

PROJECT SUMMARY *When one teaches, two learn.* Robert Heinlein

Applicant: Lancaster County Workforce Development Board
Project Title: **Project RELATE** (REciprocal Learning Among Teachers and Employers)
Service Area: Lancaster County, PA

Project Objectives:

1. Teachers will effectively incorporate authentic examples of STEM learning demonstrated by one or more Lancaster County employers into their regular classroom instruction.
2. School counselors will be able to describe 5 specific STEM (Science, Technology, Engineering and Math) jobs in advanced manufacturing and/or agribusiness, as well as the educational requirements, knowledge and skills required for each position.
3. Employers and educators will be able to discuss the PDE Academic Standards for Career Education and Work and incorporate these standards into shared learning experiences.
4. Educators and employers will be able to explain the importance of skills such as teamwork, digital literacy, problem-solving, and communication in the workplace.

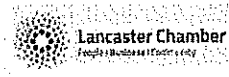
Description: Project RELATE, a differentiated professional development demonstration project, will engage approximately 125 Lancaster County educators and five advanced manufacturing employers in one of three, increasingly intensive, models of reciprocal workplace learning. The first model, which targets early career educators or those who are new to workplace learning, will offer online learning activities during the school year culminating in an industry tour experience in June 2019. The second model, designed for educators who are ready for a more immersive workplace learning experience, will offer educators a three-day onsite learning experience coupled with 18 hours of curriculum support and shared learning experiences throughout the school year. Finally, the third model will match one employer and one school for intensive reciprocal learning throughout the school year. Employers and teachers will work together to design authentic work-based learning experiences for students that match actual workplace problems with specific academic standards. Together, teachers and workplace volunteers will deliver the lesson they have designed to ignite workplace innovation and student learning simultaneously.

Potential Impact: Ultimately, this project will prepare today's students for tomorrow's workplace challenges. Increasingly, employers are recognizing that the paradigm of recruiting workplace talent has been replaced by *growing* workplace talent. This requires educators and employers to work together in new and creative ways. Project RELATE posits three differentiated professional development models for connecting employers and educators.

Project Partners: Lancaster Workforce Development Board, Lancaster County STEM Alliance, CNH Industrial, Armstrong Flooring, Lancaster-Lebanon IU13, La Academia Charter School, Lancaster Chamber.

Technical Assistance Priorities: Networking opportunities for project partners

Contact information: Cathy Rychalsky, Lancaster Workforce Development Board,
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PROJECT NARRATIVE

Project Title: Project RELATE (REciprocal Learning Among Teachers and Employers)
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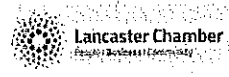
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Project Approach and Management

Statement of Purpose: The purpose of Project RELATE is to bring business and education closer to better prepare today's youth for tomorrow's workplace challenges. Teachers tend to work in isolation both from each other and from members of the private sector. Charged with transmitting the knowledge and skills students will need to enter the future workforce, teachers are woefully lacking in their understanding of the workplace and STEM skills students will need for a successful career. Similarly, few members of the private sector understand the challenges educators face daily in the classroom. Most of us base our understanding of education on our own experience of schooling rather than the realities of today's classrooms. Academic standards, assessment anchors, and multi-tiered systems of support are all foreign concepts that can seem hopelessly erudite and unrelated to the workplace. By strategically bringing educators into the workplace and employers into the classroom, Project RELATE will begin to bridge this chasm in understanding by suggesting ways business and education can work together toward a shared goal of preparing tomorrow's workforce.

