-evaluation for all topics will be performed Jun 2016. Based on feedback, modifications will be made. There is a lack of quantitative research on the effect of industry infusion into the classroom and, therefore, some target goals are predictions based on teaching methodologies such as PBL, work-based study, and dual enrollment. -The program will be evaluated annually for 5 years after the grant year. Short- and long-term evaluation data, benchmarks and goals for industry centered PBL include: 1) Data: pre- and post- surveys on student attitudes towards learning in PBL environment, Goal: 80% of PBL students report using skills outside of the classroom (Benchmark: Knowledge in Action Research); 2) Data: comparative evaluations between PBL and non PBL classrooms on student test results, Goal: PBL student scores higher than non-PBL students on course content (Benchmark: Knowledge in Action Research); 3) Data: pre- and post- student scores on PBL career skill rubrics, Goal: 15% increase in student achievement. -Short-term and long-term evaluation data and goals for the IT Pathway include: 1) Data: number of students that enroll in the program, Goal: 15 students in FY16, 45 students in FY17, 60 students in FY18-20; 2) Data: number of students graduating from high school with a certificate (completion rate), Goal: 80% average completion rate with the first graduating class in 2017; 3) Data: number of students continuing on work-study, further degree and/or workforce, Goal: 90% in FY 17-20. The IT Pathway is a new offering and there are no benchmarks for these goals. K to Industry will look toward benchmark information from similar programs implemented around the country for gauging early success of the program.

* Spending Reduction in the five-year fiscal forecast

Operational efficiencies resulting from the industry-centered PBL, the train-the-trainer model and the PBL teacher council will be tracked via the number of PBL activities that utilize the resources provided across the District throughout the year. A goal of this program is to have 60 PBL activities throughout 20 buildings in FY16 (3 PBLs/building) with an additional 60/year thereafter. This number is well beyond what the current infrastructure can support. Hence, savings due to operational efficiency will begin in FY16. The benchmark for this goal is the current rate of PBL usage within District buildings. -Savings from the IT Pathway is achieved by reduction in a DCS staff member with the creation of a new Tolles satellite program on site at Dublin. This would save Dublin $81K annually and $405K after 5 years. Cost savings will be tracked through the human resources staffing plan. -Savings in marketing and communications through shared delivery resources are projected to be $76,000 annually and $380K after 5 years from 2016-2020. Clavin will keep a record of the marketing delivery methods and report results annually at evaluation checkpoints. Spending reductions in marketing and communications will be tracked by the number of publications and announcements delivered through partners sources other than DCS.

* Utilization of a greater share of resources in the classroom

Short term evaluation will occur from Aug 2014 to Jun 2016. Two sets of "pre" program assessments will be collected (Aug 2014 and Aug 2015). A post-evaluation of the program will be performed Jun 2016. The following benchmarks will be established and modified to maximize classroom resources: number of mentors/industries, completion of CCP, student interest and enrollment in the IT pathway, usage PBL content repository, and teacher PD. -The program will be evaluated annually between FY16 and FY20 although the relationship of increased usage is not linear with time. IMSA's Coolhub Mentor Matching reported that as the portal became more established more mentors and students participated. The program added 1,000 users in 31 months initially and is now on track to add 1,000 users in a 10-month time
period. Coolhub grew to 2,400 users in 5 years. Due to lack of data points, a linear regression is assumed to determine goals for growth. Short-term and long-term evaluation data and goals for the CCP and digital learning/Hackerspace lab include: 1) Data: number of mentors by end of fiscal year, Goal: 100 mentors (FY16), 250 (FY17), 600 (FY18), 1300 (FY19), 2850 (FY20); 2) Data: number of teachers using CCP, Goal: 75 teachers (FY16), 150 (FY17), 300 (FY18), 600 (FY19), 1200 (FY20); 3) Data: number of students using CCP, Goal: 200 students (FY16), 500 (FY17) 2000 (FY18), 3600 (FY19), 6000 (FY20); 4) Data: number of community education and/or night classes offered in digital learning lab, Goal: 0 (FY16), 1 (FY17), 2 FY18), 3 (FY19), 4(FY20) 4) Data: number of PBL units stored in the content repository, Goal: 70 (FY16), 140 (FY17), 210 FY18), 280 (FY19), 320 (FY20). Program modifications will be made based on evaluation results and recommendations from the Grant Advisory Board.

