FUNDED BY A GRANT FROM THE NATIONAL SCIENCE Foundation, the CUNY GK-12 Fellows Program provides gradu-
ate students the chance to work with teachers who are just
beginning to teach high school sciences and mathematics at the
Advanced Placement (AP) level. In this program, 10 graduate
students in the sciences volunteer to serve as instructional fel-
ows, while engaged in traditional research and coursework at
the City University of New York (CUNY).

CUNY GK-12 fellows work closely with their cooperating
teachers to plan their day-to-day activities, based on both the
teachers’ and students’ needs. Fellows may also assist with setting
up labs, grading, and instruction. During the academic year, fel-
ows are required to spend 10 hours per week on in-class instruc-
tional activities at their assigned high school and an additional five
hours per week on out-of-class preparation activities.

Training

Both teachers and fellows receive training in the form of con-
ferences and seminars, which ground them in teaching skills and
practices. Overall, there are 10 days of training for the fellows,
beginning with a five-day summer institute on teaching AP
courses offered by the College Board. If the teachers involved
are teaching their AP class for the first time, they actually attend
the class with the fellows with whom they will be working.
Later, during a five-day intensive training class organized by the
CUNY program, fellows learn pedagogical techniques and strate-
gies for effective teaching.

Mentoring

The program also has intrinsic mentoring. Experienced fellows
pair up with first-time participants to hold informal discussions
on their classroom approach. These meetings, in addition to
monthly program-wide seminars, provide a support system for
new fellows.

Impact

The program focuses not only on the graduate students serv-
ing as fellows, but also on the high school science programs in
which they serve. At the outset of the program in 2003, only
three of 28 schools in the Bronx School District offered any AP
classes in the sciences. Since then, three additional schools have
offered AP courses and several more have expanded their AP
offerings as a direct result of the aid provided by the program.

For Nancy Medina, who is currently serving as a fellow for
both AP chemistry and AP biology at Clinton High School in
the Bronx, the most beneficial aspects of her experience have
been learning how to teach — and at the same time, learning
from teaching.

Medina is planning for a career as a high school teacher, and
the experience has been invaluable. She’s not only had the
chance to be mentored by an experienced educator, but has
practiced teaching herself, and learned about better ways to
reach students.

“The teacher I was working with was great. He teaches high
school and college chemistry, so he knows his field very well. I
was able to observe how he taught the lessons, what he thought
was important, and how he got results from his students. And
because I had to prepare a particular section, it helped me
sharpen my own chemistry knowledge. I really had to learn it
better so I could teach it to children.”

Another fellow, Mary Donovan, used the program to test the
waters of academia before accepting a fellowship at Queens
College. “If I had not been involved in the CUNY Fellows
Program, or if I’d had a bad experience, I would never have
accepted my position at Queens,” says Donovan, whose fellow-
ship requires her to serve as an adjunct professor by teaching
four credits per semester in addition to completing her research.

“I actually didn’t know if teaching was something I wanted to
do. However, I had a really positive experience teaching the
class and the lab, and felt more confident about pursuing teach-
ing as a career.”

Donovan’s early involvement with the fellows program con-
sisted of her simply meeting with a teacher to discuss his lesson
plans. Later, her participation grew into a much more involved
endeavor. Slowly, she started incorporating some of her own
ideas about teaching styles and how certain topics should be
taught. After a while, she began collaborating with her teacher
to develop lesson plans and to incorporate new methods, such
as peer-led team learning, into the coursework.

Rising to the unique challenges of teaching in a high school
setting, whether it meant finding a way to complete her lab
work in an already busy schedule or simply maintaining control
of her class, helped Donovan feel increasingly confident that she
could tackle other teaching challenges.

With a comment fitting for a program based in New York
City, Donovan observes, “If I could make it there, I could make
it anywhere.”

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For more information about the NSF Graduate
Teaching Fellows in K-12 Education Program,
and a list of institutions with grants, visit