Math Teachers and Social Media: Professional Collaboration or Support Group?

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About Me

Academic cred:
- PhD candidate in Curriculum & Instruction, Mathematics Education
- Current research focus involves helping Algebra 1 teachers make productive curriculum adaptations

Internet cred:
- Internet content creator since 1996
- Blogger since 2001
- Created MathEd.net and @MathEdnet in 2009, coinciding with starting grad school

Why?
After teaching in rural Colorado for 6 years, I **craved knowledge and collaboration**.
1 Framing the Issues
  - The Social Web
  - The Makings of a Profession

2 Perspectives of Teaching and the Social Web

3 Challenges and NCTM’s Role
Many-to-many

Source: http://www.ted.com/talks/clay_shirky_how_cellphones_twitter_facebook_can_make_history
Eleanor Roosevelt Theory of Social Media Use

“Great minds discuss ideas; average minds discuss events; small minds discuss people.”

People $\iff$ Facebook
Events $\iff$ Twitter
Ideas $\iff$ Blogs/Google+
Axe Grind #1: Choose your tools carefully.

Every tool has affordances and constraints!

Twitter is far better at transcending geographic constraints than temporal constraints. Ideas on Twitter have short half-lives.
[My] observations of the "T" in #MTBoS: (1) It's really poor at organizing conversation. (2) It's really good at sharing resources. +

Source: https://twitter.com/absvalteaching/status/425432906975420416
+ (3) It's good at getting a quick answer to a question. (4) It's not so good at relaying the subtlety of a point or opinion. +
+ (5) It's used beyond its capability or intention. (6) It's a good gateway to where the rubber should really be hitting the road.
The Math Forum Store will be unavailable Friday, April 11, from 3:00 a.m.–7:00 a.m. (ET) while we apply software upgrades.
We are math teachers who share what we've learned, cause we don't want our classes to suck the energy from students. Professional development among friends, not just colleagues. Fun! Immediately useful! Interesting!

Organizers

Join Our Community

Conferences
Recent submissions and comments

1. **The "water triangle" proportional reasoning task**
   - +4 votes
   - 6 comments
   - Commented on 1 week ago by Sybilla (8,920 points)
   - Tags: ratio-proportional-relationships, proportional-relationship

2. **Equations for different purposes**
   - +3 votes
   - 3 comments
   - Commented on 1 week ago by Joel Reyes Noche (1,390 points)
   - Tags: equations, algebra, test-based-accountability, teacher-education

3. **Really big numbers**
   - +1 vote
   - 0 comments
   - Submitted 1 week ago by Sybilla (8,920 points)
   - Tags: number

4. **STEM Integration in K-12 Education**
   - +1 vote
   - 0 comments
   - Submitted 2 weeks ago by Sybilla (8,920 points)
   - Tags: stem, science-technology-engineering-mathematics

5. **Learning numbers resource**
   - +2 votes
   - 1 comment
   - Commented on 2 weeks ago by lhwalker (3,330 points)
   - Tags: mathematics-teaching, visual-representations, ratio-proportional-relationships

6. **How to write better multiple choice test questions**
   - 21 views
   - Tags: mathematics-teaching, visual-representations, ratio-proportional-relationships

Most popular tags

- CCSS
college
mathematics-teaching
gallery
of-math-teachers
elementary-teachers
assessment
teacher-education
calculus
professional
methods
nursing
students

Welcome to The Mathematics Teaching Community, where you can post submissions and receive comments from other members of the community. Check out our Frequently Asked Questions for more information.

Most popular tags

- algebra
algorithm
angles
applications
area
assessment
calculus
CCSS
connected
ccss
Registration for Electronic Discussion Groups

Stay in Touch

AP Central offers Web-based threaded discussion groups for many AP courses and roles. This feature gives you the ability to post messages online to be viewed by the entire group. These types of discussion groups are sometimes referred to as "list serves." However, because AP Central does not use the LISTSERV® software, we call ours electronic discussion groups or EDGs.

Registration

You can participate in the AP community by joining the electronic discussion groups for the subjects of interest to you. Click on the link below to see a current list of our EDGs. When you find the name of the EDG you want to join, select the "Subscribe" link in the far right column. You will then be asked to enter your email address and a password (it does not have to be the same as your AP Central email address and password).