* Implementation of a shared services delivery model

The program's short-term evaluation will occur from Aug 2014 to Jun 2016. Two sets of "pre" program data will be collected, one during program planning (Aug 2014) and one when the program has been initialized in the classroom (Aug 2015). A post-evaluation of the program will be performed Jun 2016. The following benchmarks will be established and modified to enhance delivery methods: pre- and post-evaluation of online instructional models using Quality Matters rubric and subject content surveys; CCP data analytics on usage and completion of online PD offerings; teacher and industry pre- and post-evaluation of summer externship academy; learning analytics from CCP on usage including number of users from outside the District; data from CSCC on dual enrollment course offerings. -The program will be evaluated annually between FY16 and FY20. Short-term and long-term evaluation data and goals for the CCP, PBL teacher council, online PD, and dual enrollment courses include: 1) Data: user experience and satisfaction of online PD modules, Goal: 80% user satisfaction and 80% user completion rate; 2) Data: number of participants using online PD modules, Goal: 3 teachers/building and 20 industry professionals in FY16, additional 3/building/year (FY17-FY20) for a total 300 teachers; 3) Data: user experience and satisfaction of externship offering, Goal: 80% user satisfaction and 90% user completion rate; 4) Data: percentage of users of CCP located outside DCS, Goal: 1% (FY16), 5% (FY18), 10%(FY20); 5) Data: evaluations of dual enrollment courses collected by CSCC; Goal: to refine the courses based on assessments. Program modifications will be made based on evaluation results and recommendations from the Grant Advisory Board.

* Other Anticipated Outcomes

The CCP has the ability to provide data analytics that can be used to optimize learning and usage. It can provide information for teachers on necessary modifications to teaching strategy for learning style, differentiation and student intervention. Information about teacher and industry usage, popular and unpopular features, and efficiency and effectiveness measures can also be collected. Because the system has not yet been designed, the specific measurable are not yet determined and will be based on recommendations made by the Grant Advisory Board. The short- and long-term measurable data analytics from the CCP will be determined by the end of the planning phase (Nov 2014).

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

☐ Yes
☐ No

If the applicant selects "Yes" to the first part of the question, the response should provide an explanation of the time and effort it would take to implement the project in another district, as well as any plans to share lessons learned with other districts. To every extent possible, applicants should outline how this project can become part of a model so that other districts across the state can take advantage of the learnings from the proposed innovative project. If there is a plan to increase the scale and scope of the project within the district or consortium, it should be included here.

* Explain your response

A major feature of K to Industry is its scalability within the District as well as its replicability outside of the District. Once initiated, the Community Connect Portal (CCP) will be accessible to the entire District and community and industry members. The CCP will have the capability of continual growth and development by increasing the number of industries and mentors, refinement and addition of PBL and PD resources, and increased opportunities for collaboration and communication among industry, the community, post-secondary institutions and the local school district. With a community of 40,000 and a working professional population of 60,000, Dublin is the perfect place to execute the K to Industry program and implement an innovative web-based tool (Community Connect Portal) to connect industry, educators and students. The CCP is a web-based learning exchange portal where the resources available through the Portal will be accessible to educators, students and industry outside of Dublin City Schools. Dublin industries will provide a foundation for other school districts as they incorporate their own local industries into their CCP. In Ohio, the Community Connect Portal can become a platform for shared learning across the state. To cover the costs of scaling the CCP, online PD and marketing tools could be sold as a subscription to districts. Alternatively, industries could pay a premium for inclusion in the CCP or provide sponsorships so there is no costs to districts for continued maintenance and development. Replication of K to Industry's CCP would be time and cost efficient. Districts would need to obtain user accounts. Dublin City Schools would share lessons learned and resources with teachers and the community. School districts could personalize their program through many means ranging from appointing an internal staff member to target the needs in their area, to leveraging a career center, to utilizing industry as a sponsor. A train-the-trainer model like the one proposed takes 3 years to fully implement. The immersion portion of the K to Industry program utilizes Columbus State Community College's dual enrollment digitized courses. Once these courses are created, any district can adopt them by enrolling a teacher in CSCC PD (5 days training). The IT Pathway will be designed so it is flexible to meet any district's needs and a student can leave at any time. If a student decides to go to college in a location that does not have a work study program they can use their earned certificate to obtain a high paying part-time job.

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 time frame. The Governing Board of the Straight A Fund reserves the right to conduct an evaluation of the project and request additional information in the form of data, surveys, interviews, focus groups and other related data on behalf of the General Assembly, Governor and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant, and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP).

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<td>First Name</td>
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<td>Thomas</td>
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<td>Kim</td>
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## Implementation Team

