

Voices From the Field



John Ewing, Jill Edgren, Paula Jakopovic, Dan Schaben

John Ewing - Math for America

Jill Edgren Wood River Rural Schools. Grades 9-12

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All Girls All Math 1998

Math in the Middle cohort 3
2006-2008

Nebraska Association of Teacher
Mathematics: President 2011 and
other board positions

NSF Noyce Master Teacher Fellow
2011-2016

NMSSI courses as a student and
teacher



Mathematicians look for patterns

Youngest of 5 and our birthdays

5/10

5/25

4/4

4/13

7/14

3/27

5/23

5/25
4/4
3/27

5/10
7/14

4/13
5/23

G H I J K L M N O P

Traditional classes - 45 minutes daily

Block classes 92 minutes everyday for a semester

Alternate Block: 92 minutes every other day

Wood River has a 4 year math requirement

1-1 iPad

Roughly 450 students enrolled preK-12, 150 9-12

52% of 9-12 students on free/reduced lunches

Black or African American 5 Hispanic or Latino 38 Pacific Islander 1 White 110

Algebra 1, Geometry, Algebra 2, June test prep, Advanced Math, Pre- Calculus, Calculus, College Algebra, Trigonometry/Statistics, Applied Statistics



Things I would want math education programs to know

Perfect lesson plan does not equate a perfect lesson

Embrace moments of growth

Connect

Continue to collaborate and embed pedagogy with math

Explore with technology as learning tools

Find ways to model and active learning

Paula Jakobovic, University of Nebraska at Omaha

Assistant Professor of Early Childhood & Elementary Mathematics

Former 6th grade teacher and PK-6 math coach

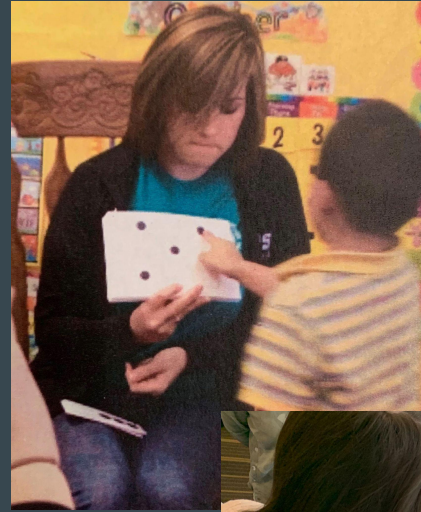
NSF Noyce Master Teacher Fellow (UNL) 2011-2016

Northwestern University Teacher Fellowship
2010-2011

NSF Math in the Middle (UNL) 2009-2010

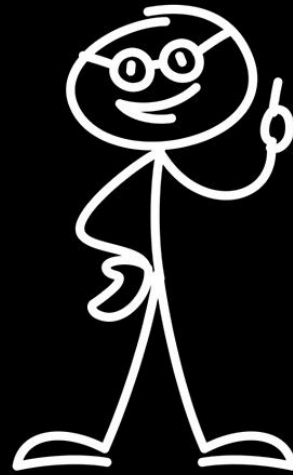
NSF Math Matters (UNL) 1999-2000

NCSM: National Council of Supervisors of
Mathematics, board of directors & journal editor



It's not always so elementary...

The role of math identity and agency in elementary mathematics teaching



How to be a
MATH PERSON:

Step 1:

Do math
(any type)

Step 2:

Be a person

The Math Stories of Future Elementary Teachers

“Ever since I can remember **I have struggled with math**. I have **never enjoyed it** and have always had a negative experience/outlook. I felt as though I was just another student that didn’t understand or “get it”... **I blame mathematics for my anxiety**. To this day, I still get anxious in math classes as a 21-year-old. I never spoke up in math class or expressed that I felt left behind because **I felt like a burden**.”

The Math Stories of Future Elementary Teachers

“I could feel myself **falling farther and farther behind** in math as I was **struggling** to grasp concepts and was **lacking foundations**... I would often turn in my math homework late or not fully completed, which is what made my pre-calc teacher nicknamed me “Day late and dollar short”. That was one of the **lowest points in my math experience** because I felt like **I wasn’t being seen or understood.**”

“Math Can Feel Risky”

- Lead with a collaborative spirit, rather than coming in to “fix”
- Lead with compassion and empathy to build rapport
- Lead with humility and vulnerability to build trust
- It takes relationship/trust building paired with math content and pedagogy that is salient and accessible and that breaks down false dichotomies

It IS possible to make a difference...

The Next Chapters in Preservice Elementary Teachers' Math Stories

“I met a student in practicum who explained his experience with math the same way I did when I was a kid. This **made me feel seen** and I felt as though **I knew exactly how to help this student** because I went through the same things.

The other takeaway I have is how much **I really enjoy math**. I didn't realize it because **I never felt understood and supported by my teachers**. When you have a teacher who **actually cares** and wants to help you, **math can be incredibly fun to do**.

I feel as though this semester has been **pivotal in my math teaching career**... just because I struggled to learn a math concept, does not mean I am not smart enough to teach others.”

The Next Chapters in Preservice Elementary Teachers' Math Stories

“I began this semester slightly dreading this class, math had me feeling very **“burned out”** and I was expecting not to enjoy myself...Reflecting over my growth, where I started both a math learner and math teacher, and the skills/ knowledge I now possess has made me **incredibly proud of myself** and **excited to teach math** in the future.”

We need to help elementary teachers have agency to “buck the system”

High stakes testing culture “driving unproductive success”

- Standards become a checklist instead of a roadmap
- Expectations to teach a mile wide AND a mile deep are unsustainable
- Curriculum provides strategies and models that become the “flavor of the day” instead of a thoughtfully crafted learning progression
- Creates a culture where we focus on product instead of process

Our teachers need us in their corner as advocates and partners - mathematical flourishing doesn't come from rushing the process

Dan Schaben- Lexington Public Schools, Central Community College

What I do - “teach a topic everyone is scared of and adults in the room tell kids they don’t need.” Bus driver, Pole vault coach, Calculus, precalculus, college algebra, robotics, Mu Alpha Theta

Where I teach - Lexington, the Heart of Nebraska.

31% English Language Learners - Ukraine/Afghanistan/Sudan- Think pole vaulters in full hijab/thwab/thobe - students that did not have a full complement of p-k13+ (Fatuma)

71% Free and reduced lunch - also irregular sleep arrangements.

Why I teach - Chop Wood Carry Water - We should all be studying Shelby Aaberg’s program 8th national MAT

How I should teach- Philip Exeter Academy

How I grade - “Grading for Equity-What it is, Why It Matters, and How It Can Transform Schools and Classrooms” - Joe Feldman

What I believe - Any human that wants to chop wood and carry water everyday can learn math at its highest level, I am living proof.

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