

Executive Summary

Critical Industry Issues, Critical Issues Research Methods, Problem Identification, & Technical Analysis Methods can be found in Technical Assignment 3. Technical Assignment 3 previews my 2 research topics, 2 technical analyses, and the methods I intend to use to analyze these topics for the Teachers Education & Technology Center (TETC).

The Critical Industry Issues section summarizes sessions I attended at the PACE Roundtable Seminar where I was able to interact with industry professionals. I was able to attend sessions on design coordination & constructability of MEP systems, BIM implementation challenges, & how to build respect with design professionals.

Two topics are identified for research in the Critical Issues Research Methods sections. The first topic deals with the feasibility of obtaining a LEED (Leadership in Energy & Environmental Design) rating for the TETC project and how owners of educational buildings should approach sustainable design for their projects. My second research topic focuses on the use of technology for review of coordination & shop drawings. This research looks in depth at productivity, waste, and omissions created by the drawing review process.

The Problem Identification & Technical Analysis Methods sections pin point problem areas of the TETC project and how constructability, value engineering, & cost/schedule reduction reviews can be performed. Issues with the design of the foundation system, specifically grade beams & pile caps, and the construction methods for the grade beams & piles caps are discussed in these sections.