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<th>First Name</th>
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<tr>
<td>Kim</td>
<td>Wilson</td>
<td>Superintendent, Tolles Technical and Career Center</td>
<td>As the superintendent of Tolles Technical Center Kim Wilson will oversee all operations of this partnership as it pertains to Tolles. Wilson will be highly involved in the planning of the IT pathway, specifically in logistics and delivery. She will assign marketing and planning personnel as well as the teacher facilitator of the IT Academy. Wilson will ensure that all deliverables that are Tolles responsibility will be completed and delivered in a timely fashion. Looking into the future Wilson will be at the core of expansion of the program by utilizing the seven other districts Tolles services as potential users of the program and assisting with further dissemination beyond Tolles’ service area. Wilson will assign two people within Tolles Tech. Center to assist with the planning and marketing of the IT Pathway. Wilson and the other two Tolles representatives will attend the grant advisory board meetings and will be provided with a schedule.</td>
<td>Kim Wilson has served as superintendent of Tolles Technical Center since 2011. Her previous experience includes superintendent of Ohio Hi-Point Career Center (8 years), Career-Technical Director for Mad River Local Schools (5 years) and Instructor. Wilson is the president of the Ohio Association of Career Technical Superintendents as well as serving as a Director on numerous Chambers of Commerce (Logan, Union, Champaign, Urbana). Her academic background includes an Educational Administration, Personal Training and Development and a comprehensive Business Education.</td>
<td>Since Wilson started at Tolles she has established two satellite academies in Hilliard City Schools. While at Ohio Hi Point Wilson established 23 high school satellite programs at associate schools in 5 counties with an enrollment of 1,103 students. She was also highly involved in the renovation and construction of new laboratories at Bellefontaine High School. Because of her experience in developing these laboratories and programs in other districts, establishing an IT Academy she is the most highly qualified person to assist in developing this program. Wilson was also on the planning and implementation team for Teachers in Industry for Educational Support (TIES), a summer internship program in which teachers worked on a defined problem for business/industry and wrote curriculum based on their experiences. Wilson screened applicants, recruited business partners, matched selected teachers to internship experiences, and facilitated curriculum development sessions.</td>
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<tr>
<td>Dana</td>
<td>McDaniel</td>
<td>Deputy City Manager and Director of Development, City of Dublin</td>
<td>McDaniel will be responsible for relationship management between schools and local industry/businesses; facilitating introductions and building partnerships between the schools, city and businesses. Dublin, under McDaniel's guidance, will be conducting a workforce.</td>
<td>McDaniel possesses an undergraduate degree in Public Administration from Miami University/Ohio (1987); a Masters of Public Administration from The Ohio State University, John Glenn School of Public Affairs (1990); and a Masters of Strategic Studies from the United States Army War College (2003). He is a General in the Ohio National Guard. McDaniel has and continues to serve on several regional and local boards (Franklin County Public Health, Franklin County Commission, Ohio National Guard).</td>
<td>McDaniel's team has retained[C1], [expanded is the same as created] attracted and created over 13,000 jobs for a City with a population of 43,000. The city was named Best Small City for Startups by Business Week, and Best Small City for small businesses by Fox Business News. Dublin has received several awards from both the</td>
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analysis through the year of the grant that will result in the following information: 1) Specific industry advisory taskforces comprised of high level representatives from the IT Commerce/CS industry and the Medical Bioscience/Healthcare industry (Form 2 Dublin); 2) Direct marketing program developed to cultivate strategic relationships stemming from IT and Medical industry-targeted businesses within Dublin leveraging their networks and supply chain; 3) A gap analysis to determine what existing businesses within these 2 industries are missing from their supply chain, service needs and workforce needs. The information reported in this analysis will help the developing pathway as well as provide guidance for an expansion of the program in the future. McDaniel’s involvement during the planning stage will be to collaborate with MurphyEpson on communication strategies. McDaniel will get involved once the CCP has been developed and recruiting of mentors and companies begins. At the end of the implementation stage McDaniel will help Dublin City Schools reach out to various businesses in the area. McDaniel will be invited to the grant advisory meetings but will not be required to attend until his assistance is needed. He will be provided meeting minutes and a project schedule. Communication will occur via email, phone, virtual and face to face meetings.

County Emergency Management & Homeland Security Agency, Dublin Chamber of Commerce, Dublin Counseling Center/Syntero, ex-officio member of the Dublin Methodist Hospital Foundation Board, and Alumni Board for the John Glenn School of Public Affairs-The Ohio State University; Miami University/Ohio, School of Public Policy, Public Leadership Advisory Committee). He has served on the Boards of the Ohio Assistant Municipal Managers Association (OAMMA) and the regional board of the American Public Works Association (APWA). He is a member of the International City/County Managers Association (ICMA) and International Economic Development Council (IEDC).

International Economic Development Council and Ohio Economic Development Association and has been named CEO Magazine’s Best in Business in the Columbus Region three years in a row. Business First [Italics?] recently named McDaniel as one of 20 People to Know in Economic Development. Dublin was designated a global Smart21 Community four times and a Top7 Intelligent Community twice by the Intelligent Community Forum. In 2013, McDaniel was awarded a Lifetime Achievement Award by the Intelligent Community Forum. He has worked for the city for more than 25 years developing key relationships with local businesses and industry. Consistently he has served as the city’s point person in relationship building between the school district, city and local industry. McDaniel also established the city’s first entrepreneurial center, a program that has averaged nearly 20 new start-up companies per year since 2007. McDaniel created DubLink, a broadband infrastructure system operating throughout the city’s key businesses and neighborhoods. After DubLink, he helped create a 24-square mile WiFi network, which continues to expand, and then co-founded the Central Ohio Research Network (CORN) in partnership with the Ohio Academic Research Network and the Ohio Supercomputer Center.

