**Multiple Pathways**
Panel Chair: Uri Treisman, Dana Center & TPSE Math
Panelists:
- Luis Casian, Ohio State University
- Paula Compton, Ohio Department of Higher Education
- Ricardo Moena, University of Cincinnati
- Michelle Younker, Owens Community College, Ohio

Discussion Leader: __________________________

Facilitator: __________________________

Discussion Questions:
1. What do you find interesting, promising, or exciting about the math pathways approach? What questions, concerns, suggestions do you have about math pathways?
2. What would you need to advance math pathways work in your state? Are there structures in your state that are a natural base for math pathways work? Are there support structures that are a base for this level of collaboration with each other? With policymakers?
3. What would you need to strengthen existing assets or create new ones? What role do you see for the professional associations, higher ed associations, and TPSE in supporting your work?

NOTES: (Facilitators should take as much space as needed for notes)

Discussion Summary, including:
- Promising practices and/or programs
- Key themes/takeaways
- Questions for the panelists
Enhanced Alternative Pathways
Panel Chair: Mark Green, UCLA & TPSE Math

Panelists:
- Michael Dorff, Brigham Young University
- Deborah Nolan, UC Berkeley
- Karen Saxe, Macalester College

Discussion Leader: _____________________________
Facilitator: _________________________________

Discussion Questions:
1. What do you find interesting, promising, or exciting about enhanced alternative pathways? What questions, concerns, suggestions do you have?
2. What information do you have about the math in your institution in which you and/or the math department is not involved (e.g., in the social sciences)?
3. In what direction do we want to see math departments evolve?
4. What supports would you need to help this evolution occur?

NOTES: (Facilitators should take as much space as needed for notes)

Discussion Summary, including:
- Promising practices and/or programs
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- Questions for the panelists
Leading Change
Panel Chair: Jim Lewis, National Science Foundation

Panelists:
- Matthew Ando, University of Illinois at Urbana-Champaign
- Loek Helminck, NC State University
- Suzanne Weekes, Worcester Polytechnic Institute

Discussion Leader: ________________________________
Facilitator: ________________________________

Discussion Questions:
1. Do you find the expanded math pathways initiatives (lower and/or upper division) discussed at the meeting appealing and relevant for your department?
2. Is there a process within your department for gaining consensus for reforms of this type? If not, is there a way in which TPSE could help you develop such a process?
3. How might you gain the support of key campus and/or system administrators for expanded pathways reforms?
4. Would it be important to the department/institution to assess the efficacy of the kinds of reforms that have been discussed at this meeting?
5. Does your department and/or institution have the capacity to conduct such an assessment?
6. How might TPSE be able to assist you in leading changes you would like to make on multiple pathways?

NOTES: (Facilitators should take as much space as needed for notes)

Discussion Summary, including:
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