

Project Description

For years the Hughes-Jones Harrodsburg Area Technology Center has served students in Anderson, Mercer, and Boyle counties. About 300 junior and senior students were bussed to the area technology center for two to three classes in carpentry technology, welding technology, automotive technology, electrical technology, health science and allied health. Then they are bussed back to their schools for academic courses where instruction may or may not be integrated with the technical courses at the technical center.

Research indicates that students benefit from a more integrative approach of academic courses being taught through the lens of careers. Students might learn how to read a welding technical manual in English Language Arts (ELA) or how the Pythagorean theorem is applied in carpentry technology. Three years ago, the Hughes-Jones Harrodsburg Area Technical Center embraced this integrated instructional approach by writing and receiving the J.P. Chase New Skills for Youth grant to transition the Area Technical Center into Trailblazer Early College and Career Academy (TECCA).

The Academy provided opportunities for freshman and sophomores to begin taking technical courses at earlier levels by inviting academic teachers to instruct on-site. Participating districts provide academic teachers to begin developing integrated curricula for ELA and Mathematics so that freshman, sophomores, junior and seniors can attend one, two or three technical classes and/or one or two academic courses. Beginning August 2019, Mercer County provides an ELA teacher and Anderson County provides a mathematics teacher while Burgin Independent provides a half-day special education teacher for the morning and Anderson provides a half-day special education teacher for the afternoon. By inviting academic teachers to join the career and technical education team, we can make learning more relevant to the workplace, address employers' needs for preparing students better for the workplace, and provide learning for many students all day at the Academy.

Today 351 students attend the Academy, about half come from Mercer County and Burgin Independent school districts within Mercer County. As TECCA transitions to the full-day career academy model, the Trailblazer Steering Committee recognized a need for students to have the opportunity for more dual credit courses, more work-based learning opportunities with business partners, and the ability to access AP courses in their home high schools. After discussions with students, the Committee realized that the school must seek ways to attract students to choose to attend the academy all day. Health science courses must attract a range of students from those who seek state registered nurse aid (SRNA) certification as well as those who want to pursue medical school. In order this range of students, the Academy must meet the 21st century learners' needs.

Understanding the habits and needs of students must shape the discussion of learning spaces. A quick scan of a high school campus reveals students hanging out alone or in small groups while reading, taking notes, writing, or chatting. Beyond the obvious is another layer of activity, enabled by smart phones, iPads, Chromebooks and laptops. Both student habits and their technologies raise questions. For example, if students carry laptops to class, does this affect how we equip the rooms? Will the generation that has grown up with video games, smart phones and home theater systems be satisfied with what we can offer in classrooms? What spaces will give students the most educational value?

Globally, schools are replacing traditional classrooms with innovative flexible learning spaces to improve academic outcomes. Research indicates that students in flexible learning spaces spend

significantly more time in large group settings collaborating, interacting with peers and actively engaging than students in traditional classrooms. Students spend significantly less class time being taught in a whole class setting, engaged in teacher-led instruction, working individually, and using technology than in traditional classrooms. Research suggests that the varied, adaptable nature of flexible learning spaces coupled with the use of student-centered pedagogies, facilitated by higher proportion of class time interacting, collaborating and engaging in content.

The purpose of this grant proposal is to renovate a traditional computer lab/shop into a flexible learning space where students have more opportunities to immerse themselves in learning. By designing common spaces with comfortable gathering spots to provide opportunities for groups to meet or individuals to study in a more relaxed atmosphere than they might experience in their traditional classrooms. This flexible learning space will allow classroom discussions and debates to spill into after-class conversations. The space, equipped with outlets and USB ports to charge devices and comfortable furniture will create the conditions for students to reinforce their learning through relaxed discourse. Students will be able to access on-line high school and college courses here beyond what is offered at Trailblazer.