Sixteen to twenty-four year-olds in the United States ranked last in a test of numeracy skills given in twenty-three developed countries.¹ On the National Assessment of Educational Progress, less than one-third of U.S. eighth graders showed proficiency in mathematics and science.² The percentage of females and Native Americans who say they're interested in STEM fields is now slightly higher than it was in 2000; however, the percentage of African American and Latino students who say the same is down dramatically.³ Statistics like these underscore how ill prepared our nation's youth are for 21st century workforce demands. Georgetown's Center on Education and the Workforce predicts that the total number of STEM jobs will grow by 26% between 2010 and 2020. The Georgetown Center also projects that professional and technical jobs in healthcare, which it doesn't include in its STEM numbers, will grow by 31%, far faster than the workforce as a whole.⁴ In *The Hidden STEM Economy*, Jonathan Roswell of the Brookings Institution argues that most studies dramatically undercount middle-level STEM jobs that are available to workers without a 4-year college degree – jobs that pay 10% higher than jobs with the same educational requirements.⁵ It is clear that in the future, STEM jobs will dominate the employment landscape.

Project RELATE proposes a differentiated professional development demonstration project that will engage approximately 125 Lancaster County educators and five advanced manufacturing employers in one of three, increasingly intensive, models of reciprocal workplace learning. The first model, which targets early career educators or those who are new to workplace learning, will offer a series of 6 webinars throughout the school year culminating in a one-day industry tour experience in June 2019.

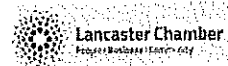
¹ Change the Equation. (2015). STEMtistics. <http://changetheequation.org/stemtistics>

² President's Council of Advisors on Science and Technology. (2010). *Prepare and Inspire: K-12 Education in Science, Technology, Engineering and Math (STEM) For America's Future*.

³ U.S. News and World Report. (2015). *STEM Workforce No More Diverse Than 14 Years Ago*. Retrieved from <http://www.usnews.com/news/stem-solutions/articles/2015/02/24/stem-workforce-no-more-diverse-than-14-years-ago>

⁴ Rosen, Linda. (2013). *The Truth Hurts: The STEM Crisis is Not a Myth*. Huffington Post. Retrieved from http://www.huffingtonpost.com/linda-rosen/the-truth-hurts-the-stem_b_3900575.html

⁵ Rothwell, J. (2013). *The Hidden STEM Economy*. The Brookings Institution: Washington, D.C.



Every year in June, the LCWDB coordinates “Industry Tours for Educators.” Teachers, counselors, and support staff from Lancaster County school districts get an opportunity to tour local businesses to get a better understanding of the types of career pathways, skilled occupations, technologies, and more which can be found in our local community. Educators are able to hear from employers about their needs and take their experiences back to the classrooms. The addition of these grant dollars will allow us to build upon this existing program by coupling these popular workplace experiences with year-long learning. Throughout the school year, educators will meet online monthly to learn about economic development priorities in Lancaster County, PA’s high demand occupations, Academic Standards for Career Education and Work, the occupational outlook for jobs in advanced manufacturing, and the importance of STEM literacy in the 21st century workplace. In addition, curriculum specialists from Lancaster-Lebanon Intermediate Unit 13 will work with teachers to integrate this learning into their ongoing classroom instruction in a manner that is age-appropriate and consistent with the Academic Standards for Career Education and Work. Participants who successfully complete this program will be given preference points in Lancaster County’s 2019 Externship Program, the foundation for Project RELATE’s second model of engagement.

The second model, designed for educators who are ready for a more immersive workplace learning experience, will offer 60 educators a three-day onsite learning experience in August 2018 at CNH Industrial, a global leader in agribusiness and the capital goods sector. This experience, which has been in planning since September 2017, has an expected cost of over \$200,000 – all of which will be covered by CNH Industrial and the Lancaster County STEM Alliance. Grant funds will allow participants to receive 18 hours of follow-up curriculum support and shared learning experiences throughout the 2018-19 school year. This dramatically increases the likelihood of successfully integrating learning into the classroom. This is the second year the Lancaster County STEM Alliance has sponsored an intensive employer externship. Evaluation data from year 1 indicated that participants found the externship experiences extremely valuable; however, they needed greater support in understanding how to translate workplace learning to the classroom. As one 2017 educator noted in his evaluation,

This was a phenomenal experience, and I am very grateful to the High Companies and every member of the team that made this externship a reality. A very positive learning experience that can be carried forward to current and former students. My only area for improvement would be more time for discussion - what do you want from students / applicants, how do we prepare them to meet your early expectations, and how do we get students to your organization. THANK YOU!

