

# Contextualized Math Teaching in Manufacturing

Milwaukee Area Technical  
College

University of Wisconsin—  
Madison

# jaberwocky

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Did gyre and gimble in the wabe:  
All mimsy were the borogoves,  
And the mome raths outgrab.

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- Direct measurement was used for some data

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- In practice, the class didn't follow a neat predictable path.
- Students came with questions both general and specific that were sometimes not math based.
- Essentially all problems solved by numbers are initially formed with words
- The translation of word problems to math calculations is the weak link for many

# Examples

Developing a formula for converting  
Fahrenheit temperature to Celsius



# Examples

Graphing slope & intercept and comparing it to Tensile testing where the modulus of elasticity is charted to reveal the yield point or elastic limit.

The idea of replacing formula generated numbers was replaced with physical measurements to generate the formula based on change in force and change in length.

# Examples

Weight from volume

Area from direct measurement

Heat input

Ohms Law

Work in pound-feet

Horsepower

# Questions?

Thank You