An Undergraduate Summer Program in Mathematics Education
An Initiative of a New Network of Liberal Arts Colleges and Universities
to Address a Need in STEM Teacher Education at these Institutions

In May 2012, fifty-eight math, science and education faculty from 30 liberal arts colleges and universities met at Bryn Mawr College for a three-day NSF-funded conference titled:

Building a network for excellence in STEM teacher education at liberal arts institutions:
Doing together what we cannot do alone.

Liberal arts institutions, with their small education programs, prepare relatively few STEM teachers, but the teachers they do prepare have strong content knowledge, tend to take on leadership roles in their schools, and have the potential to make a disproportionately large impact on the schools and districts in which they teach. The goal of the conference was to take the first steps to create a national network of liberal arts institutions to work together to strength STEM teacher preparation, henceforth referred to as the ‘Network’.

One of the challenges participants at the conference identified is to provide their undergraduate math and science students whose career interests are in K-12 education with courses and experiences that have a strong focus on math or science education. Education programs at liberal arts institution are small and it is rare for these institutions to have an education faculty member with an expertise in math or science education and/or to be able to offer courses dedicated to math or science pedagogy. As a way to address this issue, the conference participants strongly recommended that the Network pursue offering focused summer experiences involving math and science education that would be open to all undergraduates from institutions in the network.

As a first step in this direction, the Network aims to launch a pilot program in partnership with Brown University’s Education Program that will bring together a small group of undergraduates from the network for a summer program in mathematics education. This new program will build on the very successful and long running Brown Summer High School Science Education program.