

## Why Science?

Concord is a community actively involved in initiatives to address global warming and its impact on the environment. None, however, will have as profound and positive an effect on our future as the ***Hooked on Science*** program proposed by the Science Department at Concord Carlisle High School (CCHS) in conjunction with Concord Education Fund.

We have an opportunity – arguably an obligation -- to engage our children in advanced science study at the middle and secondary school levels. The CCHS Science Department has a three year, visionary program that will *hook* hundreds of students on advanced science study. Elements of this program will challenge those who are predisposed to the sciences. Equally important, the program's compelling content and fresh, hands-on approach can't help but ignite the interest of a larger following.



## Creating a State-of-the-Art Science Center

The engine driving this program is the creation of a project room or “laboratory” for extended research, experimentation and engineering. By retrofitting existing storage space at CCHS and purchasing portable equipment and materials, we can transform science curricula, club offerings and fuel a passion for science education among hundreds of CCHS students.

If the lab is the engine, the faculty is the key to unlocking the intellectual potential of the students. In the words of one teacher, “to get a chance to teach the kids something at a high level, that we’re really excited about, well that REALLY gets them excited!” The proposed capacity for state-of-the-art experimentation, engineering and robotics will be unique among the state’s public secondary schools.

The ***Hooked on Science*** program will:

- Create new elective courses:
  - BioTechnology and Environmental Studies
  - Organic Chemistry
  - Field Geology, Environmental Science and Astronomy
  - Modern Physics and Engineering
- Establish a Laboratory for Extended Research, Engineering and Robotics
- Develop two extra curricular seminars: one for freshmen and sophomores and one for juniors and seniors
- Design an independent research module for select CCHS juniors, who can partner with local content experts (scientists in the community)
- Enhance and expand science clubs and competition teams
  - extend club partnership opportunities to K-8 students and teachers
  - expose K-8 students to the new capacity for higher level experimentation and engineering at CCHS
  - enable a Concord Middle School Science Olympiad Team
- Sustain faculty enrichment through two annual awards for summer travel and research with proven professional development programs.

## Projected Timeline

### The Hooked on Science Program Timeline

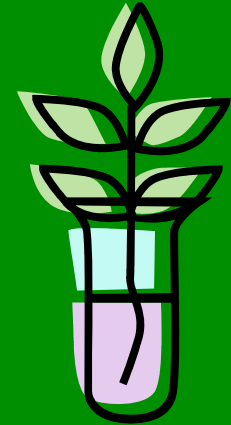
<b>Year One</b> 7/08 – 6/09	Curricula development for electives; room retrofit; initial equipment and materials purchase. Potential Spring seminar; some club enhancements.
<b>Year Two</b> 7/09 – 6/10	Lab/Project Room fully functional and faculty training complete; implementation of two new electives and two seminars; all club enhancements operational; final equipment purchases and materials purchase for 2010-2011 academic year.
<b>Year Three</b> 7/10 – 6/11	Implementation of final two electives; inception of Independent Research offering; faculty enrichment awards. Materials for 2011-2012 academic year.

## Now is the time to act

Two years ago, CCHS added two electives to its Science Curriculum. Those classes are oversubscribed while core courses continue at capacity. Demand for more advanced study exists at CCHS.

A recent post on *Tomorrow's Professor*, a forum created by MIT and Stanford academicians, asks if Engineering Schools can "go green" fast enough to save our planet. Without motivated science students, no amount of investment of time or resources will alter our future. To engage and prepare today's students for tomorrow's possibilities, we need to promote and provide for advanced study in science. We need to act now. We need to get our students hooked on science.

# Hooked on



# Science



The Concord Education Fund is an independent organization that raises money to award grants and make special gifts to the Concord Public Schools and the Concord Carlisle Regional School System. Since inception, the CEF has given the schools more than \$1.1 million.



## Saving the Planet by Encouraging Advanced Science Study

A Concord Education Fund Initiative