- Subscribe to Electronic Discussion Groups

To login after you have registered, click on the link below and enter your email address and password.

- Login to your Electronic Discussion Group(s)

To change your account preferences, click on the click below. You may be asked to enter your email address and password.

- EDG Account Settings

To Unsubscribe:

To unsubscribe from an EDG at any time, follow the directions given at the very bottom of every message sent to you from the list.

If You Have Problems:

If you have any problems using the Registration form, choose "About Electronic Discussion Groups" below in "See also." Select your course from the list at the bottom of the page to send an e-mail to the moderator, including full details about the problem you are experiencing.
April is Mathematics Awareness Month! Here's the new Math Munch post to jumpstart your month. Math Awareness Month, Hexagons, and Plane Puzzles.
So many tools, but so many teachers!

236,000 + 1.7 million

What makes something a profession?

Discuss with those around you:
- Is teaching a profession?
- Why or why not? What criteria should we consider in our argument?
Shulman’s “attributes” of a profession

- the obligations of *service* to others, as in a “calling”;
- *understanding* of a scholarly or theoretical kind;
- a domain of skilled performance or *practice*;
- the exercise of *judgment* under conditions of unavoidable uncertainty;
- the need for *learning from experience* as theory and practice interact; and
- a professional *community* to monitor quality and aggregate knowledge

(Shulman, 1998, p. 516)
Professions are characterized by:
the obligations of *service* to others, as in a “calling”

- Teachers’ perception?  Positive
- Public perception?  Positive
- Social media potential?  Positive
Is it Worth Being a Teacher?
Posted on March 29, 2014

Five years ago, I decided not to continue with my career in high-tech. After twenty-five years rising, and falling, and rising again, through the ranks in my field, I decided to follow a growing calling to teach.

Little did I realize, or appreciate in others, that teaching entails great sacrifice. This from a man whose wife started teaching nearly a decade before him.

While the sacrifices I detail below are true, and challenging, I still feel that the call to teach outweighs their weight. The true test will be do I feel the same next week, month, or year, as this job is the most demanding I have ever held, even though I have worked for some demanding high-tech companies, such as Motorola and Qualcomm, and a start-up where I slept on my office floor many nights and weekends.

Source: http://mathequality.wordpress.com/2014/03/29/is-it-worth-being-a-teacher/
Professions are characterized by:
understanding of a scholarly or theoretical kind

- Teachers’ perception? Mildly Positive
- Public perception? Unfavorable
- Social media potential? Positive
Axe Grind #2: Open Access or Else.

Set your work free!

Teachers love to share freely, yet much of the scholarly knowledge around teaching is not free to share.
Stats peeps: did any of you order "Teacher Proof" yet? I'm dying to talk about this book with somebody: amazon.com/Teacher-Proof-

Amazon Books

Teacher Proof: Why research in education doesn't always mean what it...
‘Tom Bennett is the voice of the modern teacher.’ - Stephen Drew, Senior Vice-Principal, Passmores Academy, UK, featured on Channel 4’s Educating Essex. Do the findings from educational science ever...

View on web

FAVORITE 1

6:10 PM - 18 Aug 2013
Excited by the new @NCTM research briefs by Michelle Cirillo about math discourse, discussion. nctm.org/news/content.a... nctm.org/news/content.a...

from Missouri, USA

Source: https://twitter.com/ottensam/status/298883288020447233
Research Clips and Briefs

NCTM's Research Clips and Briefs are research-based responses to questions of practice.

- **Clips** are short and provide only the findings.
- **Briefs** include more information and list related research.

Send questions or topics related to classroom practice that you would like to see addressed. Research Clips and Briefs are designed to closely connect to practitioner needs.

