

**The Subway Summit**  
**Teachers College, Columbia University**  
**Smith Learning Theater in the Gottesman Libraries**  
**June 15, 2018**

**Schedule at a Glance**

8:45	Light Breakfast
9:00	Opening Remarks – John Black
9:15	Morning Keynote Address – Bob Siegler
9:45	Presentation Session 1
10:45	Break
11:00	Presentation Session 2
12:15	Lunch
1:15	Afternoon Keynote Address – Micki Chi
1:45	Presentation Session 3
2:30	Break
2:45	Presentation Session 4
4:00	Break
4:15	Presentation Session 5
5:00	Poster Session and Reception

# Presentations

## 9:15 – 9:45 Morning Keynote Address

*Why is Rational Number Arithmetic So Difficult for So Many People?*

Robert Siegler

Carnegie Mellon University (and Teachers College, Columbia University)

## 9:45 – 10:45 Session 1: Learning and Engaging with Digital Technology

Chair: Daniel Lerman

*Enhancing Adolescents' Executive Function Skills through a Digital Game-based Intervention*

Teresa Ober, Jessica Brodsky, Corinne Brenner, Maya Rose, Charles Raffaele, Jan Plass, Bruce Homer  
CUNY Graduate Center, New York University

*Using Clustering Methods to Characterize Player Types for Executive Function Training Games*

Corinne Brenner, Jan Plass, Bruce Homer

New York University, CUNY Graduate Center

*Teaching Financial Literacy Using Game Design*

J.D. Jayaraman, John Black

Teachers College, Columbia University

*Examining Media Literacy in Adolescents and College Students*

Jessica Brodsky, Kasey Powers, Cody Barshaba, Fran Blumberg, Patricia Brooks

CUNY Graduate Center, Fordham University

## 11:00 – 12:15 Session 2: Instructional Methods and Pedagogical Approaches

Chair: Helena Connolly

*Student-Focused and Teacher-Focused Orientations Toward Teaching*

Ethlyn Saltzman, Anna Schwartz, Ron Whiteman, Patricia Brooks

CUNY Graduate Center

*Argument-based Teaching in Different Disciplinary Fields*

Chrysi Rapanta

Universidade Nova de Lisboa, Portugal

*Yes But: Developing a Critical Stance Toward Evidence*

Daniel Lerman, Deanna Kuhn

Teachers College, Columbia University

*Learning a Simple Model of Appraisal Leads to Emotion Knowledge Transfer and Enhances Emotional Acceptance and Empathy*

Ilya Lyashevsky, Melissa Cesarano, John Black

Teachers College, Columbia University

*Why is it Important for Students and Teachers to Share Goals?*

Zhongqi Shi, Xiaodong Lin-Siegler

Teachers College, Columbia University

## 1:15 – 1:45 Afternoon Keynote Address

*Translating the ICAP Theory of Cognitive Engagement into Practice*

Micki Chi

Arizona State University

**1:45 – 2:30      Session 3: Coping with and Learning from Mistakes and Challenges**

Chair: Ilya Lyashevsky

*Learning from Errors*

Janet Metcalfe and Matti Vuorre

Columbia University

*Desirable Difficulties and the Learning of the Link Mnemonic*

Rachel Martinell-Valdes and Mitchell Rabinowitz

Fordham University

*Students' Struggles in STEM: Self-Compassion, Attributions, and Goal Orientations*

Melissa Vega, Rebecca Steingut, Scott Lu, and Xiaodong Lin-Siegler

Teachers College, Columbia University

**2:45 – 4:00      Session 4: STEM Learning Interventions**

Chair: J.D. Jayaraman

*How Learning Goals and Contrasting Cases Aid Transfer from Engineering Activities*

Laura Malkiewich, Catherine Chase

Teachers College, Columbia University

*Changes in Students' Use of Epistemic Criteria in Model Evaluation*

Na'ama Av-Shalom, Hebbah El-Moslimany, Ravit Duncan, and Clark Chinn

Rutgers University

*Using Embodied Instruction and Programming Language Formats in Young Children's Debugging Activities*

Jung-Hyun Ahn, Woonhee Sung, John Black

Teachers College, Columbia University

*Grounded Embodied Learning: Helping Students Learn Physics Through Visuo-Haptic Priming and Instruction*

Shih-Cheh Douglas Huang and John Black

Alibaba and Teachers College, Columbia University

*Supporting Transfer of Physics Knowledge from Open-Ended Learning Activities with the Invention Coach*

Helena Connolly, Marianna Lamnina, Vincent Aleven, Catherine Chase

Teachers College, Columbia University and Carnegie Mellon University

**4:15 – 5:00      Session 5: Cognitive Processes and Learning Mechanisms**

Chair: Laura Malkiewich

*The Effects Of Knowledge Accessibility On The Perception And Use Of A Verbal Analogy Strategy*

Mitchell Rabinowitz, Kenneth Woolley, Tiedan Huang

Fordham University

*Are Different Measures of Statistical Learning Tapping the Same or Distinct Learning Mechanisms?*

Elizabeth Che, Olga Parshina, Rita Obeid, Timothy Ricker, and Patricia Brooks

The College of Staten Island and CUNY Graduate Center

*Effects of Orthographic Exposure on Metacognition and Vocabulary Acquisition*

Susan Chambre

Fordham University

**5:00 – 6:00      Poster Session**

*Examining Relationships between Executive Functions and Literacy Skills in Adolescents*  
Teresa Ober, Patricia Brooks, Jan Plass, Bruce Homer  
CUNY Graduate Center and New York University

*What Strategies Do Students Use to Manage their Academic Failure?*  
Katherine Hibbard, Scott Lu, Melissa Vega, Xiaodong Lin-Siegler  
Teachers College, Columbia University

*Children Show a Robust “Brilliance = Men” Stereotype for White, but not Black, Targets*  
Jilana Boston, Ryan Lei, Eleanor Chestnut, Reut Vraneski-Shachnai, Andrei Cimpian  
New York University

*Coding Through Play in a Collaborative-Game-Based Learning Environment: Implications for Educational Game Design*  
Nirmaliz Colón-Acosta  
Teachers College, Columbia University

*Students' Reports of Struggles in STEM and Math Performance*  
Scott Lu, Melissa Vega, Xiaodong Lin  
Teachers College, Columbia University

*Examining Effects of Game Mechanics on Learners' Performance in an Executive Functions Training Game*  
Shashank Pawar, Frankie Tam, Jan Plass and Bruce Homer  
New York University

*Learning by Arguing*  
Yuchen Shi, Flora Matos, Deanna Kuhn  
Teachers College, Columbia University

*Uncertainty and Expectations in Instruction Influence Curiosity, Affect, Learning, and Transfer*  
Marianna Lamnina, Catherine Chase  
Teachers College, Columbia University

## **Acknowledgments**

### **Sponsors**

- The Office of the Provost, Teachers College
- Department of Human Development, Teachers College

### **Conference Chairs**

- John Black, Teachers College
- Catherine Chase, Teachers College

### **Faculty Conveners**

- Bruce Homer, CUNY Graduate Center
- Jan Plass, New York University
- Mitchell Rabinowitz, Fordham University
- Clark Chinn, Rutgers University

### **Event Organizers**

- Celia Goldsmith
- Latasha Daly
- Brian Hughes
- Malik Muftau
- Nirmaliz Colon-Acosta