Teachers need time to discuss these experiences, talk about the implications for their work, and plan lessons collaboratively. Using a learning management system, educators and employers will form a professional learning community with monthly networking opportunities with CNH Industrial and curriculum support from IU13 staff. Each educator will design an age-appropriate lesson plan as a capstone project during the 3-day externship. The learning management system will allow educators and CNH employees to share lesson plans online, discuss instructional strategies, and learn from each other.

The third model will match one employer and one school for intensive reciprocal learning throughout the 2018-19 school year. Approximately fifteen engineers, scientists and other employees from Armstrong Flooring have volunteered to work with teachers at La Academia Charter School in Lancaster to collaboratively design authentic work-based learning experiences

for students. As Crystal Shaw states in her letter of collaboration, "We believe that bringing business and education together in this way will spark innovation in both settings." In this model,



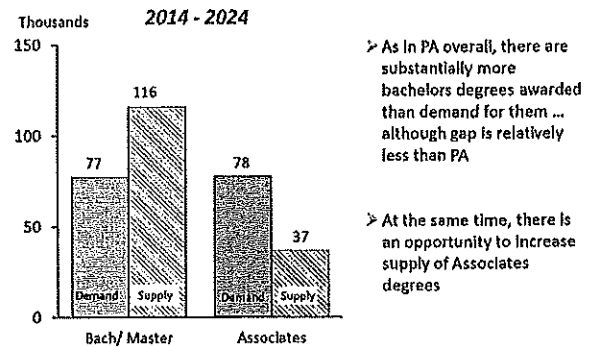
employers and teachers will work together to design authentic work-based learning experiences for students that match actual workplace problems related to specific academic standards. Together, teachers and workplace volunteers will deliver the lesson they have designed. Armstrong Flooring chose La Academia because it is a priority school where 93% of students are economically disadvantaged, 91% are Hispanic, 15% are English language learners, and 16% of students have an

Individualized Educational Plan (IEP). In January 2018, Armstrong leaders volunteered to lead a one-day STEM learning session at La Academia (see photo at left). This experience, facilitated by the Lancaster County STEM Alliance, was so successful that Armstrong Flooring asked to make a more substantive commitment to the school.

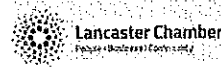
Professional developers have long known that teacher learning is not a "one size fits all" proposition. These three models, which build upon already successful public/private partnerships in Lancaster County, provide educators and employers with choice and a range of options for relationship building and collaboration.

Career Pathway(s) Focus: Project RELATE will focus on Advanced Manufacturing Career Pathways, an area of tremendous need in Lancaster County, PA. As highly skilled baby boomers retire en masse, local businesses face an unprecedented talent shortage requiring new and creative solutions. In advanced manufacturing today, the use of robots is standard practice. Industry is employing leading-edge science and technology to improve manufacturing, to reduce costs, to increase speed or throughput, to make more sophisticated products, and to make manufacturing more agile. Digital manufacturing is the extensive use of sensors and controls, along with digital design and engineering using computer-aided manufacturing and life-cycle management software. The greatest talent need in advanced manufacturing is for highly skilled technical workers with post-secondary credentials but less than a 4-year degree. As the chart illustrates, it is the middle level STEM jobs in advanced manufacturing where the demand outpaces the supply. The high school to Harvard mentality that has dominated career discussions in the past is not only doing a disservice to many young people, but it is also creating a significant talent shortage in technical areas such as manufacturing, where high-paying jobs remain unfilled due to the lack of qualified candidates. Approximately 66% of high school graduates enroll in a 4-year degree program. The sad reality is that three out of four of these students leave college prior to graduation, lacking the STEM skills needed to obtain family-sustaining

