



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

DATE:

1/22/18

AGENDA ITEM (ACTION ITEM):

Consider/Approve application for a Greater Cincinnati STEM Collaborative grant to fund a summer STEAM Academy: Rockin' Robots Camp at Summit View Academy

APPLICABLE BOARD POLICY:

Click or tap here to enter text.

HISTORY/BACKGROUND:

Rockin' Robots Camp - Students will tap their creativity and be empowered to learn new skills as they create their own basic robots and learn how they work. They will gain the programming fundamentals to create and control both virtual and real-world characters.

FISCAL/BUDGETARY IMPACT:

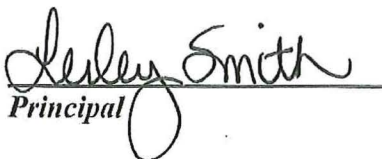
The camp is for 3 hours a day for 5 days; If we receive the grant, students are not required to pay and all materials are included. Teacher stipends are also included in the proposed funding for the grant.

RECOMMENDATION:

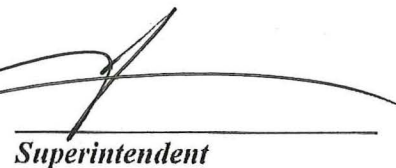
It is recommended that the Kenton County Board of Education approve the Greater Cincinnati STEM Collaborative grant application to fund a summer STEAM Academy: Rockin' Robots Camp at Summit View Academy.

CONTACT PERSON:

Lesley Smith


Principal


District Administrator

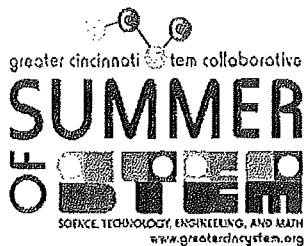

Superintendent

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.

Kenton County Board of Education

Board Members: Carl Wicklund, Chairperson Karen L. Collins, Vice Chairperson Joshua Crabtree, Esq. Carla Egan Jessica Jehn
"The Kenton County Board of Education provides Equal Education & Employment Opportunities."



Greater Cincinnati STEM Collaborative (GCSC)

Applications for Summer of STEM 2018 Camps

Release Date: December 18, 2017

Greater Cincinnati STEM Collaborative (GCSC) helps prepare students for their futures and to join Greater Cincinnati's workforce through connected, robust STEM learning pathways. STEM learning is propelled by business, education, community collaboration and our culture of incubation, acceleration, and inclusion.

Our vision is that Greater Cincinnati continues its growth as a technologically rich, vibrant community with the most talented STEM workforce in the country that is representative of the region's population. GCSC prioritizes organizations serving higher percentages of students who are diverse, disadvantaged, and/or otherwise underserved for direct funding and support.

All Summer of STEM 2018 camp applications must be submitted by Monday, February 5, 2018.

Summer of STEM 2018

Summer of STEM combats summer learning loss ("summer slide") by creating opportunities for students to explore STEM learning and careers specifically during the summer months. GCSC funding mainly supports students who otherwise would not have access to high-quality STEM programs. Visit the [Summer of STEM webpage](#) to review previous summers' results, partners / supporters, and more.

Due to the generosity of GCSC's partners and incorporating lessons learned from the previous two summers, GCSC is pleased to offer "camps-in-a-box". Camps are designed by expert educators, both locally and nationally, and based on previous successful summer camps:

1. **Introduction to STEM: Design and Making Camp** - Students will choose a technology-related passion project designed to grow their critical thinking, creativity, and collaboration skills while increasing their interest in STEM. They will present what they learn to an authentic audience. [Link to overview](#)
2. **STEAM Academy: Rockin' Robots Camp** - Students will tap their creativity and be empowered to learn new skills as they create their own basic robots and learn how they work. They will gain the programming fundamentals to create and control both virtual and real-world characters. [Link to overview](#)
3. **Computer Science Camp** - Students will think algorithmically, computationally, creatively, and critically while collaborating and communicating with others. They will learn about Computer Science and have the opportunity to explore their interest in the ever-changing and rapidly growing Information Technology (IT) field. [Link to overview](#)
4. **STEM Bicycle Club Camp** - Students will experience GCSC's STEM Bicycle Club in the summer camp environment. Students will break down and re-assemble bicycles they get to keep. The club builds student confidence as well as problem solving and persistence skills. [Link to overview](#)
5. **C-STEM Girl Camp** - Girls will be motivated to learn computing and STEM concepts through a fun and exciting robotics-based curriculum. Girls will grow their leadership and communication skills, meet inspiring women leaders, and gain exposure to the variety of future opportunities. [Link to overview](#)
6. **Other (write-in)** - GCSC will award several mini-grants, up to \$3,500 each, to support programs designed to engage students in two additional ways:
 - a. New, innovative STEM programs that will be prototyped in summer 2018 - and / or -
 - b. Programs designed to occur primarily outdoors, in nature's perfect science lab.