### Algebra (March 2007)
- Algebra in the Elementary Grades
- Introduction to Algebra Symbols

### Curriculum (September 2007)
- Selecting the Right Curriculum
- Producing Gains

### Discussion (January 2013)
- Benefits of Discussion
- Strategies for Discussion

### Effective Instruction (March 2007)

### Formative Assessment (June 2007)
- What Is It?
- Key Strategies
The NCTM Research Agenda Conference Report

Fran Arbaugh
Beth Herbel-Eisenmann
Nora Ramirez
Eric Knuth
Henry Kranendonk
Judith Reed Quander
The National Council of Teachers of Mathematics (NCTM) espouses priorities to foster stronger linkages between mathematics education research and teaching practice. Of the five foundational priorities, one is directly focused on research, indicating NCTM’s commitment to “ensure that sound research is integrated into all activities of the Council” (NCTM, n.d.). Another priority specifically references
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@Lustomatical @k8nowak @TheJLV Mind if I print out one of your blog posts for my presentation next week? Not going to have Internet access.

9:42 AM - 4 Apr 2014
Attribute #3

Professions are characterized by:

- a domain of skilled performance or practice

- Teachers’ perception? Typically Positive
- Public perception? Mixed to Unfavorable
- Social media potential? Optimistic
Axe Grind #3: We talkin’ about *practice*.

Forget “teaching comes naturally” and “born to teach.”

Just as we want students to focus on effort instead of perceived notions of “natural” ability, teachers should, too. **We shouldn’t be teaching like we’d do amateur night at the improv theater.**
What’s wrong with this?

1. Undermines the idea that teaching is a profession that can be developed through careful unpacking of the practice and a common technical language
2. Perpetuates the belief that teaching is individual and tacit
3. Reinforces the predominance of “style” over skill

If teaching is individual and must be figured out by each person on the job, then there is little hope of ensuring that all young people receive skillful instruction.
Unveiling the hidden work of teaching

- Conferences
- Lesson planning
- Curriculum design
- Summer workshops
- Professional development
- Reading
- Collaboration
- Grading
- Reflections
- Policy positions
Professions are characterized by:
the exercise of *judgment* under conditions of unavoidable uncertainty

- Teachers’ perception? Positive
- Public perception? Mixed to Positive
- Social media potential? Cautiously Optimistic
Professions are characterized by:
the need for *learning from experience* as theory and practice interact

- Teachers’ perception? **Positive**
- Public perception? **Mixed to Positive**
- Social media potential? **Cautiously Optimistic**
Unveiling the hidden work of teaching

- Conferences
- Lesson planning
- Curriculum design
- Summer workshops
- Professional development
- Reading
- Collaboration
- Grading
- Reflections
- Policy positions
Attribute #6

Professions are characterized by:

- a professional *community* to monitor quality and aggregate knowledge

- Teachers’ perception? Positive with too many false positives
- Public perception? Mixed to Negative
- Social media potential? Positive (but we can do better)
Axe Grind #4: No secret handshakes.

I refuse to use “MathTwitterBlogosphere” or “MTBoS”

If you want to attract people into a community, use familiar language and symbols. **What’s cute to insiders looks like alphabet soup to outsiders.**
Math-\textit{myspace} & Blogger-\textit{osphere} vs. Math-\textit{myspace} \& \texttt{WordPress}-\textit{osphere}
Had a few conversations w/ newcomers to the #MTBoS. There's a feeling of being intimidated and not being able to "break in" to the +
Exploring the MathTwitterBlogosphere

8 WEEKS OF FUN MISSIONS & PROMPTS, STARTING OCTOBER 6.

Mission #8: Sharing is Caring in the MTBoS

It’s amazing. You’re amazing. You joined in the Explore the MathTwitterBlogosphere set of missions, and you’ve made it to the eighth week. It’s Sam Shah here, and whether you only did one or two missions, or you were able to carve out the time and energy to do all seven...
Whether they draw members from the same school or from different schools, groups of “teachers helping teachers” offer many benefits. Based on accounts of five diverse teacher groups oriented around the challenges of reform, Helen Featherstone (1996) identifies the following benefits:

They address particular problems of practice, they contribute to the professional development of members; they provide social, emotional and practical support; they nurture the development of professional identities; they craft a collective stance on issues related to teaching. (p. 2)

What distinguishes professional learning communities from support groups, where teachers mainly share ideas and offer encouragement, is their critical stance and commitment to inquiry. Exercising what Lord (1994) calls “the traits of critical colleagueship,” teachers ask probing questions, invite colleagues to observe, and review their teaching and their students’ learning and hold out ideas for discussion and debate. Among critical colleagues, disagreements

(Feiman-Nemser, 2001, p. 1043)
Do we have a critical stance and commitment to inquiry?