Local Area Also Has Demand / Supply Imbalance



Notes: Demand is for job zone 2 (Associate) and 4, 5 (Bachelor's/Masters). Supply is assumed to be constant at average of '11 - '33 completion rate. Local area includes Chester, Dauphin, Lancaster, Lebanon, and York counties. Sources: PA/SHR Middleville University Supply/Demand Gap Study 2016



employment. Saddled with thousands of dollars in college debt, they and have no realistic way to dig themselves out of the economic hole we have helped them to create.⁶ National data also tell us that half of all college graduates are not prepared for the 21st century workplace. This leads to mal-employment, a specific type of underemployment that exists because college-educated workers are forced to accept jobs that do not use the skills and abilities they acquired in college.⁷

Program Goals: Project RELATE has the following measurable goals:

1. Teachers will successfully incorporate authentic examples of STEM learning demonstrated by one or more Lancaster County employers into their regular classroom instruction.

Measure: Lesson plans will be submitted via an online learning management system. Evaluation surveys will be collected before each intervention, immediately upon completion of the intervention, and six months following the workplace experience.

2. School counselors will be able to describe 5 specific STEM (Science, Technology, Engineering and Math) jobs in advanced manufacturing and/or agribusiness, as well as the educational requirements, knowledge and skills required for each position.

Measure: Evaluation surveys will be collected before each intervention, immediately upon completion of the intervention, and six months following the workplace experience.

3. Employers and educators will be able to discuss the PDE Academic Standards for Career Education and Work and incorporate these standards into shared learning experiences.

Measure: Transcripts from learning management system sessions. Evaluation surveys will be collected before each intervention, immediately upon completion of the intervention, and six months following the workplace experience.

4. Educators and employers will be able to explain the importance of skills such as teamwork, digital literacy, problem-solving, and communication in the workplace.

5. *Measure:* Transcripts from learning management system sessions. Evaluation surveys will be collected before each intervention, immediately upon completion of the intervention, and six months following the workplace experience.

There are many more, less tangible goals that we hope to accomplish as part of Project RELATE. As the name implies, relationship building is at the heart of any successful cross-sector collaboration. Bringing educators and business leaders together in a variety of ways will lead to a better understanding of each other's work context.

Learning Outcomes: *"If you can learn a simple trick, Scout, you'll get along a lot better with all kinds of folks. You never really understand a person until you consider things from his point of view, until you climb inside of his skin and walk around in it."* – Atticus Finch in *To Kill A Mockingbird* by Harper Lee

Cross-sector professional learning is designed to produce profound learning outcomes for everyone involved. How many times have we heard educators vilified for not producing the learning outcomes we desire, or business criticized for putting profit ahead of people? Education and business are both complex systems not easily understood from the outside. When employers and educators work together, there is less of a tendency to blame each other for problems that exist within the community. As a result of Project RELATE, educators will be challenged to think beyond one school year, beyond academic standards and Keystone exams to the larger

⁶ Fleming, K. (2013). *Success in the New Economy*. Available at <https://www.youtube.com/watch?v=zs6nQpVII64>.

⁷ Harrington and Fogg. (2011). "Rising Mal-Employment and the Disconnection between Recent College Graduates and the College Labor Market."



questions of career, quality of life, and the role of meaningful work in an individual's life. On the other hand, employers may learn that schools are underfunded, students have multiple intelligences, and all-to-often learning is negatively impacted by challenges such as homelessness; poverty, drug addiction, and transience that originate outside the classroom.

The PDE Career Education and Work Standards provide a roadmap for educators and employers to work collaboratively toward a shared goal of preparing today's students for the workplace of the future. The standards address Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and Entrepreneurship across four grade bands (grade 3, 5 8 and 11). This guidance is invaluable in helping both educators and employers plan classroom-specific activities for students.

Schedule of Activities: The following tables illustrate the major activities and milestones associated with each of the three models.

