



PA STEM Girls
Collaborative Project



The PA STEM Girls Collaborative Project is currently recruiting teachers and afterschool providers to take part in the **CryptoClub Project**, funded by the National Science Foundation (NSF). The CryptoClub Project consists of classroom and web-based materials, which teach cryptography and related mathematics to students, in grades 5 through 12, in both formal and informal settings. The CryptoClub Afterschool Curriculum was developed with NSF support and has been nationally field-tested.

A typical CryptoClub program consists of 16-20 sessions; however, you can customize it to fit your needs. The program uses games, treasure hunts and other informal activities to engage students in cryptography and mathematics. It applies topics typically found in a 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, <http://cryptoclub.org/>.

To learn more, check out the 3-minute video at <http://resourcecenters2015.videohall.com/presentations/493>. This video gives a brief overview of the project. Additional information, including documents entitled "Mathematics in CryptoClub" and "CryptoClub Connections to CCSSM" can be found on the project website, <http://www.math.uic.edu/CryptoClubProject/>.

Who can be a CryptoClub Leader?

Leaders need not be mathematics teachers; they just need to be enthusiastic about math. No prior cryptography experience is required.

What Happens at a Leader-Training Workshop?

Participants will learn how to:

- Teach cryptography in fun and engaging ways
- Incorporate middle-school mathematics into their formal or informal learning environment
- Use a variety of games, Internet activities and stories to engage their students

Is your organization interested in taking part in CryptoClub?

Below are the requirements for implementing a CryptoClub program.

- Attend a three-day training session hosted by the PA STEM Girls Collaborative Project
- Support a minimum of 10 students during the 2017-2018 academic year



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- Participate in evaluation activities
- Provide computers with Internet service for at least a quarter of the sessions

Cost

The cost of this training is \$200.00, which includes: CryptoClub instructor resources and CryptoClub books for 10 students (additional student books may be purchased at a cost of approximately \$12 per book). Breakfast and lunch on all 3 days of the training are also included.

Training Dates & Location

The first day of CryptoClub training will take place on Tuesday, September 26th from 9:00 AM to 3:00 PM at the Indiana County 4-H Office in Indiana, PA. Days 2 & 3 of the training will be planned at a later date, we will make sure that everyone who attends Day 1 will be able to attend Days 2 & 3.

Other CryptoClub trainings are being planned for weekend evenings near Clarion, PA and Saturdays near Erie, PA. If you are interested in attending one of these trainings, please contact Lisa Kovalchick at kovalchick@calu.edu.

Registration

To register, please visit <http://ngcproject.org/pa-stem-girls-collaborative-project-cryptoclub-training>.

If you want to implement a CryptoClub program, but cannot afford the registration, we may be able to help. Please contact PA STEM Girls Collaborative Project Lead Contact, Lisa Kovalchick at kovalchick@calu.edu.

Questions?

If you have questions about the CryptoClub program please email the PA STEM Girls Collaborative Project Lead Contact, Lisa Kovalchick at kovalchick@calu.edu.