

International Workshop:
*Setting a Collaborative Mathematics
Education Research Agenda
for Africa and the United States*

*July 31 - August 1, 2006
Dakar, Senegal*



PROGRAM BOOK

Atelier International:
*Formulation d'un Plan de Recherche
Collaborative sur l'Enseignement
des Mathématiques pour
Afrique et aux Etats-Unis*

*Du 31 Juillet au 1^{er} Aout 2006
a Dakar au SÈnÈgal*

Le Meridien President Hotel
Pointe des Almadies • BP 8181 • Dakar, Senegal
Phone: 011-221-869-6969 • Fax: 011-221-869-6924

organized by
The Quality Education for Minorities (QEM) Network and
The African Mathematical Union Pan African Mathematics Olympiad (AMUPAMO)
in collaboration with The Republic of Senegal

Supported by the National Science Foundation and the John Templeton Foundation

COUNTRIES and INSTITUTIONS / ORGANIZATIONS REPRESENTED AT THE WORKSHOP

INSTITUTION / ORGANIZATION

AFRICA

BURKINA FASO

Ministry of Education, Ouagadougou
University of Koudougou, Koudougou
(AMU Education Commission)

University of Ouagadougou, Ouagadougou

EGYPT

Ain Shams University, Cairo

GHANA

Ashesi University, Accra

IVORY COAST

University of Cocody-Abidjan, Abidjan

University of Abobo-Agjamé, Abidjan

MOROCCO

University Hassan II, Casablanca

University of Mohamed V, Rabat-Agdal

MOZAMBIQUE

Ministry of Science and Technology, Maputo

NIGERIA

National Mathematics Centre, Abuja

University of Calabar, Cross River State

SENEGAL

Ministry of Education, Dakar

Universite Cheikh Anta Diop, Dakar

SOUTH AFRICA

University of the Western Cape, Cape Town (Tygerberg)

University of Witwatersrand, Johannesburg

UGANDA

Makerere University, Kampala

ZIMBABWE

UNESCO Office, Harare

UNITED STATES OF AMERICA

ARIZONA

University of Arizona, Tucson

CALIFORNIA

Oxnard Union High School District, Oxnard

COLORADO

U.S. Air Force Academy, Colorado Springs

GEORGIA

Fort Valley State University, Fort Valley

Georgia Institute of Technology, Atlanta

Spelman College, Atlanta

University of Georgia, Athens

LOUISIANA

Southern University at Baton Rouge, Baton Rouge

NEW JERSEY

Rutgers University, Newark

NEW YORK

New York University, New York City

NORTH CAROLINA

Cape Fear High School, Fayetteville

North Carolina A&T State University, Greensboro

North Carolina State University, Raleigh

(Benjamin Banneker Association)

OHIO

Ohio State University, Columbus

PENNSYLVANIA

John Templeton Foundation, West Conshohocken

U.S. VIRGIN ISLANDS

University of the Virgin Islands, St. Thomas

WASHINGTON, DC

Howard University

Quality Education for Minorities (QEM) Network

AGENDA - AT - A - GLANCE

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Monday, July 31

AM

7:30 *Registration and Continental Breakfast* Room B-12

8:00 **Opening Plenary: Welcome and Review of Workshop Agenda and Packet**

8:15 **Keynote Address:** *Mathematics Achievement in Africa*

8:45 **Plenary Session Panel I:**

Topic: *Key Issues in Pre-college Education in Africa and the United States:
Mathematics Curricula, Mathematics and Culture, and Identifying/Nurturing
Mathematical Talent, including Students Gifted in Mathematics*

9:45 *Break*

10:00 **Opening Ceremony of PAMO 2006 and International Workshop**
Welcome from The President of Senegal and other Dignitaries

11:00 *Coffee Break*

11:30 **Plenary Session Panel II:** Room B-12

Topic: *Key Issues in College/University-level Mathematics Education:
Teacher Preparation in Mathematics, Freshman-level Mathematics, and
Identifying/Nurturing Mathematical Talent at the College Level*

PM

12:30 *Lunch*

1:30 **Keynote Address:** *Africa-U.S. Collaboration in Mathematics Education*

2:00 *Break*

2:15 **Two Concurrent Sessions – Topics One and Two**

Topic One: *Barriers to Student Mathematics Achievement,
Including Language, at the Pre-college and College Levels* Room B-12

Topic Two: *The Role of Culture in the Teaching and Learning of Mathematics* Room C-05

AGENDA - AT - A - GLANCE

3:15 *Coffee Break*

3:30 **Two Concurrent Sessions – Topic Two (repeated) and Topic Three**

Topic Two: *The Role of Culture in the Teaching and Learning of Mathematics* Room C-05

Topic Three: *Mathematics – The Gateway for Careers in Science, Technology, Engineering, and Mathematics* Room B-12

4:30 *Break*

4:45 **Reports from Concurrent Sessions – Topics One, Two, and Three** Room B-12

5:45 *Adjournment*

6:30 *Reception*

Tuesday, August 1

AM

9:00 **Keynote Address:** *Africa-U.S. Collaborations in Mathematics Education* Flambayant

9:30 **Plenary Discussion:** *Setting a Collaborative Mathematics Education Research Agenda*

10:15 *Coffee Break*

10:30 **Two Concurrent Sessions – Topics Four and Five**

Topic Four: *Preparing Teachers of Mathematics* Flambayant

Topic Five: *Prioritizing a Collaborative Mathematics Education Research Agenda* Room C-05

11:30 **Two Concurrent Sessions – Repeat of Topics Four and Five**

PM

12:30 *Lunch*

1:30 **Reports from Concurrent Sessions – Topics Four and Five** Flambayant

2:30 *Views from Mathematics Education Practitioners*

3:00 *Views on Mathematics Education from Students*

3:30 *Break*

3:45 *Funding International Collaborative Research in Mathematics Education*

4:30 *Summary Highlights, Key Observations, and Next Steps*

5:30 *Closing Remarks and Adjournment*

6:30 *Dinner*