



## CHICAGO MATH, NFP

Chicago Math, NFP is organized to support and enhance mathematical education in the Chicago metropolitan area by supporting participation in local, regional, and national mathematics competitions as well as fostering noncompetitive extracurricular mathematics activities.

### Background

About 25 years ago, a small group of Chicago area math teachers began a conversation that led to the formation of what became the cornerstone mathematics competitions in the area, the North Suburban Math League ([www.nsmll.org](http://www.nsmll.org)) and the Illinois Council of Teachers of Mathematics State Contest ([www.ictm.org/links/contest.html](http://www.ictm.org/links/contest.html)). These competitions have enriched the mathematics education of a great many students in the metropolitan area. Among all of the beneficial career outcomes of this academic stimulus, in no way is this clearer than in the increasing number of former competitors who returned to become the current coaches in both competitions. It is among these competitors-turned-coaches that a new conversation has begun.

All of these efforts are supported only by the effort and financing of parents and local school districts. The ability of these competitions to reach the broadest body of students is limited by the ability of those families and schools to support such opportunities and therefore, by the limited target communities with these opportunities. By increasing support for existing programs and laying the groundwork for the creation of programs targeted at different audiences, a larger and broader body of students can share in this enriched mathematical experience.

To facilitate this process, an organization is needed to focus on the overarching goal of enhancing mathematics education in the Chicago metropolitan area through extracurricular activities.

### Initial Projects

There are three avenues in which Chicago Math, NFP will initially act.

**First**, and most directly, we will serve as the primary organizer and sponsor of the Chicago American Regions Math League (ARML) teams ([www.chicagoarml.org](http://www.chicagoarml.org)). The Chicago ARML teams consist of 60-70 of the most mathematically talented high school students in the Chicago metropolitan area, selected by an open tryout, who practice several times before traveling to Iowa City, IA to compete in the national ARML ([www.arml.com](http://www.arml.com)) competition. **Second**, Chicago Math, NFP will start a program of weekly classes for students, parents, and teachers focused on enrichment and exploration with the goal of increasing interest in mathematics, particularly among younger students, and providing support for parents and teachers looking to strengthen mathematics education. Because of the wealth of existing programs for high school students in the metropolitan area, particularly in terms of contests,

as well as the breadth of professional development opportunities for high school mathematics teachers, these courses will begin with a focus on the elementary and middle school levels.

**Third**, Chicago Math, NFP will seek to provide support to existing organizations in the metropolitan area, such as existing mathematics extracurricular activities and competitions. As funding for education in general has decreased over the past few years, the budgets for extracurricular mathematics activities at many area schools have been frozen or reduced. With local schools being the primary source of funds for many area math competitions, the ability to offer access to the students as well as to maintain the quality of these contests is at risk—especially in the most challenged areas of the state. Providing funding and expert services to these organizations would decrease the financial burden on local schools, particularly those in economically disadvantaged areas.

#### Funding Sources

As a continued supply of mathematically talented students is in the best self interest of the financial, insurance, consulting, and technology sectors, there are a number of corporations with a large Chicago presence from which funding will be sought. Several Chicago-based corporations already provide funding to specific competitions and organizations. Additionally, many former students who have been through local programs such as Chicago ARML feel that these programs were an essential component of their education and are willing to provide funding.

#### Similar Organizations

In the San Francisco Bay Area, the Berkeley Math Circle ([mathcircle.berkeley.edu](http://mathcircle.berkeley.edu)) has had a significant influence in building mathematical talent in that metropolitan area. The BMC has done this through several programs, including the Bay Area Mathematical Olympiad (a math competition) and weekly lectures on a variety of topics for students (often focused on contest preparation). In addition, they have sought grant money to provide compensation for teachers from economically disadvantaged areas who bring students to the weekly lectures. The existence of the BMC corresponds to an increase in the number of USA Mathematical Olympiad ([www.usamo.org](http://www.usamo.org)) qualifiers from the Bay Area as well as an increase in the performance of the region's teams in the American Regions Math League. In Boston, The Math Circle ([www.themathcircle.org](http://www.themathcircle.org)) provides weekly courses for students of a wide variety of ages. Their courses tend to focus on enrichment topics and exploration by the students. In the eleven years since their founding, participation in their program has grown rapidly and their program has been used as a model to start programs in several other cities and in other countries. They also make heavy use of recent program alumni as program staff.

#### Contact

Isaac Greenspan  
Mathematics Faculty, Illinois Mathematics and Science Academy  
Head Coach, Chicago ARML  
[ilg@chicagomath.org](mailto:ilg@chicagomath.org)