Crowdsourcing Curriculum: How Twitter Saved My Teaching

Jenny White  @JennSWhite  UNCSA

The MTBOS
The Math Twitter Blog o-Sphere
Who?
Networking Teachers
When?
Why
#MTBOS?
Inspiration
Anytime I get a compliment from a colleague now, they finish with “Did this idea come from Twitter too?” 😂 Of course it did 👩‍🏫 #whyMTBoS
In my Classroom...
If a student says something negative they have to say two nice things about it.

You stop class. No opting out. We all listen.
We Say hello at the door

Greet every student at the door.

Glenn does high fives, I do awkward hellos:

“Why howdy there!” ,“Hello math friend!”, “Early Morning Coffee toast!”, “Hi there sunshine!”
We Start Class With memes

Pre-Warm Up jokes
We Notice and Wonder

Annie Fetter
@MFAnnie

Math educator, GSP lifer, Desmos newbie, bike commuter, reader, bass guitarist, hockey goalie, off-grid home owner, beer nerd, cat person w/ cat
#NoticeWonder
We Change Our Language

Howie Hua
@howie_hua · Aug 4
Just because it’s circulating again, I’ll say it again: Asking questions does not mean you’re dumb. I say "Ask me at least 2 questions" rather than "Do you have any questions?"

Ethan Weker
@Ethan_MidPen
Repeating to @howie_hua.
I’ll often ask "What's a question that you could imagine someone having?" Or, "What didn't I explain as well as I could have?"

5:54 PM – 5 Aug 2018
ALL Y'ALL ALL Y'ALL
FOLKS TEAM
PEOPLES HUMANS
HUMANOIDS GANG
MONSTERS SCHOLARS
FRIENDS COMRADES
INVESTIGATORS
COLLEAGUES PEEPS
MATHEMATICIANS
NERDS SCRIBES
MY LOYAL SUBJECTS
PLEBIANS FOLLOWERS
(+ OTHERS)
We Desmos Together
We Lower The Warm Up Entry-Point
#MyFavorite #MTBoS
Structures
Visibly Random Grouping

**Weekly Groups**

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**Front of the Classroom**

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*Meg Craig*
@mathymeg07  Follows you

Math teacher at heart, reader, card maker, traveler, corgi-lover, the personal librarian you didn’t know you needed.

#MTBoS
(Vertical) Non-Permanent Surfaces
In Instructional Routines
The Daily Grind

Warm Up

Practice Earlier Topic
- Yesterday
- Last Week
- Last Month

Today's Instruction

Debrief
3 Act Math

Act 1: The Hook

Act 2: The Calculations/Predictions

Act 3: The Reveal

WHEN MATH HAPPENS

Dane Ehlert
Non-Routine Problems
Daily Practice Routines
Favorite #MTBoS
Inspired/Borrowed
Projects and Tasks
What is the Mathematicians Project?

The Short Version:

- We as math teachers tend to only talk about white male mathematicians.
- Most of my students don’t look like that, and thus, they have few mathematical role models they can identify with.
- Take 10-15 minutes a week to research (read Wikipedia, that’s all you need) a not-old-dead-white-dude mathematician, and then take 5 minutes in class to tell your students about them. Include a picture. It’s worth it, I swear.
MarbleSlide Challenges

Marbleslide Challenge Set
by Sean Sweeney
A set of 36 Marbleslide Challenges to run throughout the year. You can use teacher pacing to unlock a new challenge each week. These challenges can be used with any level from Algebra 1 through and beyond Calculus. Encourage higher level students to use fewer equations to increase the difficulty level. Some of the challenges are very difficult to complete using a single equation, but all should be possible to complete using a number of linear equations.

Marbleslides Challenge Set 2
by Sean Sweeney
A set of 30 Marbleslides Challenges to run throughout the year. These challenges can be used with any level from Algebra 1 through and beyond Calculus. Encourage higher level students to use fewer equations to increase the difficulty level. Some of the challenges are very difficult to complete using a single equation, but many can be completed using a number of linear equations.