Model 1: Webinars and Industry Tours

Activity	Due Date	Assigned To
Determine the most appropriate learning management system.	July 31, 2018	LCSA
Design the scope and sequence and set the dates for the 6 webinars that will occur during the school 2018-19 year.	July 31, 2018	LWDB /IU13/ Chamber
Create recruitment materials to distribute to Superintendent's Advisory Council and Curriculum Coordinator's meeting.	August 31, 2018	IU13/ LCSEA
Create application and post links to application on partner websites.	August 31, 2018	LCSEA/LWDB Chamber
Recruit educators to participate in the program.	September 30, 2018	All partners
Deliver 6 webinars for participants between October 15, 2018 and May 31, 2019.	September 30, 2018	LWDB / LCSEA Chamber
Recruit employers to offer industry tours in June 2019.	November 30, 2018	LWDB/ Chamber
Facilitate industry tours in June 2019.	June 30, 2018	All partners

Model 2: 3-Day Externship plus Webinars

Activity	Due Date	Assigned To
Note: Planning for the 2018 Summer Externship Program at CNH Industrial began in September 2017. The project team has been meeting monthly since September to design the Externship experience and recruit participants. 73 participants from 12 public school districts, 3 non-public schools, and 1 charter school applied for this experience. 60 applications have been selected for participation and 13 applications have been placed on a wait list. The cost of the summer Externship Program is covered by in-kind contributions from CNH Industrial and the Lancaster County STEM Alliance. Grant funds will not be used to supplant existing programs.		
Finalize participants for August 13 – 15 Externship experiences.	July 31, 2018	LCSEA/CNH
Offer an intensive 3-day externship at CNH Industrial	August 13 – 15, 2018	All partners
Create webinar dates and content for monthly PLC meetings with externship participants.	July 31, 2018	IU13/ CNH /LCSEA
Schedule monthly planning meetings with the business that will be hosting the 2019 Externship experience.	August 31, 2018	LCSEA Host Company
Open applications for the 2019 Externship Program.	December 1, 2018	LCSEA
Close applications for the 2019 Externship Program.	February 28, 2019	IU13
Select externship participants and communicate learning expectations and important dates.	June 30, 2019	LCSEA/LWDB, Host Company

Model 3: Adopt a School/Workplace

Activity	Due Date	Assigned To
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Recruit engineers, scientists and other employees to participate in this project.	July 31, 2018	Armstrong Flooring
Recruit teachers at La Academia to participate in this project.	July 31, 2018	La Academia
Work with La Academia teachers and Armstrong Flooring volunteers to identify workplace problems.	August 31, 2018	LCSA, LWDB LACS, Armstrong
Align workplace problems to grade 6 – 12 Academic Standards	August 31, 2018	IU13 / teachers
Obtain volunteer clearances for Armstrong employees.	August 31, 2018	Armstrong, LACS
Schedule monthly volunteer activities	September 30, 2018	La Academia, Armstrong
Deliver monthly volunteer activities in appropriate classrooms	May 31, 2019	
Teacher tour of Armstrong Flooring	December 31, 2018	Armstrong, LACS
Student tour of Armstrong Flooring and final celebration	June 2019	Armstrong, LACS

Applicant/ Team Capabilities

Lead Agency: The Lancaster County Workforce Development Board will be the lead agency responsible for bringing together business, education, workforce, and other community partners to achieve the overall project goals as defined by this proposal.

Program Facilitator(s): Cathy Rychalsky serves as Executive Director for the Lancaster County Workforce Development Board, a non-profit organization charged with administering workforce delivery services for Lancaster County. She has a Master’s Degree in Business Administration from Penn State University and Bachelor’s Degree in Business Administration from Elizabethtown College. Prior to working for the LCWDB, she spent more than 20 years in the management of local non-profit organizations and state governmental agencies, developing policies and advocating for legislation to help individuals and families become self-sufficient.

Sandy Strunk has been Executive Director of the Lancaster County STEM Alliance (LCSA) since 2014. Prior to joining the STEM Alliance, Sandy worked for 26 years for Lancaster-Lebanon Intermediate Unit 13 as the Program Director of Community Education and the Program Director for Development. Anna Ramos has spent the last 17 years of her career involved in workforce development. She has been an advocate for job seekers under the Department of Labor and Industry (WIOA) funded programs and has been with the Lancaster Chamber for the past year and a half. As the Chamber’s Business Initiatives Director, she is tasked with implementing strategies that meet employer needs through trainings/programs.

