

Kenton County School District | It's about ALL kids.

THE KENTON COUNTY BOARD OF EDUCATION 1055 EATON DRIVE, FORT WRIGHT, KENTUCKY 41017 TELEPHONE: (859) 344-8888 / FAX: (859) 344-1531 WEBSITE: www.kenton.kyschools.us Dr. Henry Webb, Superintendent of Schools

KCSD ISSUE PAPER

<u>DATE</u>: 5/29/18

AGENDA ITEM (ACTION ITEM): Bosch Community Foundation Funds Grant for K-12 STEM

APPLICABLE BOARD POLICY: 04.61 Gifts and Grants

HISTORY/BACKGROUND:

The Kenton County School System is applying for the Bosch Community Fund Grant (BCFG). This grant is written in a partnership with Boone County Schools and Grant County Schools. The BCFG will support the growth of STEM education in all of K-12 of Kenton County Schools. It will support teacher training in Project Lead The Way (PLTW) curriculum, Academic Internships for high school scholars, Externships for teachers to partner with Bosch professionals, and STEM Summer Camps for scholars who are going from 5th grade into 6th grade.

FISCAL/BUDGETARY IMPACT:

The BCFG is \$210,000 per year and a total of \$630,000 over three years. Kenton County School's portion of the BCFG is \$225,000 over three years. This is not a matching fund grant. It is unknown if we will be able to reapply once the grant period ends.

<u>RECOMMENDATION</u>: It is recommended that we accept the Bosch Community Fund Grant if awarded to KCSD.

CONTACT PERSON:

Francis O'Hara **Principal** Superintendent Director

Use this form to submit your request to the Superintendent for items to be added to the Board Meeting Agenda. Principal –complete, print, sign and send to your Director. Director –if approved, sign and put in the Superintendent's mailbox.

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BOSCH COMMUNITY FUND PROPOSAL INFORMATION

The Kenton County Academies of Innovation and Technology Background

The Kenton County School System established the Kenton County Academies of Innovation and Technology (Academies) in the 2012-13 school year. The main focus was to expose high school scholars to STEM education. The end result is to have high school graduates:

1. Prepared to enter the workforce with the needed skills, knowledge, and certification(s) required.



AND/OR

2. Prepared to enter into college/university with the needed skills, knowledge, certification(s), and academics required.

The enrollment in the Academies for the 2018-19 school year is 600+ scholars from 9-12 grade. <u>This is maximum</u> <u>enrollment.</u> The scholars spend half of their school day at the Academies and the other half at their home high school (Simon Kenton, Dixie Heights, or Scott High School). There are 7 total Academies:

Engineering Academy	Women's Engineer	ring Academy	Computer So	cience Academy	Military Prep Academy
Biomedical So	ciences Academy	Future Educate	or Academy	Gemini College A	Academy*

*The Gemini College Academy is offered through a partnership with Thomas More College (TMC) which supplies 11 professors to teach on the Academy Campus. (See Chart A: Academy Class List – Total Enrollment 600+)

General Academies Philosophy

Each Academy uses an inquiry-based/performance-based method where the lines between "technical" and "academic" are deliberately blurred. All scholars will use technology to research, produce, and present across disciplines. Much of the class work is project-based and incorporates real-world application. We encourage scholars with interests in the STEM (Science, Technology, Engineering, and Mathematics) to apply to experience how math, English, and science come alive through Motivation-Based Education.

Curriculum Integration

Real-world issues are integrated into Academy curricula by working in teams, and by studying real questions and themes that cut across academic disciplines. Teachers collaborate within an Academy to develop coherent programs by intersecting their curricula wherever possible. Each Academy has a career teacher paired with a mathematics teacher and an English teacher, except the Biomedical Sciences Academy, which has a science teacher rather than an English teacher. Each core content class covers the same curriculum as the core content classes taught at the traditional high schools. However, Academy philosophy is that small, personalized learning makes the high school experience motivating. We believe in the value of authentic teaching and project-based/inquiry-based/performance-based education. This method will provide scholars a high-quality broad-based education that will serve them well in all phases of life.

