

The National Academies of
SCIENCES • ENGINEERING • MEDICINE
Board on Science Education
Division of Behavioral and Social Sciences and Education

**English Learners in STEM Subjects:
Transforming Classrooms, Schools, and Lives**

Tuesday, February 12th, 2019

9:00 am - 12:00 pm

Lecture Room, NAS Building

9:00-9:30 Welcome and Introduction to the Report

Heidi Schweingruber, *Director, Board on Science Education*

David Francis (committee chair), *University of Houston*

9:30-10:30 Panel: Engaging Families and Communities

How can we ensure that teachers and schools feel equipped to engage families and communities throughout ELs' STEM learning? How can we foster collaborations and partnerships between schools and local communities?

Moderator:

Christine Cunningham, *Museum of Science, Boston*

Panelists:

- Sil Ganzó, *ourBRIDGE for Kids, Charlotte, North Carolina*
- Andrés Henríquez, *Vice President of STEM Learning in Communities, NYSCI (virtual)*
- Carla Johnson, *Purdue University*
- Christine McWayne, *Tufts University*

10:30-10:45 Break

10:45-11:45 Panel: Creating a Supportive Policy Context

What role can federal policies play to insure ELs have access to rigorous STEM learning opportunities? What changes need to be made to reduce potential barriers to access as well as promote consistency across states?

Moderator:

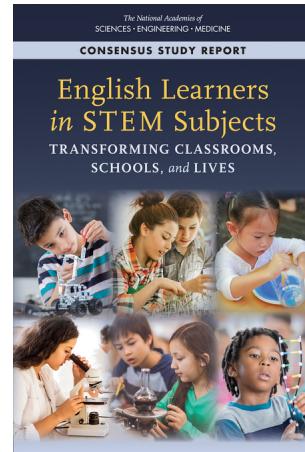
David Francis, *University of Houston*

Panelists:

- Anita Bright, *CAEP/TESOL International Program Coordinator, Portland State University*
- Julie Sugarman, *Migration Policy Institute*
- Debbie Zacarian, *Debbie Zacarian, Ed.D. & Associates, LLC (virtual)*

11:45-12:00 Wrap up/Closing Reflections

David Francis, *University of Houston*



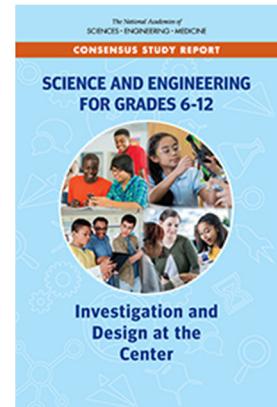
12:00-1:15 Lunch

Science and Engineering for Grades 6-12: Investigation and Design at the Center

Tuesday, February, 12th, 2019

1:15 - 5:00 pm

Lecture Room, NAS Building



1:15-1:45

Welcome and Introduction to the Report on Investigation and Design

Heidi Schweingruber, Director, *Board on Science Education*

Nancy Songer, Drexel University School of Education

(committee co-chair)

Brett Moulding, Partnership for Effective Teaching and Learning (committee co-chair)

1:45-2:45

Panel-Investigation and Design in the Classroom

- *What are the roles of teachers and students when investigation and design are at the center?*

Moderator: Brett Moulding

Andrea Tracy, Lawton High School

Matt Krehbiel, Achieve

Jaclyn Austin, Howard County Public Schools

2:45- 3:00

Break

3:00-4:00

Panel-Resources for Investigation and Design

- *What is necessary to support teachers in the new approach? How can we ensure teachers have the appropriate preparation, professional learning opportunities, instructional resources, facilities, equipment, and supplies?*

Moderator: Juan-Carlos Aguilar

Kate McNeill, Boston College

Ann Rivet, Columbia University

Jim Ryan, OpenSciEd (*participating virtually*)

4:00-4:45

Discussion-How to Build an Inclusive System

- *What are the roles that leaders of schools, school districts, and state departments of education need to perform in order to build and maintain an inclusive system for science and engineering education that engages all students in investigation and design?*

Moderator: Nancy Songer

Maya Garcia, Office of the State Superintendent of Education, District of Columbia

Carla Johnson, Purdue University

Diane Jass Ketelhut, University of Maryland

4:45-5:00

Closing Reflections

Committee Sponsors: Scott Heimlich (Amgen Foundation)

and Jim Short (Carnegie Corporation of NY)

Committee co-chairs Nancy Songer and Brett Moulding

5:00

Adjourn