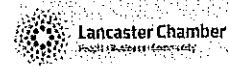
Fiscal Agent: The Lancaster County Workforce Development Board will serve as the fiscal agent responsible for receiving, managing and disbursing grant funds for Project RELATE.

Local Support: Partner agencies for this application include the Lancaster Workforce Development Board (LWDB), Lancaster County STEM Alliance (LCSA), the Lancaster Chamber, Lancaster-Lebanon Intermediate Unit 13 (IU13), La Academia Charter School, the 16 school districts and many nonpublic schools in Lancaster County. Specific roles are included in Schedule of Activities outlined on pages 6 and 7. Letters of support are available upon request.

Business / Industry Partners: Business partners include Armstrong Flooring and CNH Industrial. Letters of support are included on pages 9 and 10.

Potential Impact and Sustainability

Participating Educators: We anticipate serving 50 K-12 educators and out-of-school time providers in Model 1, Industry Tours. Participants will be recruited via websites, targeted



outreach to school leaders, email and local newsletters. Educators enrolled in this model will spend a minimum of 8 hours in the workplace and 12 hours engaged in online learning.

60 educators have been selected for the August 2018 Externship Program (Model 2). Applications were open to all K-12 educators and out-of-school time providers in Lancaster County between December 1, 2017 and February 28, 2018. Participants include representatives of 12 school districts, 3 nonpublic schools, 1 charter school, and 5 out-of-school time providers. Participants in this model will spend a minimum of 24 hours in the workplace and 16 hours engaged in online learning.

15 La Academia teachers will be recruited to participate in Model 3, Adopt a School / Workplace Program. Participation will be open to all educators and counselors at La Academia. Participants in this strand will work collaboratively with business leaders for a minimum of 50 hours and will spend a minimum of 8 hours in the workplace.

Professional Development Credit: All participants will have the option of receiving Act 48 credits through Lancaster-Lebanon Intermediate Unit 13. In addition, participants will receive Certificates of Completion from the Lancaster County STEM Alliance.

Sustainability: To guarantee sustainability, the core workplace experiences in all three models are funded by in-kind contributions provided by local employers and/or agencies such as the Local Workforce Investment Board and Lancaster County STEM Alliance. Grant funds will be used to enhance infrastructure (online learning management system), support volunteer clearances, provide curriculum consultation, and coordinate program logistics. The decision not to provide teacher stipends was made with sustainability in mind. This type of public/private partnership both enhances project outcomes and preserves key components of the program following the initial grant period.

Program Evaluation Process: Each of the three models will have a rigorous program evaluation based on continuous improvement process. Prior to starting the program, participants will take an online survey designed to assess their baseline knowledge, skills and attitudes related to the workplace where they will be placed. Immediately following the onsite experience, participants will again take an online survey to assess any changes in knowledge, skills or attitudes. Finally, the online survey will be repeated six months following the onsite experience in an attempt to capture transfer of learning to the classroom.

Online learning activities will also provide extensive documentation related to participant learning. Lesson plans, discussions and reflections will all be captured via the learning management system and will provide project facilitators with rich data for program improvement.

Employers will be asked to complete an online survey designed to capture lessons learned, suggestions for the future, and reflections on the program. All data collected will be reviewed during project partner meetings and appropriate changes to the program will be made as needed.

Letters of Support: Letters of support are included from CNH Industrial and Armstrong Flooring. Letters from other project partners are available upon request.



CNH Industrial America, LLC
Corporate Office:
700 State Street
Racine, WI 53404
Ph. +1 262.636.6011

April 16, 2018

Sandra J. Strunk, Executive Director
Lancaster County STEM Alliance
8 West King Street
Box 1613
Lancaster, PA 17608



Dear Ms. Strunk:

CNH Industrial is pleased to partner with the Lancaster County STEM Alliance and the Lancaster Workforce Investment Board on the Teacher in the Workplace grant application. On August 13 – 15, 2018, CNH Industrial will be hosting sixty educators from 12 school districts, 3 private schools, and 1 charter school in Lancaster County for an intensive onsite externship program. Educators will have an opportunity to learn first-hand about the STEM knowledge and skills needed in our workplace as we profile a variety of occupations and provide opportunities for hands-on learning.

