NCSM President
2015-2017

Dr. John W. Staley

Towson, Maryland
NCSM Mission Statement

The National Council of Supervisors of Mathematics (NCSM) is a mathematics leadership organization for educational leaders that provides professional learning opportunities necessary to support and sustain improved student achievement.
NCSM Goals for 2015-2017

• Shifting the conversation from an emphasis on “standards and assessments” to making mathematics meaningful, relevant, and accessible for each and every student.

• Growing and supporting mathematics education leaders at all levels.
NCSM Regional Director
Southern 2

Dr. Linda Griffith

Arkansas
Reviewing Three Act Tasks

“Analysis Tool”

www.mathedleadership.org
• The analysis tool is meant to be used to review and select Three Act Task.
• Each section should be considered after watching the corresponding act of the task.
• The general characteristics should be considered after viewing all three acts.
The Three Acts

• Act 1 – The Prompt, The Main Questions and Investing in the Problem
• Act 2 – The Information Gathering and Problem Solving
• Act 3 – The Reveal
Act I
Act I

The task shows students an interesting, non-static event with an uncertain result!

*What works:*

- *Engaging media component*
- *Multiple senses are incorporated*
- *Students easily identify with the prompt*
- *Text does not interfere with the prompt*
- *Students naturally notice and wonder without prompting*
The task allows students to forecast the behavior of the model.

*What works:*
- *Questions are measureable*
- *The prompt drives the students towards the intended main question(s)*
The task encourages the students to exercise proper estimation skills and compare them to others.

The task also allows the range of estimations to be broad.
Act I

The task allows conflict to motivate students.
Act I

The task includes an information gap that delays the answer before giving a formula or information.
287 packs

159 (28%)
123 (21%)
141 (25%)
151 (26%)
The task allows the students to make a list of information needed and identify variables on their own.
The task finalizes and gives needed information.
Act II

The task has a checkpoint, a place in the problem where you can get an answer to an intermediate step to make sure you understand what’s going on and make necessary corrections before the problem is over.
Act II

The task encourages patient problem solvers and leads to student improving their decisions.
Act III
The task has a Act 3 that shows the answer visually so that students may check their results.
Act III

The task lets the student determine whether or not the model describes the system accurately.
Act III

The task sets the stage for the next topic or extension lesson.

Is there an Act 4?
The task is relevant and meaningful at the student's grade level - There is a need for this task.
The task, along with appropriate teacher facilitation, leads to students recognizing and understanding important mathematical concepts.
The task depicts reality by telling a story including an engaging introduction, information, and a conclusion.
General

The task includes multimedia, encourages intuition, asks short questions, lets students do and allows teachers to be less helpful.
The task reaches a level four on the Depth of Knowledge (DOK) criteria.

**Level 4 – Extended Thinking**  
Requires an investigation, time to think and process multiple conditions of the problem.
The task “turns the real world into math” and “turns math back into the real world”.
Disclaimer

It is not necessary for one task to contain all of these components. It would be rare to find a task with all characteristic listed in the tool!
Project Contributors

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Great Modeling Tasks in Three Acts

- Bucky the Badger
- In-N-Out Burger
- File Cabinet (Free Preview)
- Penny Circle
- Stacking Cups
- Super Bear
- Thirsty Values (Free Preview)
- Yellow Starbursts
- You Pour, I Choose

**Digital Resources**

www.mathedleadership.org

**Jump Start**

Formative Assessment

Professional development modules to assist leaders in “jump starting” formative assessment, K-16. The collection contains an overview and modules, each highlighting one aspect of formative assessment with PowerPoints, Leaders’ Notes, and handouts as needed.

1. Overview
2. Identifying Learning Targets
3. Activating Prior Knowledge
4. The Answer is Wrong
5. Feedback to Students
New NCSM Webinars!
2016-2017 NCSM
Professional Learning Events

**SUMMER LEADERSHIP ACADEMY**
What: Summer Leadership Academy
Where: Adlai Stevenson High School, Lincolnshire, IL
When: July 18-20, 2016

**FALL SEMINARS**
What: Phoenix Fall Seminar
Where: Phoenix, AZ
When: October 25, 2016

What: St. Louis Fall Seminar
Where: St. Louis, MO
When: November 16, 2016

**WINTER LEADERSHIP ACADEMY (NEW)**
What: Winter Leadership Academy
Where: Atlanta, GA
When: December 2-4, 2016
Leading speakers presenting over 300 sessions

- Cultivating Leadership In a Time of Change
- Coaching That Matters
- Advancing the Social Justice Conversation
- Enhancing Mathematics Education in the Digital Age
- Sharing Research that Informs Mathematics Education
Get Involved - Volunteer

✓ State Team Leader
✓ Disseminate NCSM member materials
✓ Present a PRIME and/or CCSS leadership session(s)
✓ Write/Review for NCSM Journal or Newsletters
✓ Conferences: review proposals; help onsite; submit speaker proposal
✓ Join a committee: Awards, Nominations, Publications, Projects