Hands-On Learning Activities in Quantitative Literacy Courses

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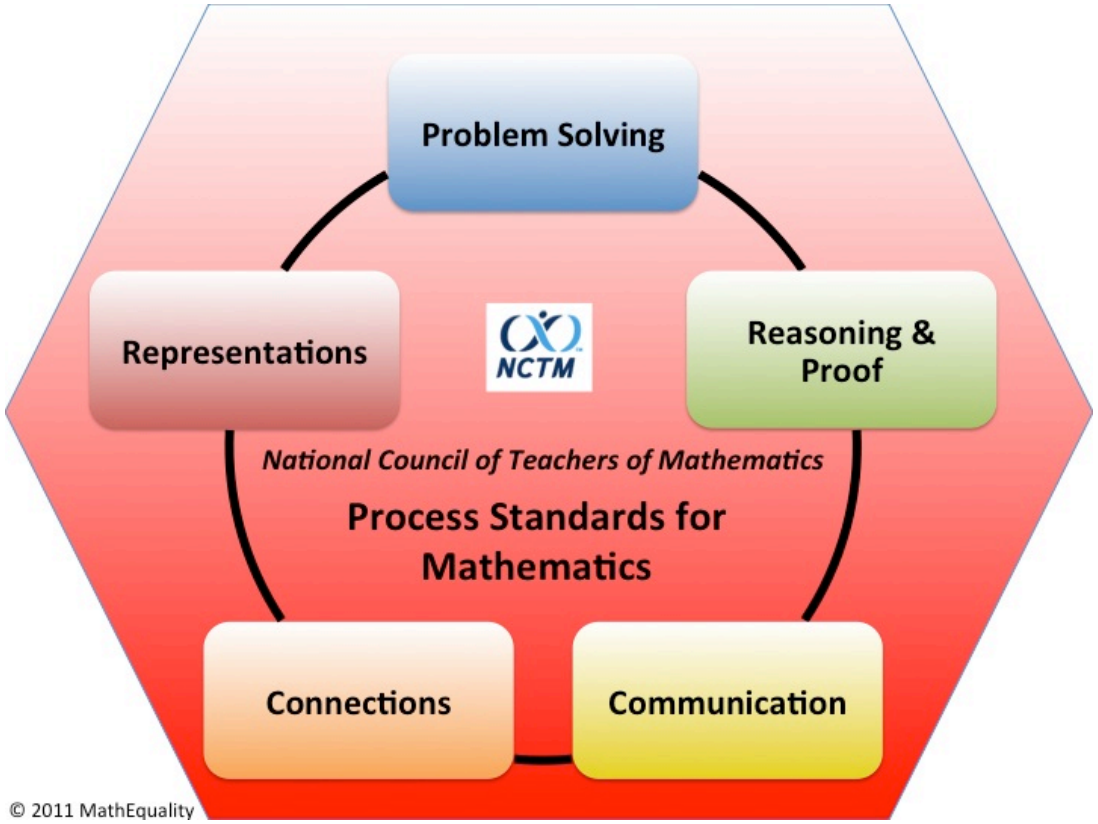
Rationale for using Hands-on Activities



Set Theory Activity

- Description: Venn Diagram
  - Students develop a question that will allow for participants' responses to be categorized into any combination of three categories. The students create a 3-circle Venn diagram based on the responses as well as develop a worksheet for the classroom activity.
- Objectives:
  - Developing a 3-circle Venn Diagram
  - Answering questions based on conjunctions, disjunctions, and negation
  - In groups, reasoning and/or proving results if different from their peers
  - Reflecting on discussion
- Discussion: Modifications for your class

Math Modeling Activity

- Description: Global Warming
  - Students use 100+ years of actual temperature data of Salt Lake City to construct a scatter plot and determine a line of fit to model the data.
- Objectives:
  - Differentiating between linear and exponential growth
  - Writing the equation of a line
  - Making predictions based off model
  - Interpreting the slope as rate-of-change
  - Contextualizing a mathematical model
- Discussion: Modifications for your class

Financial Math Activity

- Description: Mortgage
  - Students choose a reasonably priced house and research two financial institutions for fixed 15-year and 30-year mortgage rates. They analyze the different options to determine best value, reasonableness of payment, and strategies for reducing the amount of interest paid over the life of the loan.
- Objectives:
  - Performing the necessary calculations
  - Reflecting on reasoning of the calculated values
  - Comparing results using absolute difference and relative difference
- Discussion: Modifications for your class

Questions????