

The **K12 & Precollege Engineering Division** invites submissions for the 2016 ASEE Annual Conference to be held New Orleans, Louisiana June 26 – 29, 2016. The Division provides a rich and vibrant forum for the exchange of ideas, research, and experiences in the preschool through grade 12 (P12) pre-college engineering and technology education arena.

This call contains information on Paper, Special Session, and Workshop Submissions.

## I. Paper Submissions

### 1. Research-to-Practice (Include in Title – **RTP**)

Research-to-practice studies are assessed/evaluated outreach and/or education initiatives. These papers should present robust data/analysis and evaluation and provide **a literature review that situates the results within the existing body of work versus those with pure evaluation.** Papers that have an evaluative focus without being situated in the research literature should be submitted as a Program/Curriculum Evaluation paper (see #3, below). Examples of studies appropriate for this category include those that explore teacher-student or student-student interactions, as well as those that examine programmatic impacts in either formal or informal learning settings.

Accepted papers in this category will be assigned either as an oral presentation during a themed session OR as a poster during a 90-minute poster session.

### 2. Fundamental Research in P12 Engineering Education (*Include in Title - **Fundamental***)

Fundamental research studies add to foundational knowledge in P12 engineering education about students, teachers, materials, settings and more. Studies in this category do not focus on a particular intervention and the impacts of its outcome, but instead add to our understanding of underlying phenomena and ideas. Examples of studies appropriate for this category include: studying the relationship between children's planning and final artifacts, elementary teachers' perspectives on engineering or aspects of the engineering design process, and students' uses of mathematical modeling in a design task.

Accepted papers in this category will either be assigned as an oral presentation during a themed session OR as a poster during a 90-minute poster session.

### 3. Program/Curriculum Evaluation (*Include in Title - **Evaluation***)

Papers in this category share details of implementation and evaluation results of a particular program or curriculum. Examples might include a district level implementation of 5th grade engineering activities or a city-wide informal robotics competition. Papers in this category do not address a research question. They should, however, share rich, detailed implementation information and robust evidence to support a discussion of the successes and challenges of the program/curriculum.

Accepted papers in this category will either be assigned as an oral presentation a themed session OR as a poster during a 90-minute poster session.

#### 4. P12 Resource Exchange (*Include in Title - **P12 Resource Exchange***)

Resources presented in the P12 Resource Exchange include lessons, instructional approaches, tools or activity examples that demonstrate how you can incorporate engineering into the P12 learning environment. Abstract submissions to the P12 Resource Exchange should include a brief description of your resource and its targeted grade level/band(s) (approximately 100 words or less), as well as information about how you will share the resource at the exchange (learning goals, materials, time, and procedure). Paper submissions will be the one to two page handout that you would like to distribute at the P12 Resource Exchange that includes specific information relevant to your lesson, approach, tool, or activity, as well as your contact information and any additional links or resources. Please see the 2015 Curriculum Exchange Session for examples

[www.asee.org/public/conferences/32/registration/view\\_session?session\\_id=3603](http://www.asee.org/public/conferences/32/registration/view_session?session_id=3603).

Additional, optional opportunity for those submitting to the P12 Resource Exchange: The 13<sup>th</sup> Annual ASEE K12 Teachers Workshop takes place on Saturday, June 25 in New Orleans and will include a resource exchange for the first time. This will take place during the closing session at approximately 4:00 PM. If you are interested in proposing your resource exchange idea to the Saturday Teachers Workshop Resource Exchange, in addition to submitting your proposal to the main conference as described above, you must also submit your abstract and a one to two page handout through the K12 Workshop page at <https://www.asee.org/conferences-and-events/conferences/k12-workshop/2016>. If accepted, you would be required to register to attend the Saturday K12 Teachers Workshop. All proposals for the Saturday K12 Teachers Workshop are due by February 4, 2016. Contact Martha Cyr, Chair-Elect, K12 & Precollege Division, for more information ([mcyr@wpi.edu](mailto:mcyr@wpi.edu)).

Accepted abstracts in this category will be presented in a round table format at a special session. A one to two page handout to be distributed at the exchange should be submitted in lieu of a paper. This handout should summarize the curriculum, the target grade level(s), and your contact information.

