



Academic Affairs

October 23, 2013

Dr. Thomas Tucker
Superintendent, Worthington School District
Worthington Education Center
200 East Wilson Bridge Rd
Worthington, Ohio 43085

Dear Dr. Tucker:

Thank you for the opportunity to partner with Worthington High Schools (Thomas Worthington and Worthington Kilbourne) on the Ohio Straight A Fund grant proposal to the Ohio Department of Education. Columbus State Community College is pleased to assist with this effort. As you know, the College is very focused on increasing the workforce pipeline through the development of dedicated pathways from high school to college to industry. Columbus State Community College enjoyed a successful partnership with Worthington schools and Honda on a pilot project to meet a growing regional shortage of next generation multi-craft manufacturing support technicians.

As part of the proposed Ohio Straight A Fund grant proposal, Columbus State Community College agrees to partner in the following:

- Provide Columbus State Community College program information to students and parents.
- Provide in partnership with Honda an Advanced Automation Institute summer camp offered to Worthington graduates.
- Provide technical advisors for input to STEM curriculum, equipment selection and projects.
- Facilitate dual enrollment opportunities for Worthington High Schools students.
- Provide dual enrollment/blended learning courses in manufacturing.

We are pleased to pledge our support, and we look forward to continuing an excellent working relationship with Worthington schools.

Sincerely,

Jack Cooley, Ph.D.
Senior Vice President Academic Affairs
Columbus State Community College



Honda North America Services, LLC
24000 Honda Parkway
Marysville, OH 43040-9251

October 17, 2013

Dr. Thomas Tucker
Superintendent
Worthington School District
200 E. Wilson Bridge Rd.
Worthington, OH 43085

Dear Dr. Tucker:

Thank you for the opportunity to partner with Worthington High Schools (Thomas Worthington and Worthington Kilbourne) on the Ohio Straight A Fund grant proposal to the Ohio Department of Education. Honda is pleased to assist with this effort, and it will be particularly helpful to our local operations, including Honda of America Manufacturing, Inc. Recently, Honda partnered with Worthington High Schools and Columbus State Community College on a pilot project to meet a growing regional shortage of next generation multi-craft manufacturing support technicians, and we would like to further those efforts with support of the Ohio Straight A Fund proposal.

As part of the proposed project, Honda is prepared to:

- Provide Honda technician and engineering career information to students and parents.
- Provide support to the Columbus State Community College Advanced Automation Institute summer camp offered to Worthington graduates.
- Provide engagement of Honda technician / engineering expertise within the Worthington STEM (Science Technology, Engineering & Math) classrooms
- Provide technical advisors for input to STEM curriculum, equipment selection and projects

Thank you for your ongoing assistance to our company in this and other mutually beneficial projects. We are pleased to pledge our support, and we look forward to continuing an excellent working relationship with Worthington City Schools.

Sincerely,

Scot McLemore
Technical Development Manager
Human Resources and Administration Division
Honda North America Services, LLC.



THE OHIO STATE UNIVERSITY

College of Engineering
EEIC - Engineering Education Innovation Center

244 Hitchcock Hall
2070 Neil Avenue
Columbus, OH 43210
(614) 292-7923 Phone
(614) 247-6255 Fax
eeic.osu.edu

21 October , 2013

Mr. Bryan Brown
Department Chair - Applied Academics
STEM, Technology & Engineering Department
Project Lead The Way
Thomas Worthington High School
300 W. Granville Road
Worthington, OH 43085

Dear Bryan:

I am pleased to have the opportunity to lend any support I can to the Worthington STEM/PTLW program. It has been very rewarding to watch the development of the program. I hope that my input has been of value to the effort. I know Worthington is viewed as a truly exemplary program. Having served on PLTW advisory boards at two different school systems, I can recognize the great successes and the quality of the Worthington program. It is a model for integration across the STEM areas and is seeing the great power to enhance the student experience by the collaboration. Building success in the STEM area requires addressing issues of early introduction and underrepresented groups such as women in science and engineering. Your programs are leading the way in straightforwardly address both of these issues.

We at Ohio State University are one of the beneficiaries of your success. Your students are among the best students entering our STEM programs. We look forward to continuing connection to Worthington's STEM/PLTW program. It has been and will continue to be mutually beneficial.

I can also support that upgrading of facilities and equipment is needed to move your program forward. The STEM area needs to stay current and equipped to complete its mission. Therefore you certainly have my full endorsement for your proposal.

Sincerely

Robert J. Gustafson, P.E., PhD
Director, Engineering Education Innovation Center
Honda Professor for Engineering Education
Professor, Food, Agricultural and Biological Engineering



Kellie Chambers
Industrial Engineer
Package Innovation
Abbott Nutrition Supply Chain

21-Oct-2013

Dear Sir or Madam:

I've had the privilege to work with Thomas Worthington's STEM program over the last year. Abbott's Women in Engineering (WIE) group has partnered with STEM's first year females to encourage women to pursue careers in STEM.