Applications Timeline

Milestone	Date
Application window opens	December 18, 2017
Applications due	February 5, 2018
Recipients announced	February 26, 2018
Camps Professional Development	March 9, 2018 (9:00am-3:00pm) – Jones Middle School May 10, 2018 (4:00pm-8:00pm) – University of Cincinnati <i>Camp leader(s) pick(s) one to attend</i>
Summer of STEM Community Debrief	August 9, 2018 (11:00am – 1:00pm)
Results (impact) report due to GCSC	October 1, 2018

Submitting Your Application

Use this link to submit your camp application

Once you're on the application site:

1. Make an account or sign in.
2. Begin filling out your information.
3. If you want to save a draft, scroll to the bottom of the application and click the "Save Draft" button. Access draft by logging into submittable.com, clicking the drop-down menu on the top right by your name, clicking "My Submissions," selecting "Saved Drafts" from the top bar, then clicking "Continue."
4. When your application is complete, click the orange Submit button. You will receive an email confirming your application has been received.

Partners may submit multiple applications for Summer of STEM 2018 Camps.

Questions? Contact GCSC

Contact GCSC at gcscstemed@gmail.com if more information is needed to complete an application. Inquiries should include a description of the information needed and full contact information (name, organization, email address, and phone number).

Selection Principles

1. **Inclusion and Access:** GCSC will award camps disproportionately to educators (and other partners) serving students who are diverse, economically disadvantaged, and/or otherwise underserved. GCSC will award camps broadly across the region, while meeting other principles.
2. **Readiness & Commitment:** Camp leaders and their sponsors must be committed to collaborate with GCSC to:
 - Maximize and measure positive student impacts
 - Share the story of camp and Summer of STEM success
3. **STEM engagement best practices:** Camp leaders will successfully employ STEM Engagement Best Practices.
4. **Sustainability:** GCSC prioritizes funding applicants:
 - Willing to co-invest and cover at least a small portion of their camp costs. GCSC will help with partners' fund-raising as wanted (coaching / consultation, provide information needed for grant writing, and /or letters of endorsement).
 - Who will re-apply, and maximize the subsequent use of, resources and knowledge gained in Summer of STEM 2018.
5. **Innovation:** Up to 12% of GCSC's Summer of STEM 2018 funds will be allocated to support new, innovative approaches to using STEM Engagement Best Practices for students during the summer months.
6. **Sponsor Priority:** Funding will be awarded in line with sponsors' priorities: geographic location / diversity, student age and / or diversity, etc.

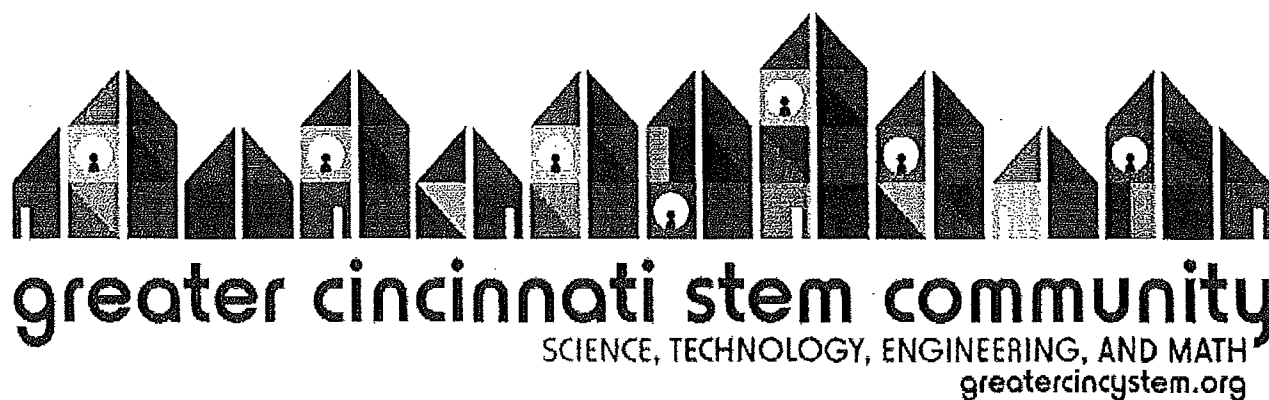
Camp Resources Provided By GCSC

1. Curriculum that includes coaches guide with lesson plans and student workbooks (see note a. below for C-STEM Girl Camp).
2. Tools and thought starters to support volunteer engagement, student recruitment, family engagement, and more.

3. Professional Development (PD) / training and consultation for camp leaders.
4. Camp materials, purchase and delivery coordinated by GCSC.
5. Student STEM Passports for all participating students.
6. As needed a small budget for camp food, staff stipend, and transportation to STEM / Design Fest event (if held, see note below).