Academies Report Card

We use the same grading scale as the traditional high schools. In addition, parents have the opportunity to discuss their scholars' progress with their teachers during parent-teacher conferences. We want each scholar to work towards a "School to Career" thought process. Our scholars learn what professionals refer to as "soft skills" as the Academies see them as "necessary skills" that are part of the learning process.

Our scholars will be graded in Seven Areas on their Report Card:

- 1. Content Reflects the scholar's mastery of the course content
- 2. Work Ethic/Effort Reflects the scholar's commitment to complete assignments & attend class
- 3. Collaboration Reflects the scholar's ability to work with others
- 4. Critical Thinking Reflects the scholar's ability to analyze & synthesize information
- 5. Real-World Writing Reflects the scholar's ability to write using professional forms of communication
- 6. Projects/Proposals Reflects the scholar's progress/completion with accompanying research
- 7. Presentation Skills Reflects the scholar's ability to present information effectively to an audience

Requirements to Join the Academies

Academy scholars are selected based on their willingness to work hard, their interest in a particular career field, and if they are on grade level. <u>There is no specific GPA requirement to be accepted to the Academies</u>. Scholars are admitted on a "first come, first serve" basis and will be considered based on availability. Interested scholars are encouraged to apply as soon as possible because of limited space in each Academy.

Academies Year-long Program

It is important for parents and scholars to know that the Academies are a year-long program. While we cover all the content that is included in core classes at the home high schools, we add components such as research and work with professionals in their chosen career field. For this reason, we require scholars to remain for the entire year once the trial period is over.

Scholars scheduled for Academy classes will remain in the Academies through the first six days of school as a trial period. After the trial period, if they choose, they will be permitted to reschedule into their home school classes or request placement in another Academy. If a scholar schedules out of Academy classes, their position in that Academy will be forfeited, and their spot will be given to a scholar on the waiting list.

If a scholar chooses to attend an Academy, they are <u>not</u> required to attend that Academy their entire high school career. The purpose of the Academies is to help scholars explore different career fields. If they find they are not interested in the career of the Academy they choose, they will finish the school year in their current Academy. After that year, they are able to join a different Academy (depending on availability) or return to their home high school.

Connections to Professionals in College and Career

Each year, scholars in the Academies complete a comprehensive semester-long or year-long project on a topic that interests them within their career field. This requires the application of the knowledge scholars learn in their three classes and the other "Seven Areas of the Report Card," to a real-world. These projects are then presented in front of a panel of professionals in the scholars' field of interest, as well as local college and university professionals. These professionals have the opportunity to ask the scholars in-depth questions and provide feedback and guidance in the future of their project. Additionally, during a scholar's senior year, these professionals may offer opportunities for an academic internship.

Academic Internship Program

An Academic Internship is a type of "Work-Based Learning Experience Program" for high school scholars (mainly seniors) who have completed extensive school-based preparation relating to an identified area of career and academic interest. To participate in an Academic Internship a scholar must be invited by a mentor/business. The internship takes place at the mentor/business's training site, can vary in length, will be non-paid (mentor could set aside money for dual credit opportunities for the scholar), and could lead to course credit if all criteria are met.

An Academic Internship may be a component of a scholar's schedule during: a) the regular school day, b) after school hours, c) during the summer, d) one semester, e) one or more trimesters, or f) year-long. The goals, skills and learning experiences will be generated by the scholar, mentor and coordinator before the Academic Internship begins and will be signed by all parties involved. Academic Internships are designed to give scholars opportunities to explore careers via workplace learning experiences and to benefit from interdisciplinary-based education. Scholars have opportunities to learn about the world of work and to develop useful skills and attitudes through the demonstrations of work-place skills. Academic competencies needed to be successful employees will be highlighted, which may result in increased motivation to learn academic subject matter.

BOSCH COMMUNITY FUND SECTION 1: BOSCH SUMMER EDUCATORS PARTNERSHIP (GRANT AREA – TEACHER TRAINING)

The Academies has spent over \$200,000 in PLTW Trainings for eight teachers since 2013. By the end of the 2018-19 school year, all career teachers will have completed all PLTW courses offered. The next step is to integrate industry training for all of the Academies' teachers. The proposal is to elevate the support staff and teachers' knowledge and skills from summer training programs through Bosch and to establish a partnership that will give scholars the understanding of real-world professions.

