

Instructors

Beverly Brown, Ph.D. is an Associate Professor of Biology. Her specialty is plant biology. She was the recipient of the NSF Grant "Interdisciplinary Teaching: Using the study of sprouts to teach mathematics and sciences at a liberal arts college." Her research interests are pollination ecology and science education.

Lynn Gatto, M.A. is a Ph.D. candidate at the University of Rochester's Warner School of Education. She has received numerous awards for excellence in science education including Outstanding Science Teacher of the Year for New York State (1991) and the Presidential Award for Excellence in Science Teaching. Her research interests include how talk mediates critical literacy practices in the urban classroom.

Heather Ames Lewis, Ph.D. is an Associate Professor of Mathematics. Her specialties are Algebraic Graph Theory and Math Education. She's been involved in partnerships with the Rochester City Schools, working both with teachers and directly with students, since 1999, and her son is a student at School #12.

Julia Walsh Postler, M.S. Ed. is a Visiting Instructor of Education who specializes in early childhood literacy. She has directed professional development and community based projects within the last three years.

Sheila Brady Root M.S. is a Visiting Instructor of Chemistry. She is currently Chair of the Central-Western Section of the Science Teachers Association of New York State and has been involved in many STEM teacher-education programs.

Carol Roote, Ph.D. is an Assistant Professor of Biology. Her research interests are development, cell biology, genetics, and microbiology.

About Nazareth College

Nazareth College is among the nation's leading colleges and universities, according to reports by *U.S. News & World Report* and *Barron's Profiles of American Colleges*. Nazareth is a co-educational, independent comprehensive College and has been described by Kaplan/Newsweek as "a hidden treasure among colleges in the Northeast."

Mission

The mission of Nazareth College is to provide a learning community that educates students in the liberal arts, sciences, visual and performing arts, and professional fields, fostering commitment to a life informed by intellectual, ethical, spiritual, and aesthetic values; to develop skills necessary for the pursuit of meaningful careers; and to inspire dedication to the ideal of service to their communities. Nazareth seeks students who want to make a difference in their own world and the world around them, and encourages them to develop the understanding, commitment, and confidence to lead fully informed and actively engaged lives.



*Hands-on Investigations
in*

*Mathematics, Science,
Technology and Literacy*

**Creating Inquiry-Based
Classroom Projects
for
Students in Grades K-6**

August 10 – 13, 2009

**Nazareth College
4245 East Avenue
Rochester, NY 14618**

Contact (585) 389-2555

**Dr. Beverly Brown—Coordinator
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Module Descriptions

Module 1—Technology for everyone!

My class is doing a great project. How can I document it to share with parents and administrators? What's a Voicethread and why would I use one in class? How do I make a podcast and better yet, how can students use podcasts to learn about math and science? We'll use computers and cameras (equipped with stop action and time-lapse photography) to answer these questions and investigate simple machines and cycles. We'll also look at innovative uses of Smartboards, Web 2.0 internet tools and on-line communication such as Instant Messaging and wikis. We'll spend time working out specific ways you can use these technologies to increase your students' interest in math and science.

Module 2—Simple Machine

We've heard from teachers that the basic physics and math associated with simple machines can be a real challenge to teach, so we decided to meet this one head on. Join us to explore low budget, high impact approaches to teaching simple machines. We'll work on understanding content, too, so that teachers can approach this topic with energy, creativity, and confidence!

Module 3—Cycles

Cycles are an essential part of Learning Standards and can be approached from many angles. We'll incorporate use of technology, literacy and mathematics into the topic of cycles, and help you design an implementation strategy that will work in your classes.

Tentative Timeline

Monday—Module 1 integrated with Mathematics, Literacy and Writing. Preparation of Lesson Plan.

Tuesday—Module 2 integrated with Mathematics, Literacy and Writing. Preparation of Lesson Plan

Wednesday—Module 3 integrated with Mathematics. Preparation of Lesson Plan

Thursday—Preparation of integration plan, grant proposal, and presentation.

All days will include mathematics, science, technology, and literacy.

Daily Schedule

8:30 – 9:00	Gathering Time (over Continental Breakfast)
9:00 – 11:45	Understanding the Topic, Hands-on activities
12:00 – 12:45	Working Lunch
1:00 – 2:45	Sharing of Results Preparation of Lesson Plans
2:45 – 3:00	Wrap Up

**All lessons will be linked to NY State
Education Learning Standards**

*This Institute would be eligible for
32 PD hours*

Registration Procedure

Costs

Registration	FREE
Lunch	FREE
Materials	FREE

Register on-line at:

www.raccems.org/educators/institutes

Select the **Nazareth College** Institute .
Problems? Contact Beverly Brown.

Register as a School Team

Each school team will have its own master teacher coach who will serve as a resource during the following school year and help the team implement their Institute-generated lesson plans.

At the conclusion of the Institute, teachers may apply for small grants. The proposal process is simple. All you need to do is explain how you will implement the ideas generated in this Institute, why funds are required, and what they will be used for.

SPACE IS LIMITED!

REGISTRATION BY JULY 10TH

IS STRONGLY ENCOURAGED.

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