

CryptoClub Hubsite Request for Application

The National Girls Collaborative Project and the CryptoClub Project from the University of Chicago are seeking Collaboratives to participate as CryptoClub Hubsites in a newly awarded broad implementation grant from the National Science Foundation (NSF). Two trainers from selected Hubsites will be trained by CryptoClub developers. The Hubsites will then recruit, train, and support programs in their regions to use the CryptoClub curriculum in middle-grade afterschool programs.

About CryptoClub

The CryptoClub Project develops classroom and web-based materials to teach cryptography and related mathematics to middle-grade students in informal settings. The CryptoClub Afterschool Curriculum was developed with NSF support and has been nationally field-tested.

A typical CryptoClub afterschool program lasts about 16-20 sessions and uses games, treasure hunts, and other informal activities to engage students in cryptography and mathematics. It applies topics from the middle-school curriculum, such as decimals and percent, division with remainder, common factors, negative numbers and pattern recognition. The program also includes cryptography games and activities from the CryptoClub website, CryptoClub.org.

Our 3-minute video, (http://resourcecenters2015.videohall.com/posters/493), gives a brief overview of the project. Additional information, including documents "Mathematics in CryptoClub" and "CryptoClub Connections to CCSSM" can be found on our project website, www.math.uic.edu/CryptoClubProject.

Benefits of being a CryptoClub Hubsite

- Training on a nationally field tested cryptography and mathematics resource to share with educators in your network.
- Development of a CryptoClub network in your Collaborative.
- Access to CryptoClub experts through NGCP-CryptoClub webinars and the CryptoClub blog.
- Travel and lodging for two Trainers for 3-day Training of Trainers in Chicago, IL in April 2017.
- \$1000 grant from the CryptoClub project to provide trainings and materials.
- \$200 grant from CryptoClub to support attendance and presentation at a professional conference. Additional support may be available upon request.

Requirements of being a CryptoClub Hubsite

Collaboratives will be asked to commit to participate for two years, with the first Cohort beginning in the spring of 2017. Participation will involve the following:

- Identify two Trainers for your collaborative to facilitate leader training workshops. Trainers will:
 - Attend a 3-day Trainer Workshop in Chicago in the spring of the first year.
 - Train and support 20 CryptoClub leaders during the summer of the first year and another 20 the next year.
 - Leader trainings are approximately three one-day sessions
 - Training schedule and timeline is flexible and should fit into the Collaborative's scheduling and style
 - Example: 3 consecutive days in the summer or one session every 2-3 months throughout the school year.
 - o Participate in monthly NGCP webinars hosted by the CryptoClub developers.
- Recruit 20 CryptoClub programs per year from your collaborative for a total of 40 programs.
 Each CryptoClub will:
 - Support a minimum of 10 middle-grade students for 16-20 sessions.
 - Provide a CryptoClub Cipher Handbook for each student (\$12 per book).
 - Participate in evaluation activities.
 - Provide computers with Internet service for at least a guarter of the sessions.
- Participate in evaluation, including helping the evaluator collect data from the programs.
- Give at least one presentation about CryptoClub at a professional conference (local, regional, or National).
- Submit at least two items per year that describe activities or experiences related to CryptoClub implementation, to be posted on the CryptoClub blog.

Trainer/Leader Qualifications

- CryptoClub Trainers should be comfortable with Algebra and entry level high school
 mathematics. Experience with teaching mathematics or prior cryptography knowledge is not
 required.
- **CryptoClub Club Leaders** should be comfortable with mathematics at the middle-grade level and should believe that working with secret messages can be fun. Experience with teaching mathematics or prior cryptography knowledge is not required.

Ongoing Evaluation Activities

CryptoClub Project Timeline

YEAR	.1	
November 17, 2016 9:00 AM Pacific 12:00 PM Eastern	Application Information Webinar	
December 15, 2016	Applications due	
January 15, 2017	Selection of Hubsites Announced	
January 26, 2017 10:00 AM Pacific 1:00 PM Eastern	Kickoff Webinar	
February 2017 – June 2017	Club Leader Recruitment and Training Planning	
April 4, 5, 6, 2017	3-day Training of Trainers Chicago, IL	
April 20, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
May 18, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
June 15, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
July 20, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
August 17, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
June - August 2017	Club Leader Workshops at Hubsites	
September 2017- April 2018	CryptoClub Programs in session	
September 21, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
October 19, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
November 16, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
December 21, 2017 10:00 AM Pacific 1:00 PM Eastern	Monthly Trainer Community Call	
YEAR	2	
Continue the 3 rd Thursday of each month	Monthly Trainer Community Call	
5 1 0040 1 0040	Club Leader Recruitment and	
February 2018 – June 2018	Training Planning	
June - August 2018		

How to Apply

- 1. Collaborative Lead will identify two (2) individuals from their Collaborative to participate in the CryptoClub Network Project as Trainer.
- 2. Collaborative Leads should write a Letter of Intent including:
 - a. Name and organization of primary CryptoClub contact person (This could be the Collaborative Lead or one of the Trainers. This should be the person who is the point of contact for the NGCP-CryptoClub team. They will also need to be closely associated with the CryptoClub activities in the Collaborative)
 - b. Name and organization of two people the Collaborative has identified as the Trainers and why they are qualified to be CryptoClub Trainers.
 - c. Explanation of workshop facilities, including the technology and Internet access. Note: This project comes with a \$1000 stipend per Collaborative. We realize this is not enough funding to support ALL project costs. Please consider ways to leverage partnerships, use registration fees, and other resources to cover the costs of this project. Please keep this model in mind as you answer the following questions.
 - d. How will the Collaborative support the CryptoClub Leader Trainings, including approximately \$50 per leader for books? For example: through registration fees for Club Leader Trainings, partnerships and/or other resources.
 - e. How will the Collaborative meet the enrollment expectations of 20 programs per year for two years (40 programs total), with a minimum of 10 students per program (400 students total)?
 - f. How will participating clubs fund the books or each student, at about \$12 per book? For example: using their own resources such as district funds, student fees, partnerships?
- 3. Submit a <u>current resume</u> and a <u>brief statement</u> from each Trainer describing his/her interest and highlighting experience in mathematics.
- 4. A <u>Letter of Support</u> from each of the Trainers' supervisors outlining the commitment and capacity to complete the project deliverables.

Submit all items outlined above to Casi Herrera at cherrera@ngcproject.org
by December 15, 2016.