Purba Majumder
President, Cybervation
With assistance from project partners
Cybervation Inc., a Columbus company founded in 1998, provides
In 2013, Cybervation, widened its vision and
Cybervation will design, implement, verify and maintain the Community Connect Portal. Cybervation will also participate as an industry partner within the K to Industry program by providing information on workforce needs, participating in the community connect portal through a company profile and housing interns within the IT pathway. Cybervation will work closely with the project manager and identified teachers throughout the development stage. Cybervation will be demonstrating updates and soliciting feedback at each grant advisory meeting. MurphyEpson will be working with Cybervation to generate communication and marketing of the CCP. Communication will occur via email, phone, virtual and face to face meetings.

Cybervation's Technology and Online Portal services to businesses nationwide. They offer strategic and results-oriented solutions that help clients meet their short and long-term goals. Their highly-experienced team provides professional, responsive and reliable service ensuring every engagement is completed on time and within budget. The company has developed many complex database driven online portals with a wide range of business intelligence. Below are some online websites and portals they have developed: Plymouth School District, Massachusetts, Student Incident Reporting System (SIRS) (www.plymouthdata.net), Plymouth Alumni website (www.plymouthalumni.net); Ohio Shopping Network - online e-commerce portal for Ohio businesses (www.ohioshoppingnetwork.com); and FundSaver - coupon offer and redemption online portal (www.fundsaver.com).- The management team at Cybervation has 40 years combined Software industry experience. The team is led by Purba Majumder (President) who spent 18 years in Technology in Fortune 100 companies like IBM and JP Morgan Chase. As a Vice President of JP Morgan Chase, she had extensive experience working on large globally-distributed enterprise projects complying with well-structured Software Development Life Cycle (SDLC) and Project Management processes. She also worked as a Senior Developer at IBM (formerly Sterling Commerce). She holds a Master's Degree and is also a PMP Certified IT Project Manager. Cybervation's Chief Operating Officer has spent more than 22 years in Information Technology management. As a Vice President of Information Technology at JP Morgan Chase, he was responsible for development of large enterprise Financial applications supporting more than 3000 concurrent users, processing in excess of $30 billion loan applications per year. He holds a Bachelor's Degree in Mechanical Engineering and M.S. Degree in Robotics.