Do we know *how*?
EACH DAY WE NEED TO LOOK AT THE WHY. WHAT ARE WE DOING, AND WHY ARE WE DOING IT. AND REMEMBER IT’S ALL ABOUT OUR KIDS.

Steven Anderson
@web20classroom

Source: https://twitter.com/sjunkins/status/446258513757491202
Challenges

Recap:

- How do we better use available social tools?
- How do we facilitate research to practice?
- How do we build on a shared vision of quality practice?
- How do we welcome newcomers?
- How do we develop norms for a critical stance?
- What’s NCTM’s role in this?
There’s an “old NCTM” and a “new NCTM,” said someone who went to 2 happy hours last night. Bridging those 2 ain’t a small task.

#nctmdenver
It has been reported to me that the median age of @nctm member is 55 years. What do we make of this, #MTBos?

Source: https://twitter.com/Trianglemancsd/status/381458462854504449
Christopher @Trianglemancsd · Sep 21
It has been reported to me that the median age of @nctm member is 55 years. What do we make of this, #MTBos?

Marshall Thompson @MTChirps
@Trianglemancsd I haven't been an @NCTM member in years. #trueconfessions As a young teacher I struggled to find the value.
Christopher @Trianglemancsd · Sep 21
It has been reported to me that the median age of @nctm member is 55 years. What do we make of this, #MTBos?

Lisa Henry
@lmhenry9

@Trianglemancsd I have been an @NCTM since I started teaching. Honestly, I have not read MT in about 3 years (no time & too academic imo)...

12:29 PM - 21 Sep 2013

Source: https://twitter.com/lmhenry9/status/381485328244035585
Christopher @Trianglemancsd · Sep 21
It has been reported to me that the median age of @nctm member is 55 years. What do we make of this, #MTBos?

Lisa Henry @lmhenry9 · Sep 21
@Trianglemancsd About the only reason I continue to belong to @NCTM is for resume purposes. I am seriously considering not reupping next yr.

Johanna Cheney @JJJsally
@lmhenry9 @Trianglemancsd @NCTM I join each year because of the magazine for math in the middle school.
Christopher @Trianglemancsd · Sep 21
It has been reported to me that the median age of @nctm member is 55 years. What do we make of this, #MTBos?

Brian R. Lawler
@blaw0013
@Trianglemancsd 50% of @NCTM members began teaching when the purpose of HS Alg. 1 was to fail 50% of kids out of math.

Source: https://twitter.com/blaw0013/status/381478285835649024
John Golden @mathhombre · Apr 22
@TCM_at_NCTM re: bridging worlds. Become a platform to connect tchrs. Give subscribers access to all yr content. Organize articles by CCSS.

John Golden @mathhombre · Apr 22
@TCM_at_NCTM make it social! Support teachers in collaborating.

Source: https://twitter.com/ddmeyer/status/325357970860953601
Discussion
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<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tr>
<td>9:30</td>
<td>Dan Meyer</td>
<td>Video Games and Making Math More like Things Students Like</td>
<td>Great Hall A/D</td>
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<tr>
<td>11:00</td>
<td>Karim Kai Ani</td>
<td>Keeping It Real: Teaching Math through Real-World Topics</td>
<td>Great Hall B/C</td>
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<tr>
<td>12:30</td>
<td>Ashli Black and Chris Hunter</td>
<td>The Mathtwitterblogosphere: Creating Your Own Online Professional Learning Communities</td>
<td>225/226/227</td>
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<td>2:00</td>
<td>Kate Nowak</td>
<td>One of Us: Every Teacher a Blogging Teacher</td>
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<td>3:30</td>
<td>Panel</td>
<td>Teachers Leveraging Technology in the Classroom</td>
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<td>8:00</td>
<td>David Wees SAT</td>
<td>Online Professional Learning Opportunities for Mathematics Educators</td>
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