#### 5. Work in Progress (*Include in Title - **Work in Progress***)

Work in Progress papers should describe an innovative study or program for which only preliminary data and results are available. Papers must be no more than 5 pages. Papers over 5 pages will be rejected.

These papers will ONLY be presented at the conference during a 90-minute poster session.

#### 6. Other (*Include in Title - **Other***)

Authors are invited and encouraged to submit other ideas that may be of interest to the P12 engineering education community but it is strongly recommended that you propose ideas to the Program Chair ([aseek12programchairs@gmail.com](mailto:aseek12programchairs@gmail.com)) prior to submitting an abstract so that the chair can identify appropriate reviewers.

**SPECIAL NOTE - If you submit an abstract, you will also be expected to review at least one abstract and paper.**

## **Preparing Your Abstract: A Checklist**

Please remember the following points when preparing your abstract:

- Title/Category: In parentheses, indicate the category in which your submission falls in the abstract's title.
  - Examples
    - Long-Term Impact of Attending Engineers-In-Training (RTP)
    - Students' Spontaneous Use of Novel Materials in an Informal Engineering Workshop (Fundamental)
    - Fish Tank Engineering (P12 Resource Exchange)
- Length: Abstracts should be 250 – 500 words long.
- Content: Abstracts should provide sufficient description of the research question, program details, observations, and (preliminary) results. Abstracts should not include citations.
- Format: PLEASE refer to the ASEE Author's Kit (on the ASEE website) for guidance on formatting your abstract. Do not use formats from other conferences, such as AERA and FIE.
- Blind review: Reviewers must be able to conduct a blind review of your abstract and paper.
  - Please use a pseudonym or placeholder for institutional, department, and other identifying names. (e.g., University of \_\_\_\_\_)
  - Anonymize references (e.g., author ASEE 2008 paper)
  - Do not use identifying information, such as last names, in the file name (e.g., please use something such as ASEE16\_K12abstract.pdf)

## **Please Remember:**

To help place your research and experiences in context, we encourage you to review past ASEE proceedings and other literature sources to identify previous work done in your area. By reviewing these other papers, you may also find information and instruments that may be helpful in conducting and assessing your work.

Please contact the K12 & Precollege Engineering Division Program Chair, Nancy Ruzycki, [aseek12programchairs@gmail.com](mailto:aseek12programchairs@gmail.com), if you have any questions or require more information.

## **II. Special Session Submissions**

If you wish to organize a Special Session through the K12 & Precollege Engineering Division, please request a Special Session Proposal form and submit it to the Division's Program Chair ([aseek12programchairs@gmail.com](mailto:aseek12programchairs@gmail.com)) by September 15, 2016. Special Session Proposal requests are

**NOT** submitted through the Monolith system and are reviewed by a special group of reviewers. Authors submitting individual abstracts that will be part of a Special Session should follow the guidelines outlined in the Abstracts for Papers section above.

### **III. Sunday Workshop Submissions**

If you wish to organize a Sunday Workshop and have it sponsored by the K12 & Precollege Engineering Division, please request a Workshop Proposal form and submit it to the Division's Program Chair ([aseek12programchairs@gmail.com](mailto:aseek12programchairs@gmail.com)) by September 15, 2015. Workshop Proposal requests are **NOT** submitted through the Monolith system and are reviewed by a special group of designated reviewers. Times for sessions are 9 AM -12 PM and 1 PM - 4 PM. Sunday Workshop presenters are responsible for convention costs associated with their workshop.

### **IV. Final Notes**

Additional information on the Division's plan for ASEE 2016, as well as how you can participate as author, reviewer, and/or moderator will be communicated through the Division Chair's regular newsletters, updates from the Program Committee, and on the Division's website at [www.k12division.asee.org](http://www.k12division.asee.org). We look forward to your submission(s)!

Nancy Ruzycki

K12 & Precollege Engineering Division Program Chair 2016

University of Florida, Department of Materials Science and Engineering

[aseek12programchairs@gmail.com](mailto:aseek12programchairs@gmail.com)

[nruzycki@mse.ufl.edu](mailto:nruzycki@mse.ufl.edu)