The many achievements of CoolTechGirls this past year were made possible with the help of a pool of company technology resources. Cybervation worked in close partnership with schools to assess and understand their needs and formulate an effective strategy for training programs. Cybervation has proven expertise to develop complex online applications like NeedNexus (www.neednexus.com) and ScribeSuite (www.scribesuite.com). NeedNexus is an online portal to match consumers (buyers) with service providers. Each service provider has a profile page and advance features to submit quotes on projects. The options and features available are determined by membership levels. Below are some key features: Buyers can search for service providers based on different criteria; service providers have their own profile pages; consumers and service providers communicate through internal messaging. ScribeSuite is a workflow management and document repository portal that monitors and keeps track of audio files and documents throughout the transcription process. The above software features are similar to those of
| Ryan Dunn | Sales Executive, Xcelerate Media (Vendor) | Xcelerate Media will develop online interactive instructional materials with assistance from Clavin and a PBL subject matter expert from ESC. Using Articulate Studio, the materials will have audio and visual effects as well as have data analytics on pupil (pupils or students - might want to stick with one term or the other in the whole document. So far I have seen student used.) interaction, milestone checks, and completion rate. The materials can be easily integrated into any learning management system.
Dublin City Schools will own the material and the source code for the lessons will be provided. Xcelerate Media will also create marketing videos for industry to get involved as well as for the program CCP program as whole. Xcelerate will start working immediately on modules in which the content is identified (i.e. for industry on /or "or?" educational practices).
Xcelerate Media will work closely with the project manager and ESC subject matter expert. Xcelerate will also work with MurphyEpson on the communication and marketing strategy. Progress will be demonstrated and feedback will be solicited at the grant advisory. | Xcelerate Media, located in Dublin, Ohio, provides customized e-Learning and training solutions to assist organizations in training employees and customers on mission-critical topics. Working with multiple Global 1000 companies, Xcelerate Media provides cost-effective solutions to organizations requiring comprehensive training for large audiences. Incorporated in September 1999 by Xcelerate Media is dedicated to one core competency. Xcelerate designs, develops and implements customized e-Learning courseware. By focusing on one competency, they have developed efficient internal processes. This provides customers with higher quality products that are delivered in a timeframe that is much shorter than other providers at a cost-effective rate. Whether they are creating 90 e-Learning courses or 9, all of their projects go through the standard Xcelerate Media process that has been finely tuned since their inception. They guarantee clients a 90 day development time frame, and have never fallen short of this guarantee to a client. Their resources, all local to Columbus Ohio, consist of the following: Courseware Developers, System Architects, Account Managers, Technical Writers, Creative Writers, Project Managers, Instructional Design Experts, Quality Assurance Specialists, Audio Specialists, Video Specialists, Course Narrators, Professional Models, Database Specialists, Translation Services.
Ryan Dunn will be the Account Executive for this project. Ryan has over 7 years experience working with Fortune 500 organizations. He has worked with organizations like Under Armour, Ace Hardware, Honda, Costco, Southwest Airlines, Lowes, and other organizations to identify and scope (I personally am not sure Bob Mahaffey, current President and CEO was head of training and development for a 10,000 person organization, then left the organization to start Xcelerate Media. His leadership and expertise in the training and development industry have helped the organization grow 30% a year, and employ over 50 employees in downtown Dublin. To date, Xcelerate works with 20 of the Fortune 50 and acts as the preferred vendor of choice for custom e-Learning solutions for many of the Fortune 500 organizations today. Xcelerate Media is looked upon as a trusted partner to some of the top educational organizations in the world today. Most notably, they are educational partners with McGraw Hill and Houghton Mifflin to help them achieve their learning and development goals and assist in the creation of e-Learning, instructor-led training, and iBooks that are deployed to students from K-12. In the Columbus area, they have created e-Learning solutions for Cardinal Health, Honda, State Auto, L Brands, Grange, Nationwide, JPMorgan Chase, Wendy's, Scott's, Big Lot's, BMW Financial, Discover Financial, ADS, Huntington and others. Examples of their work can be found on their website. |
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<th>Name</th>
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<tr>
<td>Stacia Edwards</td>
<td>Special Assistant to the President, Columbus State Community College</td>
<td>Edwards will help create and navigate a seamless transition from high school dual enrollment coursework into CSCC. She will work with Dublin City Schools and the partnering companies to formulate the best IT pathway to fit workforce needs. She will facilitate approvals for pathway coursework and logistics. Edwards will provide Columbus State contacts for Tolles to use when selecting and purchasing the equipment to be purchased for the digital learning lab. Edwards will work closely with the project manager, Dublin City Schools Director of Secondary Education, Counselors, partnering companies and Tolles Technical Center to create a symbiotic partnership that provides for the opportunity for 100% of credits to transfer into a post-secondary degree program. An online collaboration folder will be generated for share of documents and communication. Edwards will be provided a schedule and will attend the grant advisory meetings.</td>
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<td>Dr. Edwards</td>
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<td>Dr. Edwards qualifications include more than 25 years of experience in post-secondary education including K-12 community engagement. Formerly she was the Vice President of BattelleEd, Deputy Chancellor; Workforce Alignment and Economic Advancement at the Ohio Board of Regents; and Dean of Science and Math at Wright State University. Her expertise in business engagement will be utilized in the preparation of the students for work based learning. Her previous experience includes the development and implementation of innovative workforce solutions that connected unemployed or underemployed individuals in the state of Ohio with necessary short term training and employment. She has a doctorate in higher education management with research expertise in the relationship between education and labor market.</td>
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<td>Mohan Viddam</td>
<td>Chairman and CEO, Halcyon Solutions</td>
<td>Note: The responsibility text will be identical for the industry partners as they all have the same responsibilities for this project. All companies will provide a representative to the grant advisory board and a representative to attend assigned milestone checks. The following are example company responsibilities for all industry partners (Cardinal Health, OCLC, Halcyon integrates and builds technology solutions to help companies achieve their potential. Halcyon employees strive to exceed their customers’ expectations in every aspect of their engagement. Halcyon is committed to improving the quality of life for Halcyon’s employees and their communities. In addition to ongoing technical training, Halcyon offers employees classes that teach life-improving concepts like meditation and positive thinking. Halcyon is also deeply committed to social responsibility and giving back to the community. Several initiatives in the United States include the Veteran’s Workforce Development Program that provides free IT Training to Veterans and helps them find jobs in the IT industry. Mohan Viddam stated, “Social responsibility is a key aspect of our company’s vision statement and core values. Here at Halcyon our vision is to be recognized as a premier IT business solution provider and the most socially responsible...”</td>
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Honda Logistics, Halcyon, Cybervation): help the schools determine workforce needs for their company and develop an ideal course selection to fit the needs; help the schools develop rubric and assessments for problem based learning classroom activities that will assess students' career skills; help with development of typical industry experiences for Dublin school's creation of online PD for teachers on industry; participate in the community connect portal to help communication between industry, teachers and students; house student interns (unpaid in high school, paid in Columbus State work-study). During the planning stages the industry partners will be an integral part of the IT Pathway development team to assist with course selection in the IT Pathway and the industry infusion -online professional development team to help with career rubrics and assessments. Communication will occur via email, phone, virtual and face to face meetings.

