

## The Egyptian English, Mathematics, and Science Teacher Leader Program

UMBC Home

Ministry of Education

The GLOBE Program

Past Participants

UMBC Library

Mission

Faculty and Staff

**Program Elements** 

From the Directors

Instructional Resources

**Photo Gallery** 

Virtual Seminar Room

Catalogs

**Reading Room** 





View Program Model





## The Egyptian English, Mathematics and Science Teacher-Leader Program

Supported By

Egypt Cultural and Education Bureau

The University of Maryland Baltimore County

1000 Hilltop Circle, Baltimore, MD 21250

The Egyptian English, Mathematics and Science Teacher-Leader Program is a collaborative effort between the University of Maryland Baltimore County (UMBC) and The Egypt Cultural and Education Bureau. This professional development program is designed to support 30 English, 30 mathematics and 30 science teacher-leaders in a semester long program. The program helps these teacher-leaders learn about US improvement efforts in English, mathematics and science education. The UMBC Departments of Education and The English Language Center along with the local school districts cooperate to provide the teacher-leaders with a variety of course experiences, school visitations and field trips. These experiences are designed to help the teacher-leaders improve their practice and better understand issues in American education. The teacher-leaders have opportunities through their program experiences to grow in a variety of different ways. There is special emphasis place on helping teacher-leaders grow with their innovative teaching practices, English language, and computer skills as well as their science and mathematics understandings.

In addition to developing individual capacities and leadership skills, the program is a professional development experience that connects and integrates key aspects of English, mathematics and science with program improvements in education. The hope is that this program will stimulate and foster lasting alliances among teachers, schools, universities/colleges, and communities for continued communication and cooperation with the common goal of improving English, mathematics and science education. This program respects and nurtures the intellectual capacities of the teacher-leaders and others in the school community as they work together to create mathematics and science education programs that are meaningful for all students.

[ Home ] [ Mission ] [ Faculty and staff ] [ Program Elements ] [ From the Directors ] [ Instructional Resources ] [ Photo Gallery ] [ Virtual Seminar ] [ Catalogs ] [ Reading Room ] [ Participant Directory ] [ COPYRIGHT ]

## **Course Descriptions**

#### Professional Development: Leadership in Action

This course increases the professional skills of the teacher-leaders in evaluating instruction and programs in mathematics and science. The course meets twice a week. Each leader reflects on his or her current practice and develops a set of criteria to evaluate instruction. A highlight of the course is weaving the school observations into an action research plan for their own profession. Teacher-leaders work in collaborative teams to present ideas related to school reform from current publications in educational leadership. Through this offering, teacher-leaders applied for a minigrant for their program and instruction. They each developed a rationale for selecting current method and technology texts and materials to improve their instruction.

#### **Computer Skills Development**

This course is designed to enhance basic computer skills and to build on developing instructional technologies. The teacher-leaders will be learning the latest information processing techniques. The teacher-leaders will learn how to use databases, word processing program, Internet linkages, a variety of communication technologies, and educational software applications. They will be challenged to identify ways to integrate these technologies into their current practice. Teacher-leaders will be expected to demonstrate their skills with these technologies as they develop portfolios and professional presentations.

#### Instructional Strategies for Mathematics and Science Teachers

This course is designed to help teacher-leaders acquire specific understanding of content, pedagogy, and teaching technologies. Teacher-leaders will be engaged in a variety of constructivist learning experiences across the semester and will be expected to develop transformed teaching units in their own disciplines. During the course, teacher-leader will be analyzing how the content in the various disciplines is delivered and what their roles are as facilitators in the learning process. The course is designed to provide opportunities for teacher-leaders to be a student as they participate in course activities. By experiencing the content and methods as learners they will come to understand and appreciate student perspectives and understandings. Teacher-leaders will be challenged to rethink key concepts related to their disciplines as they take on student roles. Course projects will be showcased in their professional portfolio and at the end of semester symposium.

## **English for Specific Purposes (ESP)**

In this course, teacher-leaders are immersed in language acquisition designed for mathematics or science instruction. The content of their learning is expected to enhance the learning in the other parts of the program. Emphasis is placed on speaking and listening to foster greater understandings of their experiences. The class meets twice a week. During school observations, seminars, classroom discussions, and the symposium, the leaders showcase their learning.