NOTES

- a. C-STEM Girl Camp curriculum includes agenda, handouts, and electronic presentation files provided by University of California Davis.
- b. GCSC is not able to fund desktops, laptops, Chromebooks, mobile devices, or robotics equipment referenced in camp overviews. Applicants should ensure access to this equipment as part of submitting camp applications.
- c. Applicants applying for mini-grant funds via the "Other (write-in)" category will have access to resources described in #2 and #5 above. Applicants will provide all other resources, including with the funds provided by GCSC.
- d. GCSC is exploring options for an outdoor STEM / Design Fest to culminate Summer of STEM 2018. Partners interested to help plan and / or co-host are requested to contact GCSC at gcscstemed@gmail.com.



Summit View Academy

2/5/2018

PART I: APPLICANT INFORMATION:

n/a

On behalf of which school or organization are you submitting this application?:

Summit View Academy

Name and role of the person submitting this application::

Christie Jones, Library Media Specialist / Renee Kidwell, K-5 STEAM Lab Teacher

Enter your email address here::

christie.jones@kenton.kyschools.us

Enter your phone number here::

859-359-9600

Enter your organization's ship-to address here::

5006 Madison Pike, Independence, KY 41051

What is your organization's service area (city/township/village/community):

Kenton County in Independence, KY

Tell us about your organization and why you are interested in a Summer of STEM 2018 Camp.:

Summit View is a K-8 STEAM Academy, our focus is connecting science, technology, engineering, art, and math to real world learning to encourage future readiness. Our mission is to surround elementary students with problem based learning that reveals individual strengths while teaching critical thinking skills. Summer of STEAM mirrors Summit View's goals. We share the same passion of providing technology rich experiences to ALL students to prepare them for a successful future. We would love to provide this camp for a group of students who are currently performing under grade level in math or reading. These students frequently miss technology, art, music, and STEAM classes because of the extensive reading and math interventions they are required to attend during the school day. Many of these students are also part of our GAP population and are identified as having special academic or behavioral needs, Free or Reduced Lunch services, or are a part of our ethnically diverse population. This camp would provide this diverse group of students an experience to collaborate, create, learn, and build a path to self success.

For which camp are you applying?:

STEAM Academy: Rockin' Robots Camp

Why are you applying for this, vs. the other available, camps?:

Summer of STEAM echos Summit View's mission. The mission is to surround elementary students with problem based learning that reveals individual strengths while teaching critical thinking skills. During exploring and creating solutions we embody our school's ROYAL Habits; Resilient Leader, Open Communicator, Creative Visionary, Active Learner, and Lifelong Innovator into our students. This program will be an extension to the curriculum already taught throughout our classes and will help solidify the ROYAL Habits. Among all the other camp curriculums that are available, this camp aligns with our current mission, curriculum, and objectives. It provides our students with the experiences with robotics and programming that they are not having access to during the regular school day. The hands-on experience with circuits will not only strengthen their understanding of electricity and its processes but will also give them the extra confidence when it comes to science. Soldering will be a new skill that none of our students have experience with in the school environment, so this provides them with a special activity that only they will have participated in.

Where and when will your camp run?:

We will run our camp at Summit View Academy in the K-5 STEAM Lab. From the art on the wall, to the furniture and equipment available, students will be encouraged and inspired to excel. The combination of a comfortable environment, robots, and exciting learning activities will engage all students. We will hold this camp during the week of June 11th-15th so that it will not interfere with other academic oriented camps our school will be offering during the summer that these same students may also be attending to strengthen their skills in reading and math.

PART II: STUDENT INFORMATION:

n/a

How will students be selected to participate in your camp? How will your organization ensure their readiness and commitment?:

We will target students who are currently performing under grade level in math or reading. Almost all of these same students are a part of our identified GAP group - as being low income, identified with special academic or behavioral needs, or as part of our ethnically diverse population. Most of these students are pulled out of enrichment classes because of the extra interventions they are required to attend. These students often get discouraged and the Summer of STEAM is the perfect opportunity for these at risk students to create and collaborate confidently with their peers.

What percentage of your camp's students will be diverse, economically disadvantaged, and/or otherwise under-served? Describe these students.:

We will be inviting students who are pulled for intervention groups throughout the school day. This group of students consists of white, Hispanic, and African American races, many of whom receive the Free and Reduced lunch assistance program since 48% of our school participates in this program. We currently have identified seventy students in third, fourth, and fifth grades that are pulled for interventions, however, thirty-two of them are from low socioeconomic families and those will be the ones targeted for this camp.

