much in recent years and can still be used for those entering college over the next two or three years. One such strategy includes visual/auditory where students are asked to read aloud, record and play back definitions to terms, or visualize certain tasks. At HU, we offer students in our CSC 120, Intro to Computer Literacy course a method that requires them to do much more than just passively sit in class and take notes. This method, where students learn computer applications using hands-on activities, is not without its problems and challenges, but overall most students do extremely well and some have express not only satisfaction with the course, but acknowledge that learning has occurred.

Education

THE ART LOVER'S PROBLEM. W. Michael Gentry, Department of Mathematics, Mary Baldwin College, Staunton, VA. An application of algebra, without the use of calculus, to solve *The Art Lover's Problem:* How far from a Pablo Picasso portrait should an art lover stand in order to obtain the best possible view? Encourages first-year college students to think actively; helps them understand how a scientist sees or interprets the physical world. Patient problem-solving and algebraic skill are both necessary. Basic skills in algebra precede a deeper more theoretical understanding. Student responses indicate that although conceptual understanding should come first, it remains shallow in nature, unless and until some facility in algebra is developed.

STORMWATER MANAGEMENT AT THE SCIENCE MUSEUM. Lindsay M. Walker[1] & Eugene G. Maurakis[2], [1]Randolph-Macon College, Ashland, VA and [2]Science Museum of Virginia, Richmond, VA. Stormwater runoff has been a growing problem for watersheds throughout the United States. As stormwater flows across paved surfaces, such as roads, parking lots, and roofs, it picks up trash, fertilizers, pesticides, PCB's, and other pollutants which end up in larger bodies of water such as the Chesapeake Bay. To improve the quality of water for local waterways such as the James River and the Chesapeake Bay, the Science Museum is collaborating with a variety of groups to implement stormwater management technologies; porous pavement, rainwater harvesting systems, green roof, BayScapes gardens, bioretention areas, and tree box filters. The Museum is creating exhibits and demonstrations which correlate to the Virginia Standards of Learning so the students can learn about stormwater management technologies. Funded by the National Fish & Wildlife Foundation.

CONNECTING GRADUATE RESEARCH TO UNDERGRADUATE AND SECONDARY SCIENCE EDUCATION. Lisa S. Webb[1], Roberto A. Flores[2], Geoffrey C. Klein[1], Michael D. Meyer[1] & Gary J. Whiting[1], [1]Department of Biology, Chemistry and Environmental Science and [2]Physics, Computer Science and Engineering, Christopher Newport University, Newport News, VA. CNU's NSF funded GK-12 project, Linking Urban Water Quality with Science Education in the Chesapeake Watershed, involves placing graduate Environmental Science and Computer Science

students in a 9th grade Earth Science classroom where they will utilize an interdisciplinary, guided-inquiry based approach to address an environmental question (i.e. what is the health of the local watershed and what events and actions influence it?). The project is interdisciplinary, integrating environmental science, basic and applied biology (ecology and entomology), chemistry and computer science, and includes a combination of classroom, laboratory and field experiences. In order to extend the project's connection to include undergraduate science education, we field-tested the labs and activities in an introductory biology laboratory for non-science majors. We describe the scope of the activities and discuss the success of utilizing this approach to connect graduate level research to undergraduate and secondary science education. The authors would like to acknowledge the generous financial support of the National Science Foundation (GK-12 Program, award # 0841295).

RESTORATION OF DEGRADED WETLANDS IN AN URBAN SETTING: A COMMUNITY PARTNERSHIP. M. T. Muller[1], M. S. Semcheski[1], T. A. Egerton[1], C. L. Clark[1] & K. DuBois[2], [1]Department of Biology, Old Dominion University, [2]City of Norfolk. Considering the drastic loss of tidal wetlands in the Chesapeake Bay Watershed over the past century, a sense of environmental stewardship has began to percolate. Urban environments provide a distinctive suite of challenges for wetland restoration that requires cooperation from a number of city officials and community leaders. In the City of Norfolk, an aggressive plan to rehabilitate wetlands on city property has begun and consequently provided a unique learning opportunity for students from elementary age through graduate school. Restoration sites within Colley Bay in Norfolk, Virginia which is adjacent to Larchmont Elementary School and Old Dominion University have been identified. Elementary students have been growing the marsh grass, *Spartina alterniflora*, and will assist in the planting, while the ODU Biology Graduate Student Organization have made the technical plans and submitted all necessary permit applications. With funding from the City of Norfolk Wetlands Board and assistance from the Lafayette River Wetlands Partnership, this project promises to have significant positive impacts on the environmental quality and aesthetics of the area.

Environmental Science

ESTABLISHMENT OF A CRITICAL THERMA MAXIMA (CTMAX) FOR THE MAYFLY *ISONYCHIA BICOLOR* (EPHEMEROPTERA). C.A. Sims, B.S. Echols, J. Brunkow, W. Nuckols and D.S. Cherry. Department of Biology, Virginia Tech. A study of Critical Thermal Maxima (CTMax) for the mayfly, *Isonychia bicolor*, began in April 2008 and extended to October 2009. Organisms were collected using d-frame dip nets and hand picking techniques from Sinking Creek, Giles County, Virginia. Mayflies were subject to gradual temperature change and monitored for behavioral physical consequences of the increased thermal stress were observed including sporadic swimming and ecological death, defined as the inability to cling to surfaces. Results were compared with past research in order to address accuracy. In general the results showed that the mayflies were more sensitive to thermal changes. Mayflies are often