[ Home ] [ Up ] [ Course Descriptions ] [ School Partnerships ] [ GLOBE ] [ Instructional Technology ] [ Special Events ] [ Seminars and Workshops ] [ Symposia ]

## GLOBE Certified Training at UMBC

The GLOBE program is an international environmental education and science program. GLOBE stands for Global Learning and Observations to Benefit the Environment. K-12 teachers around the world can become certified to have students in their schools collect data about the environment and report their findings to the scientific community. Students perform hands on data collection to study the air, water, and soils. Students enter and maintain their data on the GLOBE internet site (www.globe.gov). Teachers completing the program are certified to teach GLOBE protocols in their school and receive a resource binder filled with learning activities to use alongside their current curriculum. This Fall Semester at UMBC the following training is offered to Education students at UMBC and Teacher-Leaders from the Egyptian Mathematics and Science Teacher-Leader Program.

Teachers must attend all four training protocols to receive certification. All sessions meet from 8 a.m. - 1 p.m. in room 208 ACIV A-wing.

Atmosphere October 11, 2001
Hydrology October 25, 2001
Landcover November 8, 2001
Soils November 15, 2001

The program will include basic protocols for each of those four areas and integrate computer skills associated with entering data and using data from other school sites. The program is modified and condensed, while other certifications include more advanced protocols and enriching activities in a longer format. Once certified through this training, teachers are encouraged to begin using one or more of the basic protocols and then take the opportunity to attend additional advanced workshops to address specific program needs in their school. There is no cost to teachers who register for the training, however travel expenses and meals are the responsibility of the participants.

GLOBE Instructor: Susan M. Blunck, Ph.D. (410) 455-6579

## **School Partnerships**

Annapolis High School Applications Research Lab/ Howard County School **Baltimore County Public Schools** Canton Middle School **Dundalk High School Dundalk Middle** Earl B. Wood Middle Francis Scott Key Middle Friends School Garrison Forest High School Glen Burnie High School Goddard Visitor Center Hammond High School Hillcrest Elementary School James Huber Blake High School Key School Landsdowne High School

Marley Middle School

McDonough School Middle School Institute Montessori International Children's House Montgomery Blair High School/Magnet Mt. St Joseph High School Oakland Mills High School Oakland Mills Middle School Owen Brown Middle School Perry Hall High School Perry Hall Middle River Hill High School Rockville High School Takoma Park Middle School **Talbott Springs Teacher Resource Center** Westchester Elementary Western School of Technology

Special Events Page 1 of 1

## Special Events/Places of Interest

## Regularly Scheduled Events:

Washington, D.C. Teachers have opportunities to visit the many sites of interests in the capital city of the United States. The museums of the Smithsonian Institution are a favorite. These include the National Air and Space Museum, the National Museum of Natural History, and the National Museum of American History, plus many others.

New York City. While in New York teachers may visit the <u>Statue of Liberty</u>, Times Square, the Empire State Building, the <u>American Museum of Natural History</u>, the <u>Metropolitan Museum of Art</u>, and the <u>Guggenheim Museum</u>.

**NASA Goddard Space Flight Center** 

Maryland Science Center: features exhibits, demonstrations, the Davis Planetarium, and an IMAX theater.

## Other Places of Interest:

One of the great aspects of the program is that the teachers have the opportunity individually to visit sites in the Baltimore area that are of interest to them.

Some favorites are the <u>Baltimore Museum of Art</u>, the <u>Walters Art Gallery</u>, the <u>National Aquarium in Baltimore</u>, <u>Patapsco Valley State Park</u>, the Inner Harbor, Fells Point, Mount Vernon, and Pratt Street Barnes and Noble.

[ Home ] [ Up ] [ Course Descriptions ] [ School Partnerships ] [ GLOBE ] [ Instructional Technology ] [ Special Events ] [ Seminars and Workshops ] [ Symposia ]

# The Egyptian English, Mathematics and Science Teacher Leader Program Faculty and Staff Education and Experience

#### Susan M. Blunck, Ph.D., Director

#### Education:

Ph.D. The University of Iowa, Science Education/Curriculum, 1993.

M.S. The University of Iowa, Science Education, 1988.

B.A. The University of Iowa, Elementary Education, 1972.

#### Experience:

Assistant Professor Science Education, University of Maryland Baltimore County. Director, Post Baccalaureate Teacher Education Program.

Co-director The Iowa Chautauqua NDN Program.

Taught all levels of science education in K-12 schools.

Research areas in teacher leadership development, STS (science, technology, and society) instruction, and systemic reform.