Objective and specific activities to accomplish these goals

Objective: To create flexible learning space for Trailblazer Early College and Career Academy students to:

- Attract more students to attend Trailblazer Early College and Career Academy
- Attract more range of students, including college bound students, technical school students and work-entry students
- Continue academic discussions beyond class
- Access on-line high school and college courses
- Create collegial atmosphere

Specific Activities:

- I. Survey students for interest in using flexible learning space
- II. Visit other career academy flexible spaces for ideas with teachers, business partners and administrators
- III. With KDE staff, TECCA teaching and administrative staff, TECCA Steering Committee, and student representatives, determine the flexible learning space.
- IV. Meet with TECCA teaching and administrative staff to design this project-based learning activity so that current students are involved in the planning and building process and collaboration among staff is accomplished.
- V. Determine estimates for electrical work, possible flooring changes, etc.
- VI. Invite students (perhaps geometry students) to design the space including but not limited to hub seating; walk up tables for computers; USB charging stations; coffee bar; healthy snack vending; high school, college, technical school logos, etc.
- VII. Invite students to name the space: (Some ideas to get student thinking started but not limited to these.) Trailblazer Hub, College Zone, The Zone, The Trail, Blaze)
- VIII. Discuss with higher education partners possible supervision assistance: cameras, work-study college student.

- IX. With electrical technology students, carpentry technology students, welding technology students, plan and build the space.
- X. Order needed furniture, etc.
- XI. Put together the space.

Timetable for the project

This project will involve current students in the planning and building of this space during the second semester of 2019-2010 (current) school year. It will open in August of the 2020-2021 school year. This will be a work in progress for student. \$8000 will get the project started.

Criteria for evaluating the program:

Students will sign into the space and provide description of activity in which they will be engaged so that we can determine how many students and purpose.

For students under the age of 18 engaged in on-line courses, course grades will be used to determine the effectiveness of the on-line courses and use of space.

Student surveys on the use and effectiveness of the space will be conducted. Survey results shared with Steering Committee, collaborating partners, including Corning, Inc.

An explanation of how the request meets Corning Incorporated Foundation Program Interests

The request of for this project is a direct investment in Science, Technology, Engineering and Mathematics curricula and workforce development. **Every** Academy student is actively engaged in automotive technology, electrical technology, welding technology, carpentry technology, health science or allied health science **every** day. In collaboration with business partners, the Academy seeks to create a pipeline of students ready for the workplace. When partners ask for improvements to curricula, the Academy works to adjust classroom instruction to meet employers' needs. By providing this flexible learning space, more students will be attracted to the Academy. More students will take advantage of the full day model so that they can acquire integrated academic credits for math and English at the Academy. More students will be able to access on-line high school and early college courses.

The amount of money sought from the Foundation and dates when funds will be needed

We are requesting \$8000 to begin the work on developing this space. Funds will be needed beginning January 15, 2020.

An itemized project budget showing sources of committed and proposed income and expenses

Budget for Renovation of Flexible Space

	Quantity	Amount	Revenue	Expenses
Corning Inc. Grant			\$8,000.00	
District Contribution Fund			\$5,000.00	
NSFY Grant (funds for branding logos already received)			\$ 450.00	
Durable Vinyl Upholstered Chairs	12	\$ 350.00		\$ 4200.00
USB Charging Stations for Electricity Class to Wire/Install				\$ 500.00
Wood/Materials for Carpentry - High Top Tables	2	\$ 450.00		\$ 900.00
Wood/Materials for Carpentry - Coffee Tables	3	\$ 275.00		\$ 825.00
Keurig Coffee Maker and Coffee Bar Set Up				\$ 350.00
Flooring/Rugs				\$ 1,000.00
Wall Covering for Boards				\$ 175.00
Vinyl Lettering for Logos				\$ 500.00
Chrome books	12	\$250.00		\$ 3,000.00
Camera for supervision				\$ 1,000.00
High Top Table Chairs	8	\$200.00		\$ 1,000.00
Total			\$13,450.00	\$13,450.00

The long-range plan for generating other funding and attaining increased self-sufficiency

Given that one of the Academy instructors teaches evening courses for Campbellsville University at Trailblazer Early College and Career Academy facility, the TECCA principal will collaborate with the higher institution to determine possible ways to partner for supervision of students through work-study employment; for seating; for healthy snack vending. Both Campbellsville University, dual credit BCTC students as well as our Trailblazer students will benefit from using this flexible space.