


Enriching Students' Mathematical Understanding

Adult Numeracy Network (ANN) Preconference
COABE - Dallas
Sunday, April 10, 2016
8:30 - 3:30




Our Mission

We are a community dedicated to quality math instruction at the adult level. We support each other, we encourage collaboration and leadership, and we influence policy and practice in adult math instruction.




Enriching Student's Mathematical Understanding: Agenda

- Presentation by Concepcion Molina
- Lunch and business meeting
- Practitioner Research introduction and invitation
- Water use activities




ANN Principles



PROFESSIONAL DEVELOPMENT PRINCIPLES

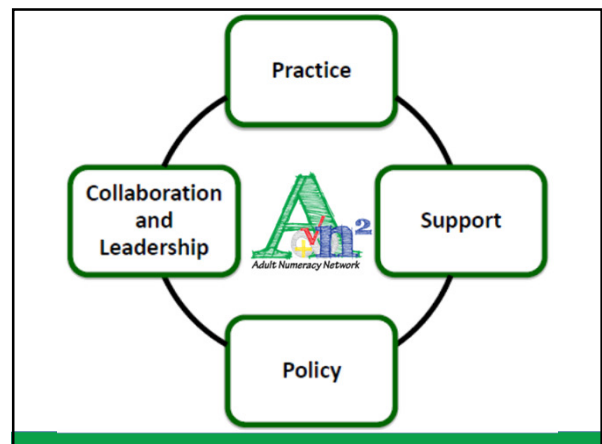
Design
Sound professional development in adult education mathematics should be designed to:

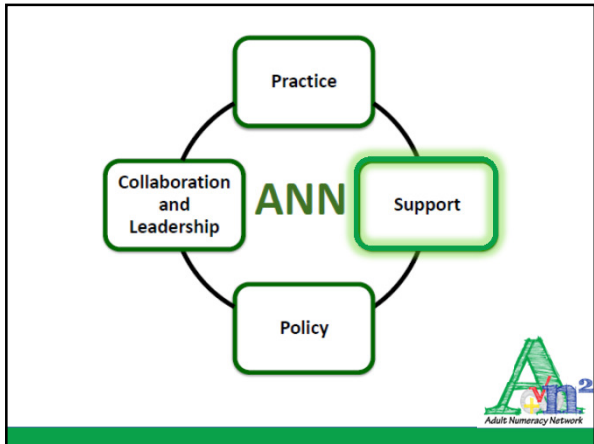
- begin with teachers as mathematics learners and thinkers.
- be a continuing process that is connected to curriculum and assessment standards, program policy and instruction and current research.
- be welcoming and accessible to all – to literacy and language teachers as well as to those who primarily teach mathematics.



“Adult Basic Education teachers can work together to improve the environment for teaching and learning numeracy.” – Mary Jane Schmitt, first president and founder of the Adult Numeracy Network







Support

We have 4 regional representatives

Support

Region 1 Northeast
Patrick Cravillon - NY

Support

Region 2 Southeast
Heidi Schuler - GA

Support

Region 3 Central
Brooke Ista - KS

Support

Region 4 Western
Tom Brewer - CA

Support

ANN has 23 state representatives

Support

Region 1 Northeast State Representatives

- Jen Way, VT
- Cynthia Bell, NY
- Margaret Giordano, PA
- Alfons Prince, DC
- Christine Bjork, CT
- Sherry LeHane, RI

Support

Region 2 Southeast State Representatives

- Melissa Shelton, OK
- Sandra Adkins, WV
- Aaron Kohring, TN
- Evelyn Peavy, MS
- Montez Gross, AL
- Christopher Kees, LA

Support

Region 3 Central State Representatives

- Rebecca Strom, MN
- Amy Vickers, WI
- Rachel Menning, SD
- LaVaughn Scheurich, KS
- Tracy Freymuth, IN
- Joanne Kantner, IL

Support

Region 4 Western State Representatives

- Bryan Rollins, OR
- Mary Forbes, AK
- Stephanie Stewart-Reese, AZ
- Kathie Daviau, MT
- Mollie Steinke, WY
- Dorothea Steinke, CO

LUNCH

12:00 - 12:30 Business Meeting

Support ANN

- Scan past practitioner research projects and/or *The Math Practitioner* issues
- Help with the website
- Co-plan membership drive or share ideas to promote ANN
- Join the team to plan a future preconference
- Give input into possible non-profit status
- Write for COABE email blast
- Solicit or write for *The Math Practitioner*



Thank Our Sponsors!

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- Walch Education
- New Readers Press
- CASAS
- GED Testing Service
- CA Dried Plum Advisory Board



Thank Our Supporters!



AIR and Como Molina

Margaret Rogers



Liz Shepard



Practitioner Research

Libby Serkies – Practitioner Research Committee Chair



Why Research?