Sean Sweeney
@SweenWSweens  Follows you
I like to think I’m awesome. I’m also a high school math teacher and on the Desmos Graph Team! #MTBoS
Data Visuals ➔ Lessons

Lauren Baucom @LBmathemagician · Aug 27
I talk with a lot of Teachers & Math Teacher Educators who want to bring equity and social justice into their classes. One way to do that is to show Ss "real" data from "real" research about "real" problems that happen to "real" people, now. Take for example... #MTBoS #mathed

Scott Galloway @profgalloway
Bankruptcy rates for people >65 have tripled. @nytimes

THE LEARNING NETWORK
What's Going On in This Graph?
Graphs, maps and charts from The Times -- and an invitation to students to discuss them live.

FiveThirtyEight
Labs and Investigations

Desmos Homework

[Graphs and equations]

With words, we might say: "After 7.5 seconds, the man was 6.15 feet off the ground." With function notation, \((7.5) \rightarrow 6.15\).

1. What are the advantages of WORDS?
2. What are the advantages of FUNCTION NOTATION?

Apollonius:
With words, we can understand the occurrence with function notation, we see the run without any extra fuss.

Gothic Page:
(1) words tell you exact details about a more accurate understanding.
(2) function notations are easier to see, trying to graph something.

Gothic Latin:
words you do not have to remember function notations, but function notation of writing the same information.
Best #TeacherLife Lessons
You are Enough

YOU ARE NOT AN IMPOSTER

YOU ARE ENOUGH

Julie
@reulbach  Follows you

HS Alg 1 & Alg 2 | ispeakmath.org |
Desmos Fellow | #MTeoS |
mathtwitterblogosphere.weebly.com |
exploremtbos.wordpress.com/overview/
You Are Not Alone

Teaching is hard, y’all. If you feel like a failure. If you’re discouraged. If you feel like everybody else knows something you don’t. If you’re nowhere close to the teacher you want to be (& feel like you’ll never get there). Just know YOU’RE NOT ALONE. #mtbos #iteachmath

Just a friendly reminder as the start of school energy starts to fade that no one can or should do #allthethings
I think Steve Leinwand said it best in his Mathematics Teacher article on surviving in a sea of change:

Postulate 3: It is unreasonable to ask a professional to change much more than 10 percent a year, but it is unprofessional to change by much less than 10 percent a year.

What I love about this 10% idea is that it is manageable. We have so many things that can overwhelm us on a monthly / weekly / daily / hourly basis, but if we focus on changing just one lesson every 2 weeks, think about how those little changes, those little shifts, will add up in the long run!
Teacher Friends are the best friends #Community #MathFam
I asked the family...

Okay #MTBoS Family, I'm working on a presentation so I have a question:

What is one big thing you've added into your classroom from a MTBoS friend?

Ex: "Ask me Two Questions" a la @howie_hua, "say Two Nice Things" a la @misscalculi8

Jennifer White @JennSWhite
7:45pm · 30 Oct 2018 · TweetDeck

Joey Herbert @herbertmath628 11h
Replying to @JennSWhite @howie_hua @misscalculi8
Definitely #noticewonder

Joe Herbert @herbertmath628 11h
Replying to @JennSWhite @howie_hua @misscalculi8
#noticewonder #VNPS
@saravdwerf's beginning of the year activities (name tents, counting to 100, etc.). @anniek_p's Mathematician's Project. I'm sure I'm missing stuff...

Casey McTeach @cmmteach
Replying to @JennSWhite @howie_hua @misscalculi8
Definitely #noticewonder

Kathy Owens @kowensSLHS 11h
Replying to @JennSWhite @howie_hua @misscalculi8
Name Tents for the first week of school from @saravdwerf
Honestly - it is hard to pick just one. 😞 There are also SO MANY things that I use from @mathequalslove

Jennifer Williams @jwilliams314 12h
Replying to @JennSWhite @howie_hua @misscalculi8
I can't remember who mentioned it at #TMC18 but having a place where students can request positive parent contacts has been AMAZING this year!