What will be the ages of students that attend your camp?:

9-13 years old

Approximately how many students will attend your camp? :

24 students

Is your organization interested to run an all-girls camp? Tell us why / why not and the benefits you anticipate for your girl students.:

Last year we ran an all girls Summer of STEAM camp and it was a HUGE success. We understand and value the importance of female roles in STEM careers but this year we are targeting a very specific group of students we feel will benefit considerably because of the lack of opportunities they are having during the school day due to their deficiencies in reading and math. These students often do not get the same outside camp experiences as others because of the expense and this camp will alleviate that factor.

What is the home county of the students your camp will serve?:

KY - Kenton

PART III: PARTNER INFORMATION:

n/a

Who will lead your camp and what is her/his role?:

Christie Jones- Media Specialist and Renee Kidwell- STEAM Teacher

Enter his/her email address here::

christie.jones@kenton.kyschools.us

Who else, if anyone, will play an important role in your camp and what is her/his role?:

Carrie Holloway, Assistant Principal of Summit View Academy, former NKU CINSAM STEM Outreach Specialist, will help provide guidance in terms of curriculum and support to enhance teacher and students knowledge of STEAM. She will serve as our administrator contact and will be involved not only with the planning but will be at school during the week of our camp.

Enter his/her email address here::

carrie.holloway2@kenton.kyschools.us

Will your camp include volunteer professional coaches to help engage students in STEM? If yes, tell us about this.:

We will have a few guests coming in to talk to the students about careers and their experiences in STEM. Joe Chavez- Kenton County Technology and STEAM Consultant will be in attendance and we have contacted our volunteer coordinator with Duke Energy to arrange volunteers to be here to assist students and share their knowledge in engineering and electricity.

Parents can play the starring role to support their child in STEM. Describe your plans for family engagement.:

Families will be invited to come to our Rockin' Robot Party on the last day of camp! Students will show off their robots, creations, and coding skills. We will also be sharing information on social media platforms like the school's Twitter and Facebook throughout the week so families can see what their child has accomplished. We are in the process of reviewing the parent resources from the STEM Companion book to share with parents. The resource as a whole has wonderful resources and information but may be intimidating or overwhelming for the parents of these particular students. We will be looking deeper into how to best communicate the importance of STEM as well as how critical it is for their students to get caught up to grade level expectations in reading and math to be career and/or college ready.

C-STEM Girl Camp applicants (only), please describe your plans to include college- and high-school-aged students as camp coaches.:

PART IV: SUSTAINABILITY:

n/a

Which of the following costs will you (and /or your partners) be able to cover?

Check all that apply.:

Camp Food

Transportation to STEM / Design Fest event (if held)

How will your organization leverage resources and knowledge gained from GCSC Summer of STEM 2018 support throughout the year?:

Our hope is that with training received from GCSC in preparation for this camp, that we will expand our knowledge of mBots and their use in the classroom. We have a small number of mBots that we currently use as a station in our STEAM lab on occasion but we have limited experience in all that they can do. We used mBots in last years Summer of STEM camp and it was our first experience with them. In addition, we have no experience with soldering. We are excited to learn more about ways that this can be utilized with our students either in the STEAM lab or during Maker Stations in the Media Center during the 2018-19 school year and beyond. We are looking forward to attending the training to further our professional learning around both of these STEM tools to improve our students experiences in our labs and maker spaces.

PART V: READINESS & COMMITMENT :

n/a

Is your organization prepared to provide any laptop/desktop/Chromebook, mobile device, and/or robotics equipment needed in your camp?:

Yes

Is your organization committed to collect post-camp data from camp students and

leaders regarding student impact and interest in STEM?:

Yes

Is your organization committed to obtain media releases for camp students and share camp news and pictures using social media?:

Yes

Is your organization willing to host visitors, including the media, during your camp?:

Yes

Is your organization able to attend one of the Camps Professional Development sessions scheduled for March 9 and May 10? :

Yes. Most likely to attend the March 9 (9am-3pm) session

If you responded "unsure" to any of these Readiness & Commitment questions, why?:

Part VI: Mini-Grant Program Information:

Complete only if applying for "Other (Write-In)"

What amount of funds are you requesting from GCSC?:

\$3,500

How will GCSC mini-grant funds be used?:

Itemized Budget

24 mBots \$69.99 each = 1679.76

Batteries (Misc.) \$150

2 Teacher Stipends \$600 each = \$1200

30 Camp T-shirts \$7 each = \$210

Celebration Snacks (misc) \$200

6 Solder Pen \$8.00 each = \$48.00

3 Hot Glue Gun \$10.00 each = \$30.00

3 Glue Stick Packs \$7.00 each = \$21.00

4 Solder Wire Rolls = \$40.00

Misc. Office Supplies = \$100

List any other organizations funding your program. Include funding amounts and status (such as requested, committed, funds received, etc.):

Part VII: Wrap Up:

Thank you for your interest in the Summer of STEM. Use this box if you have additional notes regarding your application.: