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

# Instructions

- 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*

# Act I

## 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)*

# Act I

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

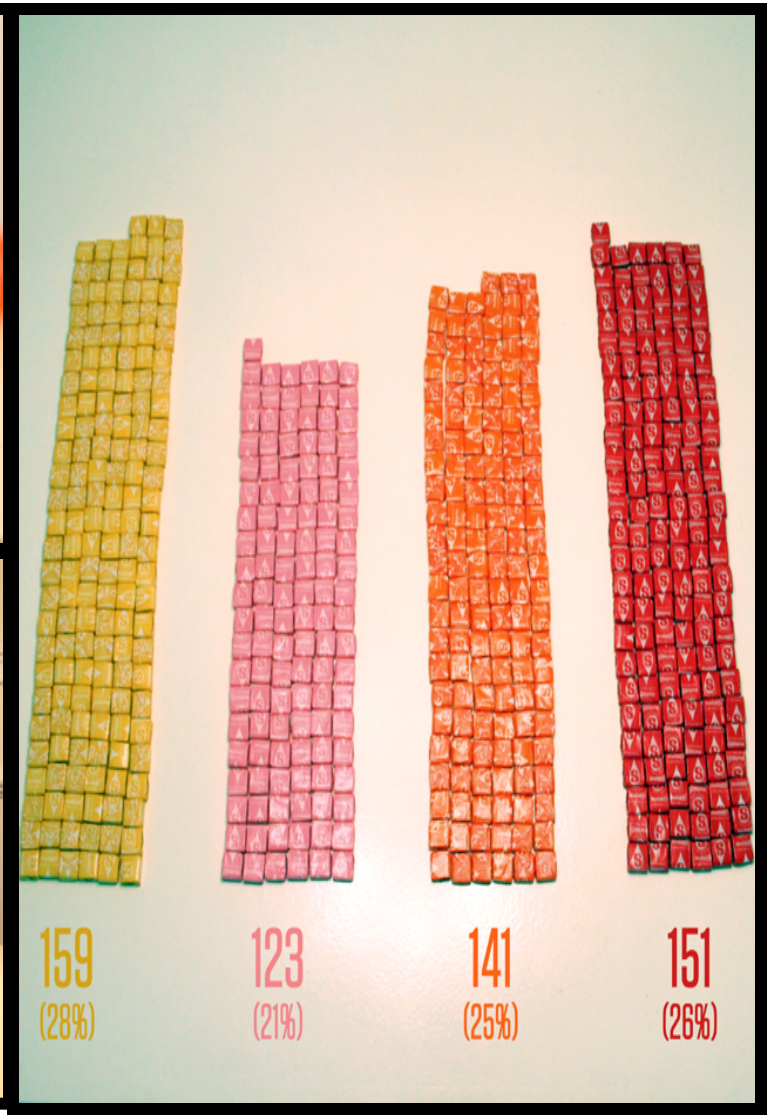
The task allows conflict to motivate students.

# Act I

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

# Act II





# Act II

The task allows the students to make a list of information needed and identify variables on their own.

# Act II

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

# 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?

# General

The task is relevant and meaningful at the student's grade level - There is a need for this task.

# General

The task, along with appropriate teacher facilitation, leads to students recognizing and understanding important mathematical concepts.

# General

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.

# General

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.*

# General

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

Reviewers:

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- Graham Fletcher
- Robert Kaplinsky
- Dan Meyer
- Jon Orr
- Kyle Pearce
- Michael Wiernicki

Undergraduate Researcher:

Jamie Mullins

# www.MathEdLeadership.org

# NCSM Mathematics Leadership Publications

NCSM Journal of Mathematics Education Leadership

WINTER/SPRING 2014 VOL. 15, NO. 1

LEADERSHIP IN MATHEMATICS EDUCATION NETWORK COMMUNICATE SUPPORT MOTIVATE

NEWSLETTER

Spring 2014, Volume 44, Number 3

First Things First for the 21st Century

*Dr. Mike Schmoker is this year's annual conference keynote speaker. In his keynote address, First Things First for the 21st Century, the audience will learn precisely where to focus their precious time, efforts, and resources to ensure that all students are prepared for the 21st century demands of college, careers, and citizenship.* The audience will also learn about the three most essential elements of good schooling, and how to implement them immediately, successfully and on a very clear, straightforward model.