Marie Keister
President and CEO, MurphyEpson (Vendor)

MurphyEpson will develop and launch a communication and marketing strategy for the K to Industry program. This plan will include: development of a concise message strategy to ensure the program purpose is clearly communicated in a persuasive, compelling way; an engagement program to ensure parents, industry partners and educational professionals understand the goals and have opportunities to provide informed input that will ensure the sustainability of the program; the development of a series

MurphyEpson is a full service advertising and public relations agency celebrating its 25th year. The firm has received numerous awards for community engagement and advertising creativity, and is a recognized expert in public policy initiatives. Led by Marie Keister, MurphyEpson has the skills to produce ideas that are on point, whether it's developing a strategic plan, a creative marketing campaign, new brand or slogan, working with the news media or building community consensus for a major public investment. MurphyEpson's strengths lie in the fact that we never run out of ideas - we get the job done on time and on budget with a high degree of service. Because of this, their client relationships are long-term, allowing them to understand and to fully contribute to our clients' success. Marie Keister, AICP, APR, -Ohio STEM Learning Network (OSLN) - Experience STEM Conference To expand the footprint of STEM education in the state of Ohio, OSLN hosted a series of regional conference around the state. MurphyEpson worked with the central Ohio Planning team to brand the event - ExperienceSTEM - and planned and implemented the inaugural local conference that featured a keynote address by Ohio First Lady Frances Strickland. More than 200 attended. -Metro School - Promoting a New Kind of High School In early 2006, the Metro Partnership
of communication tools and tactics that excite students and parents about the program benefits and encourage them to try it. The marketing effort will leverage existing communications channels and partnerships with the City of Dublin, Dublin Chamber of Commerce, Columbus Zoo and 3,000+ Dublin employers. MurphyEpson anticipates developing a program brand, an informational brochure/flier and video to briefly summarize the initiative, talking points, info-graphics for use in social media and a master presentation for project participants, The brand (logo, graphic standards) and message will be used consistently in all communication outlets, from web to social media to video and print materials as well as paid advertising and media relations. The marketing campaign will be further enhanced by inviting students interested in the marketing profession to assist in the development and implementation of the campaign. MurphyEpson will work closely with the project manager, Tolles Technical Center, City of Dublin and Cybervation and Columbus State to assure a communication strategy that fits the needs for educational entities.

lead communication/engagement strategist, facilitator, with 25+ years’ experience, created Engage Public Affairs, LLC in 2004 and purchased MurphyEpson in 2013 after serving as Vice President and Public Involvement Community Practice Leader with CH2M HILL; Keister also was Director of Corporate Communications at Central Ohio Transit Authority; and spokesperson and public involvement manager for transit systems in Louisville, Kentucky and Tacoma/Seattle, Washington. Keister is a much sought-after communication strategist and facilitator. She has facilitated several hundred public meetings and advisory groups, including a joint meeting of the Columbia, Missouri Improve I-70 Advisory Committee and Japan’s Ministry of Land, Infrastructure and Transport and the Ohio 21st Century Transportation Priorities Task Force. She has a Behavioral Sciences/Communication undergraduate degree from The Ohio State University.

Group came to MurphyEpson to handle the brand development, promotional literature and public relations needed to announce the creation of Metro High School - a high school for students interested in math and science. The challenge was to recruit a freshman class while gaining strong public support for the school. -Linden-McKinley STEM High School Columbus City Schools - Ohio STEM Learning Network With the help of Linden residents and leaders, MurphyEpson and Columbus Policy Works developed and executed a community engagement plan to secure support and enthusiasm for the new Linden-McKinley STEM (science, technology, engineering, math) Academy. This slogan for the program was developed in tandem with community leaders: Learning in Linden. Create. Participate. Educate. -Community Engagement that Builds Consensus - Columbus Education Commission MurphyEpson built the largest, most diverse, participatory community engagement program ever witnessed in the City of Columbus, the Tell Us Your Good Idea for Education campaign. The campaign included four focus groups, eight public workshops, 13 targeted meetings, 312 broadcast PSAs, and a one-of-a-kind paid postcard campaign which was launched through libraries, schools, churches and other public gathering places. Every community touched encouraged people to get involved with our schools and participate in a citywide effort to improve the academic achievement of our students.