STEM education at the middle and high school level starts building a focused foundation for skills across Science, Technology, Engineering and Mathematics. Students will have a firm foundation in each of these disciplines before starting university courses. Having graduated from Thomas Worthington in 2005, prior to introduction of the STEM program, I view this early start in focused STEM education as a huge advantage for participating students.

STEM education helps students learn to be curious, ask questions and make connections as to why the world exists as it does. STEM creates critical thinkers and enables the next generation of innovators. Innovation is what will lead us to new products and processes that will sustain our economy. Most jobs of the future will require basic understanding of science and mathematics. It's imperative as a nation that we make STEM education a top priority.

Thomas Worthington's program has made a great impression on me. It's no wonder that they have been named a 'Model School' by the Ohio Department of Education and that enrollment has doubled over the last year or two. The Thomas Worthington STEM team is very passionate about students' growth, development and success in the future. The amount of support and involvement this program receives from the outside community is a testament to the energy and excitement behind this program internally. Their team and community approach enables them to keep their momentum for continuous learning, growth and achievement.

The Worthington School District will continue to excel in STEM education because of the quality of their educators and the passion these educators have for their students' development.

As technology and processes evolve, it is necessary for the school to be equipped with updated facilities and equipment. Hands-on learning is necessary for long-term understanding of the theories that define these STEM disciplines.

Please feel free to contact me for any further information at 614-624-3242.

Sincerely,

A handwritten signature in blue ink that reads 'Kellie Chambers'.

Kellie Chambers
Engineer
Abbott Nutrition



DANIS

October 24, 2013

Mr. Bryan Brown
Department Chair – Applied Academics
Worthington High School
300 W. Granville Road
Worthington, OH 43085

Re: Worthington STEM / Project Lead The Way Program

Dear Bryan:

I have spent the past seven years participating at Worthington Schools in the STEM/*Project Lead The Way* Program and I just wanted to take the opportunity today to tell you what a pleasure it has been.

As part of our ongoing collaboration with the High School, I wanted to touch on a couple of reasons why this program is so important and my impression over the years of the value it adds to the students' education.

- **The Teachers** – one of the most consistent observations I have noticed throughout the years is the passion that all of the teachers and faculty have. Their compassion for the students to create the best and the brightest runs deep in all of them. For example, when visiting the high school from time to time, the STEM students choose to eat with their STEM teachers instead of their classmates because they have an appreciation for them. This appreciation and admiration for the teachers is because the students know how much they are cared for and that the teachers always have their best interests in mind.
- **The Curriculum/Team Approach** – The yearly curriculum I have witnessed is outstanding. The teachers are continually creating well-rounded students through the following tactics: getting them hands on experience by activities in and out of the classroom, encouraging them to participate in educational challenges such as the robot competition, field trips with their organizational partners (such as Danis) so the students get a better understanding of what a 'real engineer' does, and 3-D modeling programs they utilize in the classroom to challenge the student think analytically. I could go on with why the curriculum created is so exceptional. They are teaching the kids to work individually to solve challenging problems but also showing the importance of group work and collaborative thinking since this more accurately represents the real world.
- **Ability to Excel in STEM Education** – The teachers and staff at Worthington cultivate the students' education in hopes to create better resumes than their competitors when applying for college and scholarships. This is one of the biggest advantages a STEM education provides to its students. Students who complete the STEM program are better prepped for college. This is very attractive to application review boards for colleges nationwide. It is imperative that students who want to major in STEM-related fields in college participate in programs similar to Worthington's. The competition in this field will only continue to grow.
- **Proactively Promoting the Program to Young Women** – I do want to mention that investing additional time and effort to promote the STEM program to female students has to be one of the Worthington's strongest attributes. From creating monthly meetings for the females with engineers that are now young professionals to continually advocating the advantages to female students specifically, they truly believe that females can excel in this program and bring a different perspective that makes the program even stronger.
- **Technology changes requiring facility/equipment upgrades** – Just as professional businesses must keep up with the technology and equipment to differentiate themselves from others, Worthington will continually need to upgrade their facilities and equipment to properly prep

DANIS

the students for college and their professional careers. If the students are able to present the advantages of the program from a technical standpoint while applying for college, it will really improve their opportunities to get into the best colleges and even help with scholarships.

All of this combined is how Worthington High School will continue to achieve successful outcomes. They continually create a team environment, teach the students to work collaboratively, push them to thinking analytically, and continue to challenge them. Worthington and their team partners' goals are to ensure the success of the STEM program for years to come. I truly believe that they are on the right track to make this program a success but will continually need grant money to support their efforts.

Sincerely,



Lauren Drinkwine
Business Development Manager
Danis Construction