

Greater Cincinnati STEM Collaborative (GCSC) Applications for Summer of STEM 2020 Camps

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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 students underrepresented in STEM (low-income students, girls, and students of color — African American, Latino/Hispanic, mixed race) for direct funding and support.

All Summer of STEM 2020 camp applications must be submitted by Monday, March 9th, 2020. Timeline

| Milestone | Date |
|----------------------------------|--|
| Application window opens | December 18 th , 2019 |
| Applications due | March 9 th , 2020 |
| Recipients announced | April 9 st , 2020 |
| Camps Professional Development | May 14 th , 2020 (either 12:00 pm – 4:00 pm OR 4:00 pm – 8:00 pm) |
| Summer of STEM Community Debrief | August 7 th , 2020 (11:00am – 1:00pm) – University of Cincinnati |

Summer of STEM 2020

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 <u>Summer of STEM webpage</u> to review previous summers' results, partners / supporters, and more.

Due to the generosity of our region's STEM education and workforce development supporters GCSC is pleased to offer "campsin-a-box" again in Summer of STEM 2020. Camps are designed by expert educators and based on previous successful programs:

- 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. <u>Link to overview</u>
- 2. **STEM Gardeners** Students will engage in hands-on, math-infused making as they create sustainable gardens. Students will work through smaller lessons that focus on the foundational understanding of gardens and plant life as well as design challenges. <u>Link to overview</u>
- 3. **Coding Camp** GCSC recognizes the vast amount of public coding resources that have been created to help educators bring coding into their classroom. Coding Camp bundles these resources with GCSC best practices to support more teachers to teach coding in summertime. Link to overview.
- 4. **Run Clubs as Camps** Students will be able to participate in a summer camp version of either the GCSC 3d Printers Club or STEM Bicycle Club:
 - STEM Bicycle Club Camp is available only to those who have previously hosted and led a STEM Bicycle Club.
 - GCSC is looking for partners willing to lead the learning of how the current 3d Printers Club curricula can be translated into a summer camp using either the <u>Problem Solving inventions</u> or <u>3D Grand Prix</u> curricula. This has not been done before and GCSC is eager to learn about it.
- 5. Other (write-in) GCSC will award several mini-grants, up to \$3,000 each, to support programs designed to engage students in new, innovative STEM programs that will be prototyped in summer 2020. Preference will be given to K-12

teachers that have participated in Ohio STEM / STEAM Teachers Professional Learning Community or NKU CINSAM's Next Generation STEM Classroom (ngSC) program.

Submitting Your Application

Use this link to submit your 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.

NOTE: Partners may submit multiple applications for Summer of STEM 2020 Camps.

Camp Selection Principles

- 1. **Inclusion and Access:** GCSC will award clubs disproportionately to educators (and their partners) serving students who are underrepresented in STEM (low-income students, girls, and students of color African American / Black / Brown, Latino/Hispanic, mixed race) and affected most directly by the "summer slide". 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 and community volunteers to:
 - Maximize learning benefits for students.
 - Measure positive student impacts through post-program survey completion and debrief meeting attendance.
 - Share the stories of club and student success.
- 3. **Sustainability:** GCSC prioritizes funding applicants who:
 - Co-invest to 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, etc.).
 - Will re-apply, and maximize the subsequent use of, resources and knowledge gained in Summer of STEM during the 2020-2021 school year.
 - Already partner and collaborate with GCSC including in clubs, camps, and / or communities of practice.
 Support GCSC's funders needs for demonstrated program impact and participate in the program evaluation process that includes post program surveys and attendance at debrief meetings.
- 4. **Innovation:** Up to 12% of GCSC's Summer of STEM 2019 funds will be allocated to support new, innovative approaches to using <u>STEM Engagement Best Practices</u> for students during the summer months. *Preference will be given to K-12 teachers that participated in the 2019-2020 STEM / STEAM Lab Teachers Professional Learning Community or NKU CINSAM's Next Generation STEM Classroom (ngSC) program.*
- 5. **Sponsor Priority:** Funding will be awarded in line with sponsors' priorities: geographic location / diversity, student age and / or diversity, etc.
- 6. **Self-funding:** Schools and other organizations able to fund 100% of their club costs, including a \$1,000 fee to cover GCSC program costs (curriculum and professional development, culminating event, project management and consulting), will also be selected to participate.

Camp Resources Provided By GCSC

- 1. Curriculum that includes coaches guide with lesson plans and student workbooks.
- 2. Tools and thought starters to support volunteer engagement, student recruitment, family engagement, and more.
- 3. Professional Development (PD) / training, consultation, and community of practice for camp leaders.
- 4. Camp materials, purchase and delivery coordinated by GCSC (Introduction to STEM, STEM Gardeners, STEM Bicycle Club, and 3d Printers Club Camps)
- 5. \$500 to purchase materials (Coding Camp)

6. As needed a small budget for camp food and staff stipend.

NOTES

- a. 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. Don't forget to consult with your school's / organization's IT staff to ensure all of your planned technology will work (access to external websites, connectivity of devices / learning tools, etc.)
- b. Applicants awarded up to \$3,000 in mini-grant funds via the "Other (write-in)" camp category will:
 - Not be provided with other material or cash resources beyond the grant amount.
 - Will have access to the non-material/cash resources described in #2 and #3 above.

Camp Roles and Responsibilities

- 1. Project Manager: Plans the camp, including logistics and resources. Is the primary communication interface between the school, parents, community partners, volunteers, and GCSC. Key partner with the teacher to plan space and food, recruit students and obtain family permissions, administer post-club surveys, etc. Collaborates with others to recruit volunteer coaches / mentors. Ensures organization agrees to and accepts GCSC camp grant terms and meets commitments made to GCSC in the application process. Serves as liaison between teacher and technical (IT) support to ensure all required technology is operational. With camp teacher plans involvement of students' families.
 - GCSC has seen many types of people successfully provide project manager leadership, including: resource coordinators, school counselors, after-school / 21st Century coordinators, instructional coaches, other teachers, administrators, community partners, and volunteers.
- 2. **Teacher:** Prepares and leads camp meetings, using provided curricular resources. Creates tie-ins to science, math, engineering, and/or computer science curriculum taught during the school year. With camp project manager plans involvement of students' families. Ideally, is a K-12 teacher or has a background in informal education and/or youth development.

High-Level Camp Action Plan

- 1. Decide camp meeting location / work space.
- 2. Recruit volunteer coaches (mentors) from the partner organizations identified & confirmed during the application process.
- 3. Notify technical (IT) personnel of needed connections. Set-up & test technology to ensure it's ready for student use before start of camp.
- 4. Attend all-region camp training / professional development at UC.
- 5. Plan how and where camp materials will be stored between camp meetings.
- 6. Plan method to recruit students.
- 7. Plan food.
- 8. Select students. Collect permission forms and media releases.
- 9. Plan parent / family involvement.
- 10. Plan for club visitors, including media.
- 11. Run camp, including:
 - Post camp pictures on social media, share photos with GCSC (tips and techniques will be shared at PD)
 - At camp conclusion, administer online surveys regarding camp impact and benefits
- 12. Attend all-region project debrief at UC.
- 13. Stay tuned for information about the all-region end of summer / back to school STEM festival for students, families, volunteers, and other camp partners

"Thought Starter" Planning Resources

Attracting Volunteers Student Selection STEM Engagement Best Practices

Involving Families Workspaces & Technology

Questions?

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).