Convocation on Enhancing Teachers' Voices
in Policy Making for K-12 Engineering Education
National Academy of Sciences Building
2101 Constitution Ave., NW
Washington, DC

Draft Agenda
Last Updated September 21, 2016

Day 1: September 30, 2016

Time	Topic	Potential Speaker/Moderator
7:30am Outside Rm. 120	**Breakfast and Registration**	
8:15 am Rm. 120	**Overview and Goals for the Convocation** To include clarification of what is meant by "policy," to distinguish it from leadership within the classroom/school	*Co-Chairs, Staff Directors (for logistics)*
8:30 am Rm. 120	**Keynote: Engineering in K-12 Education** 30 minutes: • Why teach engineering in K12? • Current context: STEM integration and the NGSS • What are the big ideas in engineering that can motivate interest and learning in K-12 students and in teaching about engineering? • Opportunities and challenges to implementing K12 engineering education 20 minutes: • Engineering Education and Education Policy 10 minutes: • Comments and questions from participants	Moderator: Bruce Wellman (committee member) Laura Bottomley, North Carolina State University (**confirmed**) Peggy Brookins, National Board for Professional Teachings Standards, VA (**confirmed**)
9:30 am Rm. 120	**Panel Discussion: K-12 Leadership in Engineering Education** • Examples of opportunities to be a teacher leader • Supports needed to be an effective teacher leader • Opportunities for and challenges to becoming a teacher leader • Pre-service and in-service engineering education programs which are also emphasizing the development of teacher leadership • Special policy issues (at both the state and national levels) related to engineering education (e.g.,	Moderator: K. Renee Pullen (committee member) Cheryl Farmer, University of Texas, Austin Jacob Foster, Massachusetts Department of Elementary and

	certification of teachers in engineering, preparation issues for teachers and teaching, graduation requirements from high schools, dual credit for students, policies related to online education in engineering and large providers of engineering education resources) as well as teacher leadership in engineering education	Secondary Education, Retired (Confirmed) Camsie McAdams, The Discovery Channel, formerly Interim Director of STEM Education, U.S. Department of Education (confirmed) Beth McGrath, Chief of Staff, Office of the President, Stevens Institute of Technology (Confirmed) Mike Town (Committee Member), Tesla High School, WA (**confirmed**)
11:00 am	**Break. Move to Breakout Sessions**	
11:15 am Rooms TBA Rm. 120	**Breakout Session 1: Developing Ideas for Leadership and Action** • 45 minutes: Based on information provided in the application forms and from videos submitted prior to the convocation, participants (irrespective of team or individual status) will be grouped based on similar interests and concerns. They will identify 2-3 themes or approaches to teacher leadership in K-12 engineering that they believe have value, and they will start discussing actions they might take to address the issues that they identify.	TBD: Committee Members facilitate
12:00 p.m.	**Breakout Group Reports** • 30 minutes: Each group will choose a person to make a 2-minute summary of their discussion. This will be followed by 5 minutes of clarifying questions from the moderator and other participants	Moderator: Donna Migdol (committee, co-chair)
12:45 pm	**Lunch and Networking**	
1:45 pm	**Breakout Session 2**	TBD: The same

Rooms TBA	In this session, teams will be brought together to begin developing action plans based on their discussions in Breakout 1 and from what other groups reported out. Individual applicants may rejoin their groups form Breakout 1 or select a new session in which to participate and will provide feedback to plans that teams develop. Each team will prepare a poster sheet that provides an outline of their plan. [For consistency of presentation, the posters could have main headings already filled out by staff, e.g., What We Plan To Do, Partners, Metrics. When complete, the posters are posted on the walls of the plenary meeting room for Gallery Walk.]	committee members who facilitated first breakout sessions will facilitate these sessions.
3:15 pm	**Refreshment Break, Networking, and Move to Plenary Room for Gallery Walk**	
3:45 pm West Hall and Room 120	**Gallery Walk** Convocation participants move around the room and review posters. Each team stations a team member next to their poster to answer questions. (Two team members could trade off this task, so everyone has time to view the other posters.) Everyone is given Post-It note pads to write questions or suggestions related to the team plans. Posters with sticky notes are photographed for the convocation summary, and posters are returned to the teams, so they can benefit from the input. Posters will be photographed and added to the video showcase and the NAE website.	
4:30 pm Rm. 120	**Unconference Planning Town Hall** 10 minutes: During this plenary, the co-chairs will solicit ideas for topics from participants, and staff will write one unique idea at the top of each of 5-8 blank posters attached to the wall at the front of the room. Once the sheets have at least one primary idea on them, then participants are asked to contribute only ideas that relate to or could be discussed logically with the main topic. Once the posters are completed, participants vote on the two topics they are most interested in using colored dots. Prior to or after dinner, the committee will meet to decide how to organize each of the two unconference sessions on Day 2.	Moderator: Norman Fortenberry (committee co-chair)

Time	Topic	Potential Speaker/Moderator
5:15 pm	**Adjourn: Dinner on Your Own** List of local restaurant suggestions provided.	Committee meets for dinner, location TBD

Day 2: October 1, 2016

Time	Topic	Potential Speaker/Moderator
7:45 am Outside Rm. 120	**Breakfast available**	
8:30 am Rm. 120	**Reflections from Day 1, Topics for Unconferences Announced, Other Logistical Issues**	Co-chairs, Staff
8:45 am Rooms TBA	**Unconference: Session 1** Participants will be sent to breakout rooms to discuss the first set of Unconference topics. Each group should appoint a rapporteur for the reporting-out session. It is suggested that members of teams attend different sessions.	Participants who suggest unconferences will take the lead but at least one committee member should be present at each one.
9:30 am	**Break and move to Unconference Session 2**	
9:45 am Rooms TBA	**Unconference: Session 2** Participants can either stay in the rooms they are in or be redistributed to discuss Unconference topic #2. Each group should appoint a rapporteur for the reporting-out session. It is suggested that members of teams attend different sessions.	Participants who suggest unconferences will take the lead but at least one committee member should be present at each one.
10:30 am	**Break and Reassemble in Plenary Room**	
10:45 am Rm. 120	**Brief reports highlighting 1-2 important ideas arising from each unconference session and group discussion.**	Janice Koch (committee member)
11:30 am	**Working Lunches: Teams reassemble in breakout rooms to revise action plans and consider next steps** based on	Committee members who worked with

	information from the Gallery Walk on Day 1 and the Unconferences on Day 2.
	- Each group should think about *goals and benchmarks for success over the following lengths of time*.
	    • short (6 weeks)
	    • intermediate (6 months)
	    • and longer-term (1+ years)
	
	- Each group should identify additional people and organizations who need to be involved to promote successful outcomes.
	
	- Each group should identify a rapporteur for presenting the group's ideas in the next session.
		groups on Day 1 should return to those groups for this session.

12:25 pm	**Teams finish work and return to plenary room**	
12:30 pm Rm. 120	**Reports from Teams** A representative from each team will provide a 1-minute overview of its action plan and goals . After the meeting ends, each team will submit a one-page summary of their action plans, which will be made available on the convocation website for further discussion and collaboration following the convocation.	Bob Friend (committee member)
1:15 pm Rm. 120	**Final Reflections** Each member of the organizing committee will have an opportunity to offer brief remarks about what they heard and observed, additional ideas that should be considered for future work, and other perspectives. The floor will then be opened to final comments from participants.	Linda Abriola (committee member and member, National Academy of Engineering)
2:00 pm	**Adjourn**	