Chicago Transformation Teacher Institutes

http://www.ctti.uic.edu/

The Chicago Transformation Teacher Institutes (CTTI) is an NSF-funded Math Science Partnership of five **universities (UIC, DePaul, IIT, Loyola, and Northwestern)** and the **Chicago Public Schools (CPS**). Its aim is to increase the content, pedagogical, and leadership skills of teachers through a school leader team approach.

The CTTI teacher program includes three components in addition to networking programs:

- **Coursework** in **mathematics**, **physical science**, and **life and environmental science**. The courses provide for increased content knowledge by teachers, including how the content is embedded in contemporary issues and current research. They also support growth of deep knowledge required for strong cross-curricula work.
- **Workshops on leadership and teaching** that provide increased skills in how to use content to understand classroom practice, including instructional design, selection of classroom materials, pedagogy, and assessment of student knowledge.
- **Improved curricula** – school teams target recruitment and tailor curricula for 12th grade capstone and AP classes. These curricula are part of a vertical alignment of all four years of high school science or mathematics.

Goals

CTTI uses five Math Science Partnership Key Features in the formulation of the project's main goals:

1. The ***Partnership-Driven*** CTTI extends the engagement of five universities and CPS in a collaborative effort **benefiting schools, teachers and students** and the partner institutions.
2. CTTI employs a theoretically-focused and research-based logic model to improve ***Teacher Quantity, Quality, and Diversity*** through (a) *high quality courses and leadership development* that affect *(b) school capacity*, (c) *teacher practice*, and (d) *student outcomes* within a set of schools that serve CPS' predominately African American and Latino students.
3. CTTI teachers provide instruction within existing and new high school math and science ***Challenging Courses and Curricula*** through work both to identify, refine, and implement capstone or AP curricula in 12th grade and to improve the vertical integration of learning in Grades 9-11 courses.
4. CTTI teachers shape their teaching practices with the ***Use of Evidence*** from formative assessment systems present in CPS to document student outcomes throughout the four years of high school math and science and especially within 12th grade.
5. The CTTI program builds teams of teacher leaders to enact ***Change*** in curricula and courses and to ***Sustain*** that change in schools. CTTI strengthens the higher education partners' ability to offer strong teacher content and leadership science and math education.

Benefits for teachers

All of the coursework in the core CTTI program is offered with graduate credit to teachers. In addition, **these courses are transferable** to degree-granting programs on our campuses should you choose to continue in that manner. The CTTI program does not, alone, give teachers enough credits to earn a graduate degree. However, the math courses are already designed to provide credits at those institutions towards a Master's degree. The science courses are **fully credited** as coursework at the graduate level at the host institutions.

Application Timeline

Application submissions are accepted on a rolling basis. If your team plans on submitting an application, please let us know this by emailing our project coordinator, Dean Grosshandler, at **grosshan@uic.edu**. The application form is available on the CTTI website, at **http://www.ctti.uic.edu/**. As part of the process of preparing your application, we encourage you to schedule a meeting with us and your team at your school. We will review applications and provide responses on a continuing basis. The application asks for background information regarding teacher background and training, descriptions of current curricula status in the school, and documentation of commitments by the school to support CTTI teachers.

Program Timeline

CTTI consists of four cohorts drawn from about 20 schools. The cohort creation process repeats each year in the spring with another set of schools. Individual teachers are encouraged to take CTTI courses at any time if a team has not yet formed at their school.

Cost to Teachers and Payments to Schools

Teachers receive a $1000 stipend for each course completed with a grade of B or above and a $1000 stipend for each workshop completed. These stipends are provided by CTTI and are processed as quickly as possible. Although the program also provides course materials, tuition will need to be paid separately. *CPS has so far generously provided funding that has enabled teachers to attend courses for free or for a small fee. However, we can not guarantee that this will be the case for future courses.* **Upon implementation of new 12th grade curricula, each school may request $5000 for class materials or other uses (once for math, once for science, up to $10,000 total).**

Schedule for CTTI Cohort 3

Type	Activity	Dates
Network Meeting	Day-long symposium on CTTI	June 2, 2012
June 9	Next Generation Science Standards and Common Core State Standards in Math workshop	June 9, 2012
Workshop 1	*Leadership in Schools*	June 25 – June 29, 2012
Course 1	*Making Sense of Numbers and Symbols* (math) or *Energy in the Earth Environment* (physical science)	May 7 – June 22 (Math); July 2 - July 18 (not July 4) (Science), 2012
Network Meeting	Day-long symposium on CTTI	September 29, 2012
Course 2	*Data Analysis and Modeling* (math) or *Molecular chemistry: Applications to life and health* (physical science)	Fall, 2012
Course 3	*Logic across the High School Curriculum* (math) or *Separations and analysis in science* (physical science)	Spring, 2013
Course 4	*Investigating Pedagogical Content Knowledge for Science and Mathematics Teaching* (both math and science tracks)	Summer, 2013
Workshop 2	*Leadership in Teaching*	Spring (Math) and Summer (Science), 2013
Workshop 3	*Incorporating New Science and Mathematics Content into High School Programs* (monthly meetings)	Fall, 2013 – Spring, 2014