The Structure Proposal for the Bosch Summer Educators Partnership:

*Engineering Academy &	
*Women's Engineering Academy Teachers:	Adam Klaine (PLTW Engineering) Ian Olano (Mathematics & PLTW Teacher) Alyssa Leimenstoll (English & PLTW Teacher)
*Computer Science Academy Teachers:	Sarah Brown (PLTW Computer Science Teacher) Kristen McKinley (Mathematics Teacher) Casey Wolfe (English Teacher) Melissa Insko (English Teacher)
Biomedical Sciences Academy Teachers:	Sara Anderson (PLTW Biomedical Sciences & Science Teacher) TJ Pelfrey (Mathematics & PLTW Teacher) Nikki Mathews (PLTW Biomedical Sciences & Science Teacher)
Military Prep Academy Teachers:	CSM Jeff Stone (JROTC Teacher #1) TBD (JROTC Teacher #2) Chris Terry (Mathematics Teacher) Heidi Frost (English & PLTW Teacher)
Academy Support Team:	Francis O'Hara, Ed.D. (Director of Innovation Education) Julie Whitis, Ed.D. (Principal) Brian Noll (Dean of Scholar Affairs) Amanda Knochelmann (Career Counselor) Chris Bryson (Academic Internship Coordinator) Amanda Dempsey (Academy College Coordinator)
	20 total adjucators

20 total educators

One area of concern in the education field is teachers' understandings of other professions. Likewise, sometimes other professions lack understanding of the education profession. The Bosch Community Fund will intersect the two worlds, which will lead to better preparation of scholars to enter the workforce.

The **Bosch Summer Educators Partnership** will allow the 20 educators (listed above) to complete a one week internship at Bosch. This would occur over three summers (2019, 2020, and 2021). The structured agenda for each summer will be designed by Bosch and Academy Educators during the Fall of 2018. The goal is to build from summer to summer through a Plan, Do, Check, Act (PDCA) methodology. Sample areas to learn from Bosch professional:

- Bosch Business Sectors: Mobility Solutions, Industrial Technology, Consumer Goods, Energy & Building Technology
- Bosch Smart Home, Smart City, Smart Mobility, Industry 4.0, Internet of Things
- Bosch Research & Development, Bosch as an Employer, Bosch Safety Process, Bosch Workforce expectations & needs
- Additional areas to be established through Fall 2018 and Spring 2019 Bosch Summer Educator Partnership Meetings

Intended Outcomes for the Bosch Summer Educators Partnership:

- Academy Educators and Bosch Professionals build professional friendships where interactions become positive.
- Academy Educators partner with Bosch Professionals to mentor Academy Scholars with year-long projects.
- Bosch Professionals become advisory committee members for the different Academies.
- Academy Educators partner with Bosch to establish structured internships and externships for the scholars
- Academy Educators partner with Bosch and Navigo to establish a Pre-FAME program for scholars to explore the world of Bosch through a structured year-to-year program, building upon scholar experiences each year.*

The Structure Proposal for the Bosch Summer Educators Partnership:

- 9th grade scholars would have specific field trips to Bosch aligned with specific learning targets (Bosch Scholar Explorers)
- 10th grade scholars would have the next step of the program (Bosch Scholar Researchers)
- 11th grade scholars would continue their participation in the program(Bosch Scholar Solution Finders), and have the opportunity to apply for academic internships
- 12th grade scholars would be selected for full internships for their senior year (Bosch Scholar Intern) (See Bosch Scholar Internship Program below)

Following this four-year process, Academy Educators partner with Bosch to establish employment for scholars immediately after high school graduation.

Academy Educators partner with Bosch to establish employment for scholars to parallel with the scholar's college/university courses. An example would be the FAME 2+2 program. Scholars attend Gateway Community and Technical College for two years while working at Bosch. The scholar transfers to a Baccalaureate program at a university to complete a degree while still being employed at Bosch. The end outcome is the scholar stays with Bosch for their career.

Additional areas to be established through Fall 2018 and Spring 2019 Bosch Summer Educator Partnership Meetings.