Tom Reed
Executive Director Center
Dr. Thomas Reed will manage services related
The Educational Service Center of Central Ohio offers a comprehensive

The Educational Service Center of Central Ohio
| Kelly Wilson | Vice President-Human Resources Business Partner, Cardinal Health | All companies will provide a representative to the grant advisory board and a representative to attend assigned milestone checks. The following are example company responsibilities for all industry partners (Cardinal Health, OCLC, Honda Logistics, Halcyon, Cybervation): help the schools determine workforce needs for their company and develop an ideal course selection to fit the needs; help the schools develop rubric and suite of professional development services regarding leadership, curriculum, assessment and instruction. The ESC also has a full range of experienced consultants and services to support the use of instructional technology in the delivery of eLearning professional development. Reed's current responsibilities include implementing and monitoring the Ohio Network for Education Transformation (ONET) partnership and network development and program evaluation. Dr. Reed holds a Ph.D. from The Ohio State University School of Educational Policy and Leadership where he concentrated on neuroscience, brain development, and quantitative statistical methods and data analysis. | Cardinal Health is a $101 billion health care services company that improves the cost-effectiveness of health care. Cardinal Health is an essential link in the health care supply chain, providing pharmaceuticals and medical products and services to more than 100,000 locations each day and is also the industry-leading direct-to-home medical supplies distributor. Ranked #19 on the Fortune 500, Cardinal Health employs 33,000 people worldwide. Kelly Wilson is the VP, Human Resources Business Partner for the Enterprise Information Technology and Customer Care Shared Services organizations of Cardinal Health. Wilson has a Bachelor of Science degree in | All industry partners are dedicated to community involvement. Specifically George Barrett, CEO of Cardinal Health stated, "At Cardinal Health we take our community role very seriously and are committed to being an engaged corporate partner. We strategically target our philanthropic support to results-oriented programs and partnerships that help improve the way healthcare is delivered and that promote healthy lifestyles." Cardinal Health currently houses interns |
assessments for problem based learning classroom activities that will assess students' career skills; help with development of typical industry experiences for Dublin school's creation of online PD for teachers on industry; participate in the community connect portal to help communication between industry, teachers and students; house student interns (unpaid in high school, paid in Columbus State work-study). During the planning stages the industry partners will be an integral part of the IT Pathway development team to assist with course selection in the IT Pathway and the industry infusion -online professional development team to help with career rubrics and assessments. Communication will occur via email, phone, virtual and face to face meetings.

Note: The responsibility text will be identical for the industry partners as they all have the same responsibilities. All companies will provide a representative to the grant advisory board and a representative to attend assigned milestone checks. The following are example company responsibilities for all industry partners (Cardinal Health, OCLC, Honda Logistics, Halcyon, Cybervation): help the schools determine workforce needs for their company and develop an ideal course selection to fit the needs; help the schools develop rubric and assessments for problem based learning classroom activities that will assess students' career skills; help with development of typical industry experiences for

OCLC is a worldwide library cooperative, owned, governed and sustained by members since 1967. Their public purpose is a statement of commitment to each other that they will work together to improve access to the information held in libraries around the globe, and find ways to reduce costs for libraries through collaboration. Gene Oliver, VP, OCLC Global Systems and Information Technology, oversees activities related to technical operations-hardware, software and process. Oliver holds an MBA from Ohio University and a bachelor's degree in Music Education, with studies in Computer and Information Science and Business, from The Ohio State University. He is active in the central Ohio IT community, participating in the Columbus CIO Forum, which meets monthly to talk about new technologies and share information on best practices. He also serves on the planning committee and scholarship evaluation committee for TechColumbus and is on the board of the Dublin Chamber of Commerce. In addition, Oliver has served as adjunct faculty at Franklin

It is a core cultural tenet to partner with staff and students in libraries, museums, archives and schools of all types and at all levels to develop and help support programs for education and research. While much of OCLC's professional development activities to-date have focused on graduate level activities in librarianship and information science supporting interns and fellowship programs, OCLC is pleased to be able to partner at this level to help support this STEM education. More about their support for professional development can be found at http://www.oclc.org/en-US/about/professional-development.html. The success of these programs will easily translate to support for this program. From a technology standpoint, OCLC has over
Dublin's creation of online PD for teachers on industry; participate in the community connect portal to help communication between industry, teachers and students; house student interns (unpaid in high school, paid in Columbus State work-study). During the planning stages the industry partners will be an integral part of the IT Pathway development team to assist with course selection in the IT Pathway and the industry infusion -online professional development team to help with career rubrics and assessments. Communication will occur via email, phone, virtual and face to face meetings.

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<tr>
<th>Steve Youll</th>
<th>Strategic Services Manager, Honda Logistics North America</th>
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HLNA has a vast array of connections and connectivity to multiple civic and economic development organizations. Previous experiences have ended successfully resulting in hundreds of individuals receiving training in the logistics and supply chain industry, MEI/HLNA associates receiving ongoing developmental opportunities for their career advancement while developing a better economic base for central Ohio individuals. The HLNA team brings forth more than twenty-five years of planning, project management and solutions leadership within the supply chain industry. Since 2008, HLNA has received more than $450,000 from multiple local, state and national organizations for training and development and organizational development initiatives. Most recently, HLNA secured $87,900 on behalf of its subsidiary Midwest Express, Inc. for training and development initiatives from the State of Ohio. Additionally, Honda actively partnered with Columbus State Community College (CSCC) and other organizations in the design, development and implementation of the LogisticsART program. LogisticsART was a $4 million award to CSCC for the purpose of designing a logistics-focused training program.
classroom activities that will assess students’ career skills; help with development of typical industry experiences for Dublin school's creation of online PD for teachers on industry; participate in the community connect portal to help communication between industry, teachers and students; house student interns (unpaid in high school, paid in Columbus State work-study). During the planning stages the industry partners will be an integral part of the IT Pathway development team to assist with course selection in the IT Pathway and the industry infusion -online professional development team to help with career rubrics and assessments. Communication will occur via email, phone, virtual and face to face meetings.