Egyptian Program Co-instructor for Professional Development for Teachers.

#### Susan Bresee, Instructor ESP

#### Education:

M.A., Instructional Systems Development, ESOL/Bilingual Option, UMBC

B.A., German, University of Maryland-College Park

B.A., Geology, Wittenburg University

#### Experience:

TEFL Instructor, TEFL School Visit Coordinator, and ESP Instructor, UMBC

Egyptian Teacher-Leader Program. Instructor, English Language Center. UMBC,

Instructor, ESOL Reading Lab, UMCP. ESOL teacher, elementary school.

#### Gail Holm, Coordinator

#### Education:

M.A., Instructional Systems Development, ESOL/Bilingual Option, UMBC

B.S., Agricultural Journalism, University of Wisconsin-Madison

B.S., M.S., Poultry Science, University of Wisconsin-Madison

#### Experience:

ESP Coordinator, UMBC Egyptian Teacher-Leader Program.

Instructor, TEFL and ESP classes, UMBC Teacher-Leader Program

ESOL Instructor, Howard Community College. ESOL Intern in elementary and middle schools. ESOL instructor in employment and training program for Hispanic immigrants. Research assistant, poultry reproductive physiology and nutrition.

#### Gail Kaplan Ph.D., Instructor

#### Education:

Ph.D. SUNY at StonyBrook, Mathematics, 1977.

M.S. Mathematics SUNY at StonyBrook, 1973.

B.A. Mathematics, 1972.

#### Experience:

Mathematics teacher for algebra through AP calculus at Key School.

Instructor for History of Mathematics at UMBC.

Supervised teachers for certification for secondary mathematics.

Egyptian Program Instructor for Instructional Strategies for Mathematics and Science Teachers.

#### Margaret S. Dullnig, School Visits Coordinator

#### Education:

B.S.: Computer and Information Science, University of Maryland University College

Currently working on M.A. Instructional Systems Development, University of Maryland Baltimore County.

#### Experience:

Senior Software Developer, Allegis Group

Senior Software Developer/Technical Team Leader, Network Administration, Johns Hopkins University Applied Physics Laboratory

#### Kate McElderry

#### Education:

Working on M.A.: Instructional Systems Development, University of Maryland

Baltimore County.

B.A.: Anthropology, Environmental Biology, Ripon College, 1994

#### Experience:

Academic instructor for the Egyptian Teacher Leader Instructional Strategies for Science Teachers course.

Environmental Education coordinator and volunteer, Peace Corps Paraguay. Teacher and coordinator for Adopta-Watershed Environmental Science Program.

#### Jonathan Moreland, Administrative Coordinator

#### Education:

B.A. St. Mary's College of Maryland, Philosophy and East Asian Studies, 2000

Currently working on M.A. Instructional Systems Development, UMBC

#### Experience:

Permanent Substitute Teacher, Anne Arundel County Public Schools

Teaching Assistant for Philosophy, St. Mary's College of Maryland

#### Michelle Perez, Instructor

#### Education:

B.S., University of Maryland, College Park, Maryland, Criminal Justice

Currently working on M.A. Instructional Systems Development with a ESOL/Bilingual Concentration, University of Maryland Baltimore County.

#### Experience:

Legal Assistant, Bracewell & Patterson, Washington, DC. Internal Investigator, Public Defender Service, Washington, DC.

Egyptian Mathematics and Science Program Academic Instructor for Educational Technology.

#### Kyle Taylor, Instructional Aide

#### Education:

B.S. (Projected Graduation Date: May 2002) University of Maryland Baltimore County, Computer Science

#### Experience:

Sales Associate, Office Max, Somerdale, New Jersey. Courier-Post, Cherry Hill, New Jersey.

Egyptian Program Instructional Aid for Computer Skills Development for Teachers.

#### Abe Veppumthara, Instructional Aide

#### Education:

B.S. (Projected Graduation Date: December 2001) University of Maryland Baltimore County, Information Systems.

#### Experience:

Instructor for Newport youth basketball camp.

Physician's Aid at Washington Adventist Hospital Center.

Egyptian Program Instructional Aid for Computer Skills Development for Teachers.

[ Home ] [ Mission ] [ Faculty and staff ] [ Program Elements ] [ From the Directors ] [ Instructional Resources ] [ Photo Gallery ] [ Virtual Seminar ] [ Catalogs ] [ Reading Room ] [ Participant Directory ] [ COPYRIGHT ]