Traditional ways of preparing teachers to educate diverse students in large urban school districts have not been successful in the United States. Constantly failing schools consistently show low student performance test scores because teachers lack the qualifications necessary to teach in their subject areas, most specifically mathematics and science. The Cleveland Municipal School District, as Ohio’s largest school system, recognizes this problem and has summoned three of its local universities—two private and one public—to better prepare its teachers for the new demands of today’s students. Under the auspices of the Cleveland Mathematics & Science Partnership (MSP), mathematics and science teachers will be provided the opportunity to gain the knowledge and skills needed to be effective in their urban classrooms by participating in restructured university continuing education programs that address:

- State and local academic content standards that link what teachers need to know and be able to do with what students need to know and be able to do;
- Pedagogical content knowledge (knowledge about how to teach in particular disciplines) rather than only knowledge of a particular subject matter; and
- Strong links between teacher education faculty and arts and sciences faculty in universities.

Restructuring continuing education programs requires a concerted commitment to ensure that teachers become qualified in addressing student performance. Therefore John Carroll University, Case Western Reserve University, and Cleveland State University will join forces with the Cleveland Municipal School District and the Education Development Center, Inc., to address the improvement of teaching through the establishment of three diverse graduate programs for Cleveland mathematics and science middle and high school teachers (grade 6-12). These include:

1. A Masters Degree Program with specialization in Mathematics or Science from John Carroll University for middle school teachers (grades 6-8);
2. Graduate-level content courses in mathematics and science from Cleveland State University for middle school teachers (grades 6-8) that count towards state licensure; and
3. Graduate course work focusing on science laboratory and mathematics demonstration preparation from Case Western Reserve University for high school teachers (grades 9-12).

The Cleveland MSP’s vision is to improve student learning and achievement through high quality mathematics and science teaching within Cleveland Municipal School District classrooms. High quality teaching is defined not only by teachers having a deep knowledge of content, but also by their ability to encourage students to learn through the hands-on inquiry process. Therefore John Carroll University, Case Western Reserve University, Cleveland State University and the District will partner in sharing the responsibilities for on-going teacher continuing education, including the collaboration of resources. The end result is that the District will rely upon local universities as the primary for improving teaching through the restructuring of their teacher education programs. A provider of high-quality continuing professional development, while universities in turn hold themselves more accountable.