Dr. Mike Schmoker
Keynote Speaker
46th NCSM Annual Conference
New Orleans, Louisiana
April 7–9, 2014

Despite their unrivalled power for improving performance in any and every school, these elements continue to be misunderstood—and grossly under-implemented; therefore, they should be **our first and highest priority.**

The audience will leave this session knowing both *what* to do and *how* to do it, in ways that will yield immediate and significant results. Dr. Schmoker has offered to autograph his book after the session so don't forget to bring a copy! *NCSM* also hopes to have copies of *FOCUS: Elevating the Essentials to Radically Improve Student Learning* for purchase.

Dr. Schmoker is the author of the best-selling book entitled *FOCUS: Elevating the Essentials to Radically Improve Student Learning*. His previous bestseller, *RESULTS NOW*, was selected as a finalist for "book of the year" by the *Association of Education Publishers*. He is also a featured author in ASCD's (Association for Supervision and Curriculum Development) *Master Class* DVD series.

As a former administrator, English teacher, and football coach, Dr. Schmoker has written several books and educational articles. He is also known for his keynote addresses at state and national conferences and continues to consult with schools and state and provincial departments of education. He has worked with McREL (Mid-Continent Regional Educational Laboratory) in Denver, Colorado as a senior consultant.

*The 46th NCSM Annual Conference at a Glance*

■ Sunday, April 6, 2014

On-site registration and conference check-in will be held at the Registration Area on the 1st floor of the *Hilton Riverside, New Orleans Hotel Conference Center* from 2:00–6:00PM.

If you have preregistered, bring your confirmation letter or picture ID to pick up your conference materials.

**All meal functions, except Monday's Box Lunch, will be held in *Grand Ballroom CD*.**

**The Sponsor Display Area is in the *Hilton Exhibition Center* on the 2nd floor.**

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See last page for Board member contact info.

National Council

The National Council of Supervisors of Mathematics Improving Student Achievement Series No. 13/Spring 2014

Research-Informed Answers for Mathematics Education Leaders

LEADERSHIP IN MATHEMATICS EDUCATION NETWORK COMMUNICATE SUPPORT MOTIVATE

eNEWS Newsletter FALL 2011

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Welcome

Welcome to this edition of the NCSM e-Newsletter. In this edition, you will find current news and events as you get started with the new school year. The eNews continues to be a work in progress, so suggestions are welcome and appreciated. In the future, the eNewsletters will become a regular feature of your inbox as the frequency of their arrival will increase to monthly. In this edition, look for up to date news regarding the Common Core State Standards, happenings at NCMS, and leadership tidbits as well as a message from President, Dr. Suzanne Mitchell. I hope you enjoy the e-news and if you have any ideas to add, please feel free to contact me at mhall@astate.edu.

Message from the NCSM President

Welcome to a new school year and an opportunity to lead and influence those with whom you associate. As you launch into your work in a few weeks, NCSM is the professional organization that can provide you with leadership resources to help you succeed as a mathematics leader.

Selecting the best curriculum

Analysis Tools created by a team of educators and mathematicians, led by Bill Bush of the University of Louisville and supported by the Council of Chief State School Officers, the Brookhill Foundation and Texas Instruments. The three tools and the professional development guide include:

• Tool 1 – Mathematics Content Alignment rubrics for grades K-5, 6-8, and 9-12
• Tool 2 – Mathematics Practices Alignment rubrics
• Tool 3 – Overarching Considerations in Equity, Assessment, and Technology rubrics
• Facilitators Guide – Professional Development Facilitators Guide and PowerPoint slides

The interpretation and

http://www.corestandards.org/ where updates are continually added.