Will you be next?



Applications due October 31, 2016

- Identify the question to be researched.
- Discuss how you will collect data to answer the question.
- Analyze and interpret the data.
- Share the findings.



Water Use and Conservation

Amy Vickers - President-Elect Nominee



Preview of afternoon

ANN Teaching and Learning Principles

Curriculum

- include concepts of number, data, geometry, and algebra at **all levels**
- weave together **procedural fluency, conceptual understanding, ongoing sense-making, problem solving, and a positive attitude about learning mathematics.**
- feature **worthwhile tasks**, such as activities that are drawn from the context of real life experience.

Learning Environment

- **build on what students already know**, valuing the various **informal and alternative strategies**
- include opportunities for students to **question, reason, solve problems, define goals and monitor their own progress by using estimation, mental math, computation, and technology** when appropriate.



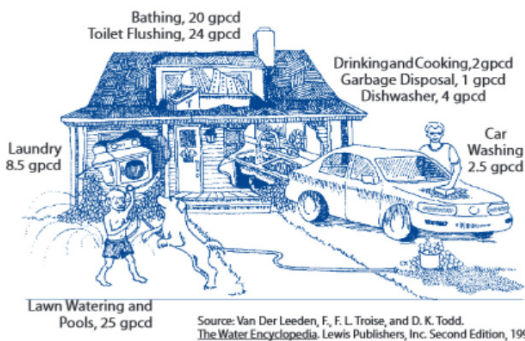
Why is Water Conservation Important?



<http://extension.psu.edu/natural-resources/water/conservation/water-conservation-videos/why- conserve-water>



Common Household Uses of Drinking Water* (*Gallons per Capita per Day)



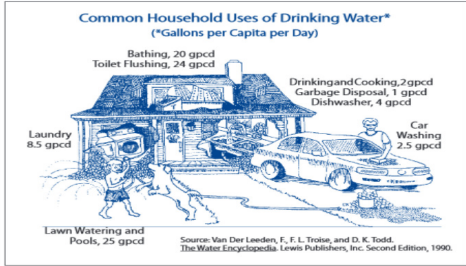
Source: Van Der Leeden, F., F. L. Troise, and D. K. Todd.
The Water Encyclopedia. Lewis Publishers, Inc. Second Edition, 1990.

Instructions

1. Convert the information on the Common Household Uses of Drinking Water handout to a **graph**.
2. How can your community reduce water use? Use information from the graph that you create to write a PSA encouraging water conservation. *Include data from your graph in the PSA.*
3. Tape your statement to the wall with the graph below it.



Reflections



BREAK

Gallery Walk: Notice and Wonder



Water Use and Leaky Faucets

Connie Rivera - President-Elect
Cynthia Bell - NCTM Delegate



What is Scientific Inquiry?

- Scientific inquiry refers to the activities through which students develop knowledge and understanding of scientific ideas, as well as an understanding of how scientists study the natural world.

-National Science Education Standards



What is Scientific Inquiry?

Scientific Inquiry

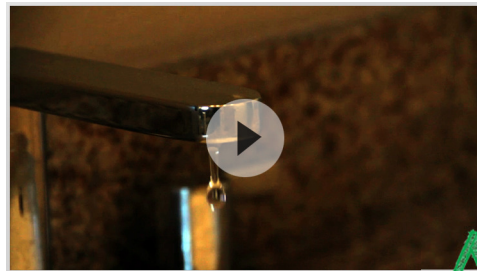
- For personal discovery
- It is how we learn science.

Scientific Method

- For new discoveries
- It's how science moves forward.



Leaky Faucet



<http://threeacts.mrmeyer.com/leakyfaucet/>





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Residential and Commercial Water Rates

Understanding Your Water Bill
 Water rates for both residential and commercial customers are based on billing units (One billing unit = 748 gallons) and billing tiers. [Please follow this link for an explanation of the information on the bill.](#)

Residential Water Rates (effective 7/1/2011):

If your single unit household uses:	You'll pay:
Tier 1 Up to three units per month (between one and 75 gallons a day)	\$1.98 per unit

Drops per Second

<http://threeacts.mrmeyer.com/leakyfaucet/act2/dropspersecond.mov>

Milliliters per Second

<http://threeacts.mrmeyer.com/leakyfaucet/act2/mlpersecond.mov>

Thank You for Coming!

- Join us at the **23rd Annual ANN Meeting**
@ COABE Preconference
- Sunday, April 2, 2017

Commission on Adult Basic Education
 ADULT EDUCATION:
 TODAY'S MAGIC FOR TOMORROW'S DREAMS!
 in partnership with ACE of Florida
 Disney's Coronado Springs Resort, Florida
 April 2-5, 2017