

## CryptoClub Cohort 2 Request for Application

The National Girls Collaborative Project and the CryptoClub Project from the University of Chicago are seeking NGCP Collaboratives and partners to participate as CryptoClub Hubsites in a broad implementation grant from the National Science Foundation (NSF). Two trainers from selected Hubsites will be trained by CryptoClub curriculum 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. The curriculum applies topics from the middle-school mathematics, such as decimals and percent, division with remainder, common factors, negative numbers and pattern recognition. The curriculum also includes cryptography games and activities from the CryptoClub website, <u>CryptoClub.org</u>.

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

#### 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 March 2018.
- \$2000 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 and partners will be asked to commit to participate for two years. Participation will involve the following:

- Identify two Trainers to facilitate leader training workshops. Trainers will:
  - Attend a 3.5-day Trainer Workshop in Chicago in the spring 2018.
  - Train and support 20 CryptoClub leaders during the summer/fall 2018 and 20 in year two.
  - Leader trainings are approximately three one-day sessions
    - Training schedule and timeline is flexible and should fit into the Collaborative/partner's scheduling and style
    - Example: 3 consecutive days in the summer or one session every 2-3 months throughout the school year.
  - Participate in monthly NGCP webinars hosted by the CryptoClub developers.
- Recruit 20 CryptoClub programs from your region. 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 quarter of the sessions.
- Participate in project evaluation, including helping the evaluator collect data from the local 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.

## CryptoClub Project Timeline

YEAR 1		
October 25, 2017 11:00 AM Pacific   2:00 PM Eastern	Application Informational Webinar	
November 17, 2017	Applications due	Ongoing Evaluation Activities
December 1, 2017	Selection of Hubsites Announced	
December 14, 2017 10:00 AM Pacific   1:00 PM Eastern	Kickoff Webinar	
January – June 2018	Club Leader Recruitment and Training Planning	
March 8-11, 2018	3.5-day Training of Trainers in Chicago, IL	
April 20, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	
May 18, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	
June 15, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	Evalua
July 20, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	joing l
August 17, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	Ouç
June - August 2018	Club Leader Workshops at Hubsites	
September 2018- June 2019	CryptoClub Programs in session	
September 21, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	
October 19, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	
November 16, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	
December 21, 2018 10:00 AM Pacific   1:00 PM Eastern	Monthly Trainer Community Call	

#### How to Apply

- 1. Collaborative Lead or Partner will identify two (2) individuals from their region to participate in the CryptoClub Network Project as Trainer.
- 2. Collaborative Leads or Partner 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 provides a \$2000 stipend per Collaborative. We realize this is not enough funding to support ALL project costs. We would like you to leverage partnerships, use registration fees, and other resources to cover the costs of this project. Please keep this in mind when answering the following questions.

- d. How will the Collaborative fund 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.

# All items outlined above should be submitted to Casi Herrera at <u>cherrera@ngcproject.org</u> by November 17, 2017.