**-PARCC is seeking public input on the Common Core State Standards:**
Public Input Sought on Draft Model Content Frameworks
Frameworks provide focus for common assessments in English, mathematics. For more information or to view the frameworks, visit http://www.parcconline.org/parcc-content-frameworks

Equity in Mathematics Education

Check out the latest news on equity from the Equity Trust at http://org2.democracyinaction.org/o/6879/blastContent.jsp?email_blast_KEY=1172497

For up-to-date information regarding equity in mathematics education, please check out the TODOS homepage at http://www.todos-math.org/ for all of your equity needs.

Leadership Corner

This edition of the leadership corner comes from Derek Keenan's *5 Traits of 21st Century Educational Leadership* and can be found

# Digital Resources
# www.mathedleadership.org

LEADERSHIP RESOURCES | THREE ACTS

PRINT PAGE

## 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 Previ
- Yellow Starbursts
- You Pour, I Choose

Thank you to the Noyce Foundation for generously funding this project.

COMMON CORE STATE STANDARDS

## Illustrating the Standards for Mathematical Practice

Module Index

PRINT PAGE
EMAIL TO A FRIEND
BOOKMARK

Introduction to the CCSS Standards for Mathematical Practice

*Professional Learning Module Index*

*Powerful PD resources at your fingertips!*

Click a button below to view resources for that module.

| 3 - 5 | 6 - 8 | 9 - 12 |
|---|---|---|
| Problem of the Month | | Properties of Quadrilaterals |
| Properties of Operations | Button Pattern, Congruence and Similarity | Similarity, Slope and Lines |
| Penny Jar, Representing Number Sentences | Comparing Linear Functions | Properties of Quadrilaterals |
| Patterns with Walls | Odd Number Patterns | Sidewalk Patterns |

nded as a quick reference to suggest focus but not limit use. Each of the modules is oration of multiple practices across multiple grades. Each module is designed for 2-3

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AMTE

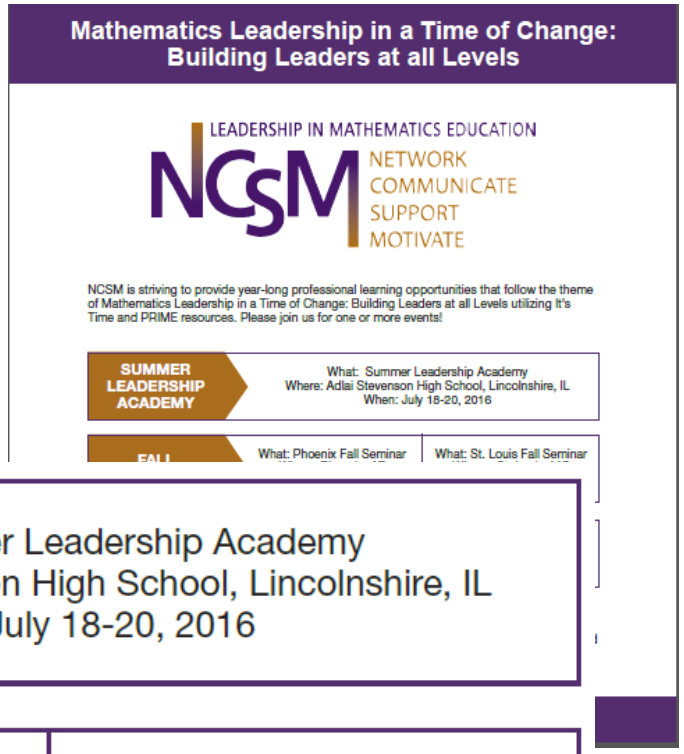
## JUMP START
### Formative Assessment

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

# BUILDING BRIDGES BETWEEN LEADERSHIP AND LEARNING MATHEMATICS

Leveraging Education Innovation and Research to Inspire and Engage

LEADERSHIP IN MATHEMATICS EDUCATION
NCSM NETWORK COMMUNICATE SUPPORT MOTIVATE
mathedleadership.org

48TH NCSM ANNUAL CONFERENCE • APRIL 11-13, 2016 • OAKLAND - SAN FRANCISCO BAY AREA

## 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

Lead From Within.
Be an NCSM
Volunteer.

# 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