Financial needs for the Bosch Summer Educators Partnership:

- Bosch Summer Educator Partnership: 17 of the 20 Academy Educators will require salary pay
- \$300.00 per day (average) x 5 Days = \$1500 x 17 Educators = \$25,500 per summer x 3 summers = \$76,500
- Establish a Bosch Scholarship Program for the 2+2 FAME Program
- Additional expenses: Travel, benefits, equipment, supplies, substitutes for Fall meetings to be covered from Academies budget

BOSCH COMMUNITY FUND SECTION 2: BOSCH SCHOLAR INTERNSHIP PROGRAM (GRANT AREA INTERNSHIP & WITHIN THE SCHOOL DAY)

The Bosch Scholar Internship Program will be structured through the scholar's progression from 9th to 12th grade as stated previously: 9th grade - Bosch Scholar Explorers, 10th grade - Bosch Scholar Researchers, 11th grade scholars - Bosch Scholar Solution Finders, and 12th grade - Bosch Scholar Intern. The structure will be designed in the Fall 2018 meetings with Academy Educators and Bosch professionals. The main outcome, as the scholars progress each year, is for Bosch to recognize the scholars who will be a great fit in the Bosch corporation, and, at the same time, the scholars see the value of working for Bosch for a career.

The Structure Proposal of the Bosch Scholar Internship Program:

- Establish 1 day field trips to Bosch for 9th-11th grade scholars designed to grow the scholar's knowledge and interests in Bosch.
- Establish an application process for 12th grade scholars to be accepted into the Bosch Scholar Internship Program.
- Establish a six-week summer internship program for 11th grade scholars going into their 12th grade year. This
 program will be established through the Fall 2018 and Spring 2019 meetings. It should parallel the Bosch Summer
 Educators Partnership in Section 1. The result will be Academy Scholars, Educators, and Bosch professionals all
 intersecting knowledge.

Financial needs for the Bosch Scholar Internship Program:

- Field Trip Cost for Buses and Lunch: Target Audience is Engineering Academy (EA 90 Scholars), Women's Engineering Academy (WEA 70 Scholars), and Computer Science Academy Scholars (CSA 90 Scholars) \$3000.00 x 3 years = \$9000.00
- Six-Week Summer Internship Program: One barrier we have encountered is transportation for the scholars to and from the internship, in addition to funding for the scholar intern to pay for lunch and professional clothing.
 Example: If established, Bosch will accept 9 interns (3 from EA, WEA, and CSA). A per diem, if needed, would be established to cover transportation, food, and professional clothing. This would be based on the free/reduced lunch categories in the school system. Exceptions will be considered though the Bosch and Educators discretion.
- Example of maximum cost: 9 Scholars x \$24.00 per day per diem = \$216.00 x 30 days (6 Weeks) = \$6480 x 3 Years = \$19440.00
- Additional expenses: Substitutes for teacher to chaperone field trips, equipment, supplies needs for the scholars established though the internship will be covered by Academy budget.

BOSCH COMMUNITY FUND SECTION 3: BOSCH PLTW MIDDLE SCHOOL TEACHER TRAINING PROGRAM (GRANT AREA – TEACHER TRAINING & WITHIN THE SCHOOL DAY)

As shown in the Kenton County Academies of Innovation and Technology Background and *Chart A: Academy Class List – Total Enrollment 600+* the 9th through 12th grade scholars have career pathways established with maximum enrollment. Kenton County Schools has 4 middle schools (Summit View Academy (SVA), Twenhofel (TWMS), Turkeyfoot (TFMS), and Woodland (WMS)). Each school has established some level of PLTW Gateway to Technology (GTT) Program. The GTT program has 10 curriculum trainings:

- 1. Automation and Robotics*
- 2. Computer Science for Innovators and Makers*
- 3. App Creators*
- 4. Energy and the Environment*
- 5. Science of Technology*
- 6. Medical Detective*
- 7. Design and Modeling (All M.S. Teachers have completed)
- 8. Flight and Space
- 9. Magic of Electrons
- 10. Green Architecture

The Structure Proposal for the Bosch PLTW Middle School Teacher Training Program:

Each middle school teacher will complete two courses per summer. The courses with an * will be the target courses established in the Bosch Community Fund grant. Changes can be made through the Fall 2018 and Spring 2019 meetings.

