

## Information for Paper Reviewers for K-12 Division --

An excel template of the Reviewing Rubric (it is just an excel table with the review questions as column headers) is available at the K-12 division website: [k12division.asee.org](http://k12division.asee.org).

### What is expected in a draft paper?

Each paper should address one or more of the objectives of the K-12 division and should include the following information:

- Background and motivation;
- What was done (Methods used and why);
- Results (include data and analysis; what was found?);
- Discussion (interpretation of what the data are telling)
- Conclusions and significance (including wider application);

Although papers should be free of grammatical and spelling errors, these issues would warrant guidance for revisions rather than outright rejection. The division evaluates more on technical merit than on writing style, provided that the review criteria are met.

### What are the objectives of the K-12 and Pre-college division?

This division provides a forum where the research, development, implementation and dissemination of K-12 engineering and/or technology education initiatives, curriculum, instruction and ideas are shared and discussed.

We invite papers related to all aspects of K-12 engineering and technology education efforts including:

- a) studies of innovative curriculum, pedagogical methods, and teacher preparation and professional development;
- (b) appropriately assessed and/or evaluated, effective outreach and education efforts, particularly those efforts contributing to greater diversity and access to engineering and/or awareness among key stakeholders such as teachers, principals, guidance counselors, parents and policy-makers; and
- (c) models for establishing, maintaining, and measuring the impacts of partnerships between universities, primary and secondary schools, industry and/or informal educational settings.

### What are the review criteria?

K-12 and Pre-College Engineering Division uses an evaluation rubric when reviewing abstracts and papers. The questions included in the evaluation are:

*Does/Is the paper -*

*Report on a well-designed study?*

*Involve the reporting and analysis of meaningful data / evidence?*

*Of interest to K-12 Division members?*

*Add meaningfully to the body of knowledge?*

*Well written and easy to read?*

Reviewers are asked to assign a score from 1-5 (5=highest) for how well a paper meets each criteria.

### What is meant by a well-designed study?

A well designed study is one that intentionally collects data, either quantitative or qualitative, to answer a research question, test a hypothesis, or assess a participant outcome.

### What if the paper presents something unique and exciting, but does not seem to meet the "well-designed study" criterion?

K-12 and Pre-college Division encourages the submission of highly innovative programs or strategies with appropriate evaluation or assessment. While we expect more than: "the participants liked it," or "I learned a lot and will make changes," the division does not require

robust statistical analysis or statistical significance for publication of results. Thus, we use a rather liberal interpretation of well-designed study.

As an abstract reviewer, you have several options:

1. Recommend acceptance, but in the comments indicate that the paper is descriptive and recommended for a poster presentation
2. Recommend rejection, stating the short-comings of the paper so that the authors are well-informed for a future re-submission

**If you are reviewing for the Curriculum Exchange and Demonstration:**

This is a curriculum sharing session that is an excellent choice if someone has a new, exciting, successfully implemented activity but does not have the assessment needed for a paper or just wants to share the activity. The paper for this session should consist of:

- the lesson or activity plans,
- suggested implementation tips and strategies,
- suggestions for assessment if that is available, and
- a description of the context in which it has been tested.