Grant funds received from this project will allow us to do monthly follow-up with participants as they attempt to integrate this learning into their curriculum and specific classroom setting. As I am sure you know, this is one of the biggest challenges for any externship program – how best to transfer workplace learning to a classroom context.

CNH Industrial is investing a minimum of 2860 hours in this professional development experience for teachers, at an expected cost of \$190,000.00. By adding a school-year component to this project, we will increase the likelihood that the educators who participate in our program will have the curricular support they need to integrate this learning into their classroom context. These types of private / public partnerships are essential in helping to create the workforce of the future.

Sincerely,

Richard Heisey, Director of Shared Technologies and Services

CNH Industrial America, LLC
500 Diller Avenue, New Holland, PA 17557
Ph. +1 717.355.1249

April 16, 2018

Sandra J. Strunk
Lancaster County STEM Alliance
8 West King Street
PO Box 1613
Lancaster, PA 17608

Dear Ms. Strunk:

Armstrong Flooring is excited to partner with The Lancaster County STEM Alliance, La Academia Partnership Charter School and the Lancaster Workforce Development Board on the Teacher in the Workplace grant proposal. Our recent discussion with you and staff from La Academia about having some of our engineers, scientists, and other employees from various departments work with La Academia teachers and students to bring actual workplace problems into the classroom was very inspiring. We believe that bringing business and education together in this way will spark innovation in both settings.

Grant funds from this project will pay for Armstrong Flooring staff required clearances and curricular support for teachers during the school year. Aligning workplace problems with the appropriate academic standards is key to making the learning relevant for both teachers and students. We are especially pleased that this project will impact economically disadvantaged students who might otherwise not be involved in an innovative programming of this type. By working closely with educators to help students better understand workplace needs and challenges, we believe we will be helping to build tomorrow's workforce.

We wish you the best of luck with this grant proposal and hope to hear great news! We are excited about working with the STEM Alliance and La Academia.

Sincerely,

Crystal Shaw

Program Manager, Engineering Leadership Development Program
Armstrong Flooring
2500 Columbia Ave | P.O. Box 3025 | Lancaster, PA 17604
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**Budget Narrative Project RELATTE
Lancaster County Workforce Development Board**

Personnel

Description	Grant Cost	In-Kind	Total Project
WIB Facilitator	\$8,334.00	\$1,500.00	\$9,834.00
Industry Tour Facilitator	\$0.00	\$1,500.00	\$1,500.00
Total	\$8,334.00	\$3,000.00	\$11,334.00

Justification: The Lancaster County Workforce Development Board, The Lancaster County STEM Alliance, and the Lancaster County Chamber of Commerce are sharing facilitation of this project. Project facilitation includes recruiting and tracking participants, managing participant logistics, serving as liaison to workplace and other partners, collecting evaluation data, and convening project team members for regular programmatic discussions and problem-solving sessions. Costs associated with the other two facilitators are captured under contracted services. Every year in mid- to late June, the LCWDB coordinates the "Industry Tours for Educators," where teachers, counselors, and support staff from Lancaster County School Districts (those who work directly with the students) get an opportunity to tour local businesses and companies to get a better understanding of the types of career pathways, skilled occupations, technologies, and more which can be found right here in our local community. Educators are able to hear from our employers about their needs in their particular industries, and take their experiences back to the classrooms, design curriculum, and help to ensure the students (tomorrow's workforce) possess the necessary skills, as well as a sound understanding of employers' expectations.

Administrative Costs - LWDB

Description	Grant Cost	In-Kind	Total Project
Administrative Costs -- Lancaster Workforce Development Board	\$5,000.00	\$1,000.00	\$6,000.00
Industry Tour Facilitator	\$0.00	\$2,500.00	\$2,500.00
Total	\$5,000.00	\$3,500.00	\$8,500.00

Justification: Administration costs will cover the expenses incurred by the LCWDB administrative services, using the approved cost allocation plan.