<p>| Mohan Viddam | Chairman and CEO, Halcyon Solutions | Note: The responsibility text will be identical for the industry partners as they all have the same responsibilities for this project. All companies will provide a representative to the grant advisory board and a representative to attend assigned milestone checks. The following are example company responsibilities for all industry partners (Cardinal Health, OCLC, Honda Logistics, Halcyon, Cybervation): help the schools determine workforce needs for their company and develop an ideal course selection to fit the needs; help the schools develop rubric and assessments for problem based learning classroom activities that will assess students' career skills; help with development of typical industry experiences for Dublin school's creation | State of Ohio. | Halcyon integrates and builds technology solutions to help companies achieve their potential. Halcyon employees strive to exceed their customers’ expectations in every aspect of their engagement. Halcyon is committed to improving the quality of life for Halcyon's employees and their communities. In addition to ongoing technical training, Halcyon offers employees classes that teach life-improving concepts like meditation and positive thinking. Halcyon is also deeply committed to social responsibility and giving back to the community. Several initiatives in the United States and India are underway, including the development of career training programs for U.S. veterans and efforts that contribute to the preservation of the earth's environment. Mohan Viddam, Chairman and CEO of Halcyon Technology Solutions, Inc. established the Halcyon culture and company initiatives. He has a Master's Degree in Computer Science from the University of South Carolina. Prior to establishing Halcyon, Viddam led all phases of software programming, design, testing, documentation, integration and project management for AT&amp;T | Halcyon started a Veteran's Workforce Development Program that provides free IT Training to Veterans and helps them find jobs in the IT industry Mohan Viddam stated, &quot;Social responsibility is a key aspect of our company's vision statement and core values. Here at Halcyon our vision is to be recognized as a premier IT business solution provider and the most socially responsible organization...equally!&quot; Halcyon was a recipient of the Community Caring Award by Business First and the Pillar Award for Community Service by Smart Business. Halcyon reached out to the school districts to get involved in programs such as K to Industry. | State of Ohio. | aimed at leveraging central Ohio supply chain resources to train and ultimately hire people into the industry. Specifically, more than 500 individuals were trained on the MEI campus. |</p>
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<th>Name</th>
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<td>Kimberly Clavin</td>
<td>Manager of STEM Initiatives, Dublin City Schools</td>
<td>As the lead grant contact and Project Manager for K to Industry, Clavin will be responsible for coordinating all facets of the grant project to include: development of the Community Connection Portal; providing content for online PBL modules; translating workforce needs into educational content; liaison between educators and industry; planning and implementation of the IT pathway; assisting in the design and launch of marketing and communication plan; building awareness and support and engaging additional partners; and, development of a cadre of teacher leaders for PBL, STEM, and industry program sustainability. Besides a grant advisory board which consists of all partners, she will formulate teams of people working together and create online collaboration zones for each team using Google Apps. While all partners will have access to each team's work, there will be team leaders for each focus area of the grant.</td>
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The team leaders will be responsible for delivery updates and proof of peer discussion through the shared zone. Teams leaders consist of; industry infusion - community connect portal (Cyberation, Teacher Leaders, Industry Partners), industry infusion - online professional development (ESC, Xcelerate Media, Industry Partners, Teacher Leaders), IT Pathway (Tolles, CSCC, Industry Partners, Dublin Schools Counselor), Marketing (MurphyEpson, Tolles, CSCC, City of Dublin) and Evaluation (ESC). As the project manager, Clavin will be highly involved with all teams. All teams will present their progress and final deliverables at grant advisory meetings and milestone checks. Ms. Clavin will also communicate with all partners regularly via email, phone, virtual and face-to-face meetings.

Clavin enjoys new challenges and loves making the path to excellence a fun/motivating experience.

the fact that the teaching assistants are not seeking nor are very enthusiastic about teaching but rather getting funding through their research. To help with the situation Clavin obtained funding to create teaching enhancement workshops available to graduate teaching associates across the College of Engineering. Clavin focused quite a bit on standardization and centralization to reduce workload in her position. This effort resulted in a 25% reduction in her workload. In essence Clavin's previous experience comprised project management. While in the industry as a design and test engineering she took on leadership roles for numerous projects. While at the university, she managed over 300 students, 40 GTAs and 2 staff members and lead numerous initiatives.