Each of these classes builds a strong foundation for high school, college, and career. In addition, the courses allow a flow from 6th through 8th grade that prepares them for their high school pathway into KCAIT. Presently, each middle school has one teacher, who has completed at least one GTT Course. The Bosch Community Fund will provide the needed cost for GTT course registration fees, travel costs, and teacher salary requirements.

The result will be a successful flow from 6th through 12th grade for scholars to have the needed skills, knowledge, and certifications to enter the workforce, college/university, or both.

Financial needs for the Bosch PLTW Middle School Teacher Training Program:

- PLTW GTT Registration cost is approximately \$1200.00 per class and each class training is 5 days.
- \$1190.00 x 4 Teachers x 2 Trainings per summer = \$9520.00 x 3 summers = \$28,560.00
- Salary for Teachers is \$300.00 per day x 5 Days = \$1500.00 x 2 Trainings per summer = \$4500.00 x 3 summers = \$13,500.00
- Additional expenses: Equipment, supplies, and substitutes for meeting time, needs for the GTT classes will be covered by Perkins budget and District Funds.

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BOSCH COMMUNITY FUND SECTION 4: BOSCH PLTW ELEMENTARY LAUNCH PROGRAM (GRANT AREA – TEACHER TRAINING & WITHIN THE SCHOOL DAY)

As shown previously is Section 1, 2, and 3 the goal is to have a continuous flow for K-12 scholars to be prepared for the STEM careers after high school graduation.

PLTW established a K-5 program called Launch. The goal is to establish PLTW Launch in all 11 of our elementary schools. The Bosch Community Fund will provide the needed cost for Launch course registration fees, travel cost, and teacher salary requirements.

The Launch program has 3 curriculum trainings and grade level specialized trainings:

- 1. PLTW: The Experience*
- 2. Getting Started with PLTW Launch Lead Teacher Training*
- 3. Core Training: PLTW Launch Lead Teacher*
- 4. Specialized Course: Aligned to Kindergarten Standards
- 5. Specialized Course: Aligned to First Grade Standards
- 6. Specialized Course: Aligned to Second Grade Standards
- 7. Specialized Course: Aligned to Third Grade Standards
- 8. Specialized Course: Aligned to Fourth Grade Standards
- 9. Specialized Course: Aligned to Fifth Grade Standards

The Structure Proposal for the Bosch PLTW Elementary Launch Program:

Each elementary school teacher will complete three courses with an * in the summer of 2019. The specialty courses will follow in the summers of 2020 and 2021. These will be the target established in the Bosch Community Fund grant. Changes can be made through the Fall 2018 and Spring 2019 meetings.

Each of the 24 interdisciplinary modules in the PLTW Launch curriculum empowers the scholars to adopt a designthinking mindset. In addition, the courses allow a flow from K through 5th grade that prepares them for their middle school PLTW GTT Program. Presently, each elementary school does not have a teacher trained in PLTW Launch. The Bosch Community Fund will provide the needed cost for launch course registration fees, travel costs, and teacher salary requirements.

The result will be a successful flow from K through 12th grade for scholars to have the needed skills, knowledge, and certifications to enter the workforce, college/university, or both.

Financial needs for the Bosch PLTW Elementary Launch Program:

- PLTW Launch Registration cost is approximately \$500.00 per class and each class training is 2 days.
- \$400.00 Registration x 11 Teachers x 3 Trainings summer 2019 = \$13200.00
- Salary for Teachers is \$300.00 per day x 2 Days = \$600.00 x 3 Trainings summer 2019 = \$1800.00 x 11 teachers = \$19,800.00
- Additional expenses: Equipment, supplies, and substitutes for meeting time, needs for the launch classes will be covered by District Funds. Additional Specialized Course Trainings will be covered by District and Perkins Funds.