Contracted Services -- Lancaster County STEM Alliance

Description	Grant Cost	In-Kind	Total Project
LCSA Facilitator	\$8,333.00	\$0.00	\$8,333.00
LCSA Executive Director	\$0.00	\$7,200.00	\$7,200.00

Foundation Outreach Coordinator	\$0.00	\$2,500.00	\$2,500.00
Learning Management System Subscription	\$5,500.00	\$4,500.00	\$10,000.00
Volunteer Clearances	\$1,050.00	\$0.00	\$1,050.00
Classroom Supplies	\$3,450.00	\$750.00	\$4,200.00
CNH Externship Luncheon	\$0.00	\$7,500.00	\$7,500.00
Total	\$18,333.00	\$22,450.00	\$40,783.00

Justification: The Lancaster County STEM Alliance will be sharing facilitation with Lancaster County Workforce Development Board and the Lancaster Chamber. Grant dollars have been budgeted for this purpose. Their Executive Director and Outreach Coordinator are also committing significant time to this effort on an in-kind basis. The subscription to the Online Management System will allow educators in all three models to access ongoing webinars and curricular support. The STEM Alliance is in the process of purchasing a system for another project, which will save our community start-up costs. The \$5,500 budgeted is for individual users associated with this grant proposal. The Armstrong project at La Academia requires workers from Armstrong Flooring to acquire clearances, which will be facilitated by the STEM Alliance. Classroom supplies are budgeted to support the La Academia work, in particular, which will help with the emphasis on "hands-on learning" that Armstrong is bringing to the workplace. The STEM Alliance is underwriting the cost of a community luncheon as part of the August 13 -15th Externship Program.

Contracted Services – Lancaster Chamber of Commerce

Description	Grant Cost	In-Kind	Total Project
Lancaster Chamber Facilitator	\$8,333.00	\$0.00	\$8,333.00
Total	\$8,333.00	\$0.00	\$8,333.00

Justification: The Chamber is one of three facilitators for this project. Dollars have been allocated accordingly.

Contracted Services – Lancaster-Lebanon Intermediate Unit 13

Description	Grant Cost	In-Kind	Total Project
Curriculum support and Online Learning	\$10,000.00	\$0.00	\$10,000.00
Total	\$10,000.00	\$0.00	\$10,000.00

Justification: Lancaster-Lebanon Intermediate Unit 13 will partner with us map curriculum alignment across all three models and assist with the delivery of webinars. This is critical if we are to help educators align workplace learning with existing academic standards and the Standards for Career Education and Work. This will enhance adoption of work-based learning and also help employers better understand the challenges associated with public education

CNH Industrial

Description	Grant Cost	In-Kind	Total Project
2860 hours of Staff Time for Externship	\$0.00	\$190,000.00	\$190,000.00
Total	\$0.00	\$190,000.00	\$190,000.00

Justification: CNH Industrial is making a phenomenal investment in workplace learning for educators in Lancaster County. Meetings with the STEM Alliance have been taking place monthly since September 2017 and will continue through August 2018. CNH Industrial is co-creating content, working with teams in Manufacturing, Engineering and Product Development to develop appropriate hands-on learning activities, and is underwriting the cost of transportation and meals (other than the Tuesday luncheon). Their video team will be filming parts of the externship experience and executives will be flying in from other locations to participate in the event.

Armstrong Flooring

Description	Grant Cost	In-Kind	Total Project
15 Volunteers @ 30/h per volunteer	\$0.00	\$13,500.00	\$13,500.00
Total	\$0.00	\$13,500.00	\$13,500.00

Justification: Armstrong Flooring is underwriting the cost of all staff time associated with this effort. This will include activity development, planning activities, delivery of activities and follow-up. Our in-kind estimate is very conservative since this is a new model for us and we have no past history upon which to base our estimates.

Total Project Costs

Grant Cost	In-Kind	Total Project
\$50,000.00	\$232,450.00	\$282,450.00