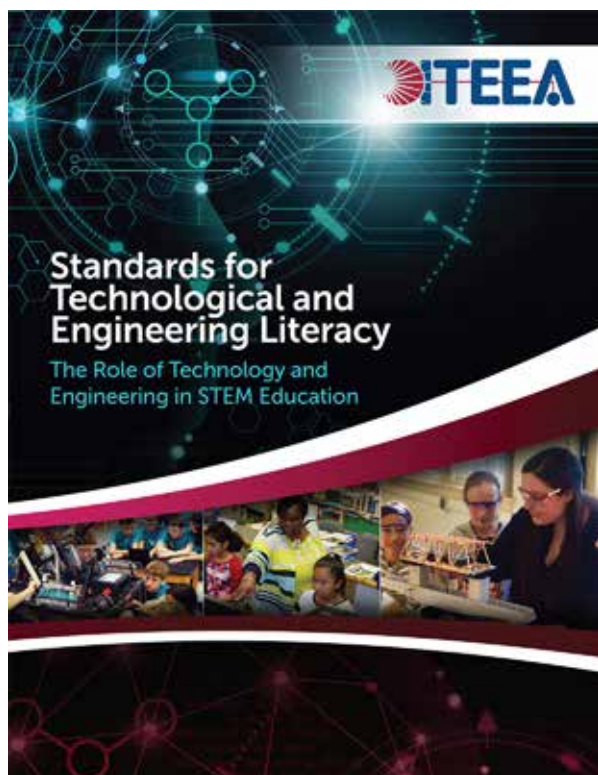


editorial

# implementing *STEL*

By Marie Hoepfl, Thomas Loveland, DTE,  
and Philip A. Reed, DTE



With this November issue, ITEEA and CTETE are moving into the implementation phase of the new *Standards for Technological and Engineering Literacy (STEL)*. The ink is dry on the finished *STEL*, released in July of this year, and ITEEA is now focused on developing and providing as many resources as possible to help classroom teachers, curriculum developers, professional associations, industry partners, textbook writers, and other stakeholders utilize *STEL* in the best ways possible.

The articles in this special themed issue on *STEL* offer a great starting point for this implementation phase. Johnny Moye and Phil Reed's article outlines how *STEL* addresses six curriculum trends and issues identified in a survey taken of ITEEA members in 2019. Other articles include exemplar lesson plans based on *STEL* to help teachers write lesson plans that make full use of *STEL* standards, practices, and contexts: Writing Standards-Based Lesson Plans to *STEL* and Sharpening *STEL* with Integrated STEM. Although some in the field still grapple with what technological and engineering literacy means, Marie Hoepfl's article explores what literacy means in the context of *STEL* and in the broader context of STEM education. Finally, recognizing the importance of safety in technology and engineering education, the article Safety in STEM Education Standards and Frameworks: A Comparative Content Analysis takes a close look at how safety is embedded in the new *STEL* standards.

This special issue is just one small part of how the profession is moving forward with *STEL*. ITEEA has laid out a plan to help disseminate *STEL*, develop a cadre of standards specialists for professional development workshops, and promote community college to university pathways for preparing technology and engineering education teachers. One recently completed activity was the development of a *STEL*-based lesson plan template that is online and fillable. Teachers can select their context area and grade band, and then they are provided with a list of appropriate *STEL* benchmarks. The lesson plan is automatically populated with matching academic standards and benchmarks followed by a section to match the standards to the cognitive, affective, and psychomotor domain. These online tools and more on the ITEEA website will help make lesson-plan writing more efficient and better aligned with *STEL*. Additional support materials will be provided on the ITEEA website in the coming year.

These resources are only effective if they are embraced and utilized by educators in the field. We hope that this special issue of *Technology and Engineering Teacher* will help you see the value of, and become an advocate for, *STEL*!