BOSCH COMMUNITY FUND SECTION 5: BOSCH SCHOLAR CAMP (GRANT AREA – SUMMER PROGRAM)

As shown previously is Section 1, 2, 3, and 4 the goal is to have a continuous flow for K-12 scholars to be prepared for the STEM careers after high school graduation. To keep the scholars and their parents engaged in STEM education the Bosch Community Funds would support the **Bosch Scholar Camp** for graduating 5th graders going into the 6th grade. The camp would be one-week long in the summer. Curriculum is established through PLTW to meet the learning needs for the scholars and can be used as the foundation of the camp. In addition, Bosch working with the PLTW teacher will create specific learning activities. The financial goal is to have a fund which establishes the Bosch Scholars Camp for a minimum of 7 years.

The Structure Proposal for the Bosch Scholar Camp:

- Each of the 11 elementary schools will be given 10 slots (110 total) for their graduating 5th graders. An application process will be established through the Fall 2018 and Spring 2019 meeting. The Bosch Scholar Camp will start in June of 2019.
- All scholars who attend the camp will be given automatic admission into the KCAIT Academy of choice when going into the 9th grade. During their 8th grade year, they will have a specifically-designed field trip to Bosch.
- The expected results are many of the campers will grow into the Bosch Scholar Internship Program during their 12th grade year, followed by employment with Bosch after high school through the FAME Program.

Sample of Proposed Weekly Plan:

Day 1: Introduction, Projects based on PLTW Curriculum and activities created by Educators and Bosch professionals

Day 2: Projects based on PLTW Curriculum and activities created by Educators and Bosch professionals

Day 3: Field Trip to Bosch with activities designed for the camp scholars

Day 4: Completion of projects and testing the outcomes of the projects

Day 5: Completion of projects, team competitions, and awards ceremony with Bosch Camp Scholars certificates

Financial needs for the Bosch Scholar Camp:

- The cost to the scholars' parents will be \$75.00 for the week-long camp for first 3 years. The following 3 years the cost will increase to \$85.00. This will cover meals, T-shirt, and created projects. Scholarships will be provided for scholars with need. 110 Scholars x \$75.00 = \$8250.00 to \$9350.00 Revenue
- The camp scholars will be divided into 6 groups of approximately 18. Each group will have a teacher and a high school scholar to teach and oversee a group.
- Cost for teachers is \$300.00 x 5 Days x 6 Teachers = \$9000.00
- Cost for High School Scholars \$10 per hour x 40 hours x 6 Scholars = \$2400.00
- Cost of T-shirts 125 x \$6.00 = \$750.00
- Cost of meals, drinks, and snacks 125 x \$6.00 = \$750.00
- Cost materials, supplies, and equipment per year = \$2000.00 est.

Revenue Bosch	Revenue from	Cost of Salary for	Cost of Hourly Pay for High	Cost of T-shirts,	Balance
Community Fund	Registration	Teachers	School Scholar	Food, Materials	per Year
1 st Year \$15000	110 x \$75 = \$8250	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$8350
2 nd Year \$15000	110 x \$75 = \$8250	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$16700
3 rd Year \$15000	110 x \$75 = \$8250	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$25050
4 th Year	110 x \$75 = \$9350	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3350 Per Year	\$19500
5 th Year	110 x \$75 = \$9350	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$13950
6 th Year	110 x \$75 = \$9350	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$8400
7 th Year	110 x \$75 = \$9350	6 Teachers = \$9000	6 H.S. Scholars = \$2400	\$3500 Per Year	\$2850

• Remaining balance of \$2850 will be used throughout the years of the camp to cover scholarships needs.

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Overview of Bosch Community Funds to be used for Kenton County Schools

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Page 9	Section 5: Bosch Scholar Camp (Grant Area – Summer Program)
Page 10	Summary and Total Bosch Community Fund Request

SECTION	1 ST YEAR REQUEST	2 ND YEAR REQUEST	3 RD YEAR REQUEST	TOTAL REQUEST
Section 1	\$25500	\$25500	\$25500	\$76500
Section 2	\$9480	\$9480	\$9480	\$28440
Section 3	\$14020	\$14020	\$14020	\$42060
Section 4	\$33000	\$0	\$0	\$33000
Section 5	\$15000	\$15000	\$15000	\$45000
Total	\$97000	\$64000	\$64000	\$225000

Additional expenses: Teacher travel expenses, benefits, equipment/supplies for new curriculum/classes for GTT and Launch, substitutes for meetings, substitutes for teacher to chaperone field trips, equipment/supplies needs for the scholars established though the internships, registration for Launch specialized courses, PLTW annual membership fee (\$5000 for KCAIT, \$750 for each (4) middle schools, and \$750 for each (11) elementary schools = \$16250) and industry certifications (approximately \$20000 annually) will be covered by District Funds, State Funds, and Perkins Funds.

