

From the Editor

This special issue focuses on Product Dissection. Guest Editor Ann McKenna, together with Gül E. Okudan Kremer and Deborah Moore-Russo, have assembled a series of papers that provide a comprehensive view of this important area, especially as an increasing number of engineering programs are addressing how best to teach innovation and product realization. The issue contains seven papers addressing issues from introductory first-year projects to senior capstone design. Examples are presented of both short and longer term activities. Of particular note is the use of product archaeology to address ABET Outcome h – “the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.”

In addition to these seven papers, we have included an eighth paper on another topic of increasing interest among engineering faculty – how to incorporate Engineers without Borders (EWB) into the student learning process. Specifically in this case, Ann Wittig describes how to use a unique opportunity to engage students in problem based learning. She proposes that the “educational potential of EWB projects is real and large. They are challenging, realistic and ill-structured, and their solutions model the PBL approach. Moreover, they provide a forum for developing abilities that may be difficult to develop in a typical classroom environment, and they stimulate learning in students with various learning preferences.”

If you are interested in innovation, product realization, problem based learning, introducing global and societal aspects into the curriculum, and simply challenging students in a number of innovative ways, there should be much in this issue for you. We are also introducing something new, taking advantage of our online format. We have asked each of the authors to consider preparing a short video describing their paper. A few have taken us up on this, and we hope to stimulate others to do the same, especially since our new format (did you notice?), will now make it easier to add a short video file.

As always, we encourage your comments and your feedback.