Todd Feitelson @toddfeitelson 54m
Replying to @JennSWhite @howie_hua @misscalculi8
I've been grading with red, yellow and green highlighters. Can't remember where I saw it.
Debbie Hurtado @DebbieHurtado 12h
Replies to @JennSWhite @howie_hua @...
First thing I added was simply the question "Can you tell me more about that?" from a @classroomchef presentation (my gateway #MTBoSPD). And since then, I've literally added dozens (hundreds?) of other jewels!

Annamary King @KingAnnimary 10h
Replies to @JennSWhite @howie_hua @...
Play table, clothesline math, WODB, and #ObserveMe. #MTBoS is a rich well of creative and engaging resources. So grateful for all my math colleagues who are so generous.

Kathy Owens @kowensSLHS 11h
Replies to @JennSWhite @howie_hua @...
Name Tents for the first week of school from @saravdwurf
Honestly - it is hard to pick just one. 😊 There are also SO MANY things that I use from @mathequalslove

Ian Kerr @ianKerr_math 5m
Replies to @JennSWhite @howie_hua @...
"one big thing" that hasn't yet been mentioned: virtually attending conferences through the lens of other mtbos'ers.
Co-Planning
Teamwork Makes the Dream Work

Greta
@g_brgmn

What would I do without the #MTBoS?! Seriously, though! There are pieces of you all sprinkled in every single one of my lessons and it makes teaching them that much more fun because I think of you all throughout my day.

8:06 PM - 12 Sep 2018
# Teamwork Makes the Dream Work

| Day       | Date | Subject                          | Monday Activities                                                                 | Tuesday Activities                                                                                     | Wednesday Activities                                                                                   | Thursday Activities                                                                                     | Friday Activities                                                                                       |
|-----------|------|----------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 2. Monday | 8/20 | Measuring and Constructing Line Segments | Warm Up: (10) • WODB?                                                            | Warm Up: (10) • Estimation 180                                                                         | Warm Up: (10) • Math Hospital—Distance with a \(-4)^2=16\ kind of error                                | Warm Up: (15) bc of first day • Set                                                                    |
|           |      |                                  | Student Task: (20) • Points, Lines, and Planes naming activity—Gallery Walk       | Student Task: (15) • Diagram Sketching from prompts                                                   | Student Task: (16) • Desmos Midpoint AB                                                               | Student Task: (15) • Desmos Midpoint AB                                                               |
|           |      |                                  | Student Task: (5) • Measure things.                                               | Student Task: (20) • Desmos Zombie Distance—Horizontal and Vertical                                   | Instruction: (10) • Midpoint Formula                                                                  | Instruction: (10) • Midpoint Formula                                                                  |
|           |      |                                  | Instruction: (15) • Choosing Measuring scales                                     | Instruction: (10) • Distance Formula • Non Vert/Horiz Distance                                       | Student Task: (20) • Card Stack—Measuring and distance                                               | Assessment 1 (15) • CC.LA.1 • CC.LA.2                                                                   |
|           |      |                                  | Closing: (10)                                                                     | Closing: (5):                                                                                        | Closing: (5):                                                                                        | Student Task: (20) • Card Stack—Measuring and distance                                               |

HW: Algebra 1 Review-Delta Math
Evernote Storage of Twitter Ideas
HOW TO #MTBOS?
Make a Twitter
Put Math in the Profile

Jennifer White
@JennSWhite

Current math teacher at UNCSA high school (Geometry & AFM), Returned Peace Corps Volunteer-Peru, Duke MAT grad, #MTBoS #MTBoSNC
Find Your People & follow them & Like Things

#ElemMathChat
#MSMathChat
#Alg1Chat
#Alg2Chat
#GeomChat
#PreCalChat
#statsChat
#DogsOrMTBoS
#KidsofMTBoS
Engage in Conversations With those People
Talk About Your Passions
Be honest, be humble, be kind—Let’s build eachother up!
Create a diverse network of NC Math Teachers on Twitter for learning, sharing, and supporting math instruction.
Won’t You Be My Neighbor?

MTBoSNC
Connecting NC Math Teachers