

INCORPORATING SIX SIGMA CONCEPTS INTO THE TECHNICAL COMMUNICATION CLASSROOM

Sean Clancey

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Outline

- ▣ What is Six Sigma
- ▣ The Pugh Concept Selection Matrix
- ▣ How I learned of the Matrix
- ▣ Implications for Instruction
- ▣ Problems With Implementation
- ▣ Questions

What is Six Sigma?

- ▣ A business management strategy developed by Motorola in the 80s
- ▣ “a vision; a philosophy; a symbol; a metric; a goal; a methodology.”
- ▣ A toolbox of quality and process improvement techniques
- ▣ A form of “Total Quality Management (TQM)”
- ▣ Some say “the most popular management methodology in history.” (others less enthusiastic)

The Pugh Concept Selection Matrix

- ▣ “ quantitative technique used to rank the multi-dimensional options of an option set.”
(wikipedia)
- ▣ a great way to more methodically make a tough decision as a group, and leave behind a record of why we made it.” (Lean Software Engineering”
“a simple and effective way of driving synergistic problem solving” (manufacturing.net)

How Did I Learn Of The PCSM?

- ▣ Non-traditional “business-model Enterprise Class”
- ▣ Student-run “real-world” class solving design and manufacturing problems for industry
- ▣ Industrial partners use Six Sigma methodologies
- ▣ PCSM an important part of engineering design analysis in these companies
- ▣ Subsequently an important part of internal technical communication

Implications for instruction in technical communication

- ▣ Can give students an insight into how engineering analysis is conducted in many organizations
- ▣ Can replace a lot of text in documents
- ▣ Can serve as an introduction into the TQM philosophy as well as helping students construct technical documents

Difficulties with teaching the PCSM

- ▣ Need to know it
- ▣ Need to incorporate it organically in class
- ▣ Involves stripping it of full TQM context – no black belts awarded

Questions

□ ?