Summary

The purpose of the Bosch Community Fund Grant is to bring Bosch professionals, Educators, Scholars, and the Community together in a format where everyone learns. The result will be building a greater workforce for Northern Kentucky and beyond.

CHART A: ACADEMY CLASS LIST - TOTAL ENROLLMENT 600+

ACADEMY & ENROLLMENT	9 TH GRADE CLASSES	10 TH GRADE CLASSES	11 [™] GRADE CLASSES	12 TH GRADE CLASSES
Engineering Academy 25 Freshman 25 Sophomores 25 Juniors 15 Seniors**	PLTW Introduction to Engineering Design & PLTW Civil Engineering/Architecture Algebra II & English I	PLTW Principles of Engineering & PLTW Computer Aided Manufacturing Pre-Calculus & English II	PLTW Digital Electronics & Aerospace Engineering AP Calculus & AP Language	PLTW Environmental Sustainability & PLTW Engineering Design Development (CAPSTONE) See Gemini College Academy*
Women's Engineering Academy 25 Freshman 20 Sophomores	PLTW Introduction to Engineering Design & PLTW Civil Engineering/Architecture	PLTW Principles of Engineering & PLTW Computer Aided Manufacturing Pre-Calculus & English II	PLTW Digital Electronics & Aerospace Engineering	PLTW Environmental Sustainability & PLTW Engineering Design Development (CAPSTONE)
15 Juniors 10 Seniors**	Algebra II & English I		AP Calculus & AP Language	See Gemini College Academy*
Computer Science Academy	PLTW Computer Science Essentials	PLTW AP Computer Science Principles	PLTW AP Computer Science A	PLTW Cybersecurity (CAPSTONE)
25 Freshman 25 Sophomores 25 Juniors 15 Seniors**	Algebra I & English I	Geometry/Algebra II & English II	Pre-Calculus & English III	See Gemini College Academy*
Biomedical Sciences Academy	PLTW Principles of Biomedical Sciences	PLTW Human Body Systems	PLTW Medical Intervention	PLTW Biomedical Innovation (CAPSTONE)
50 Freshman 50 Sophomores 50 Juniors 25 Seniors**	Algebra I or Geometry & Biology	Geometry/Algebra II & Chemistry	Pre-Calculus & AP Biology	See Gemini College Academy*
Future Educator Academy	KDE Education Basics	KDE Students Today	KDE The Art of Teaching	KDE Education Practicum (CAPSTONE)
25 Freshman 25 Sophomores 25 Juniors 15 Seniors**	Algebra I & English I	Geometry/Algebra II & English II	Pre-Calculus & English III	See Gemini College Academy*
Military Prep Academy	JROTC LET 1: Military Foundation	JROTC LET 2: Character & Leadership	JROTC LET 3: History & Citizenship	JROTC LET 4: (CAPSTONE)
25 Freshman 25 Sophomores 25 Juniors 15 Seniors**	Algebra I & English I	Geometry/Algebra II & English II	Pre-Calculus & English III	See Gemini College Academy*
Gemini College Academy*	No College Classes for 9th Grade	After School College:	After School College: FALL History	Gemini College Academy:
25 – 35 Sophomores 25 – 35 Juniors 50 Seniors**		FALL Introduction to Psychology 105 & Communications 105	114 & English 101	FALL History 101 English 101 or Elective
**Some Senior complete CAPSTONE and/or Gemini College Academy		After School College: SPRING Introduction to Business 105 & Introduction to Political Science 105	After School College: SPRING Introduction to Music 105 & Ethics in Technology 255	SPRING History 102 English 102 College Algebra 124 Calculus 143