

THE NATIONAL ACADEMIES  
NATIONAL RESEARCH COUNCIL  
NATIONAL ACADEMY OF ENGINEERING  
BOARD ON SCIENCE EDUCATION  
BOARD ON HIGHER EDUCATION AND WORKFORCE

**BARRIERS AND OPPORTUNITIES IN COMPLETING 2- AND 4-YEAR STEM DEGREES**  
**Committee Meeting 2**

NAS Building  
2100 Constitution Ave NW  
Room 120  
Washington, DC

**PUBLIC AGENDA**  
November 12-13, 2013

**Tuesday, November 12**

**CLOSED SESSION**

8:30 a.m. – 10:00 a.m.

**OPEN SESSION**

**10:15 a.m.      Welcome and Overview of the Meeting**  
*Shirley Malcom*, Study Chair

**BARRIERS AND OPPORTUNITIES**

**10:30 a.m.      Mathematics**  
Moderator  
*Uri Treisman*, University of Texas  
Speakers  
**David Bressoud**, Macalester College  
**Steven Ritter**, Carnegie Learning  
**Lou Gross**, University of Tennessee

**12:15 p.m.      Small group discussion with presenters (Lunch Served)**

**1:00 p.m.      Cost of STEM Degree**  
Moderator  
**Frank Dobbin**, Committee Member, Harvard University  
Speakers  
**Rita Kirshstein**, American Institute of Research, Delta Cost Project  
**Casey E. George-Jackson**, University of Illinois

**2:00 p.m.      Break**

**CLOSED SESSION**

**2:15 p.m. – 7:30 p.m.**

**Wednesday, November 13**

**CLOSED SESSION**

**8:30 a.m. – 9:30 a.m.**

**OPEN SESSION**

**9:45 a.m.      Welcome to Day 2**  
**Shirley Malcom**, Study Chair

**9:55 a.m.      Authentic STEM Experiences**  
Moderator  
*Tabbye Chavous*, Committee Member  
Speakers  
*Kevin Eagan*, UCLA  
*Elizabeth Ambos*, Council on Undergraduate Research  
*Phillip Bowman*, University of Michigan

**11:30 p.m.      Small Group Discussions with Presenters (Lunch Served)**

**12:15 p.m.      Systems Approach to Improving Undergraduate STEM Instruction**  
Moderator  
*Adrianna Kezar*, Committee Member  
Speakers  
*Karan Watson*, Provost Texas A&M  
*Ann Austin*, Michigan State University  
*Ellen Goldey*, Wofford  
*Robert Hilborn*, American Association of Physics Teachers

**2:00 p.m.      Break**

**CLOSED SESSION**

**2:15 p.m. – 3:30 p.m.**