

Grassroots Professional Development: How Teachers Use Twitter

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This Talk

Why study teachers on Twitter?

Study Details

Findings: a story about teachers on Twitter

- teachers' networks
- content shared on Twitter
- teaching Internet literacies
- policies and politics

What this story might mean

Teachers are interesting
and cool.

Teachers Online

Supporting Student Learning

- Math Forum (Renninger & Schumar 2002)
- Knowledge Forum (Scardamalia & Bereiter 1996)
- Web-Based Inquiry Science Environment (WISE)
(Slotta & Linn 2009)

Professional Development

- Inquiry Learning Forum (Barab, Schatz, & Scheckler 2004)
- TappedIn (Schlager & Fusco 2003)

Access to support and resources influences how much change is observed in efforts to reform instruction (Penuel, Riel et al. 2009)

Q. How do teachers use Twitter?

Q. What do they think it's good for?

Q. How do educational institutions help shape teachers' appropriation of social media?

Data

Survey of teachers on Twitter

- broadcast on Twitter using education-related hashtags
- 37 complete responses

Interviews

- 8 teachers, subset of survey respondents
- 30-60 minute telephone interviews

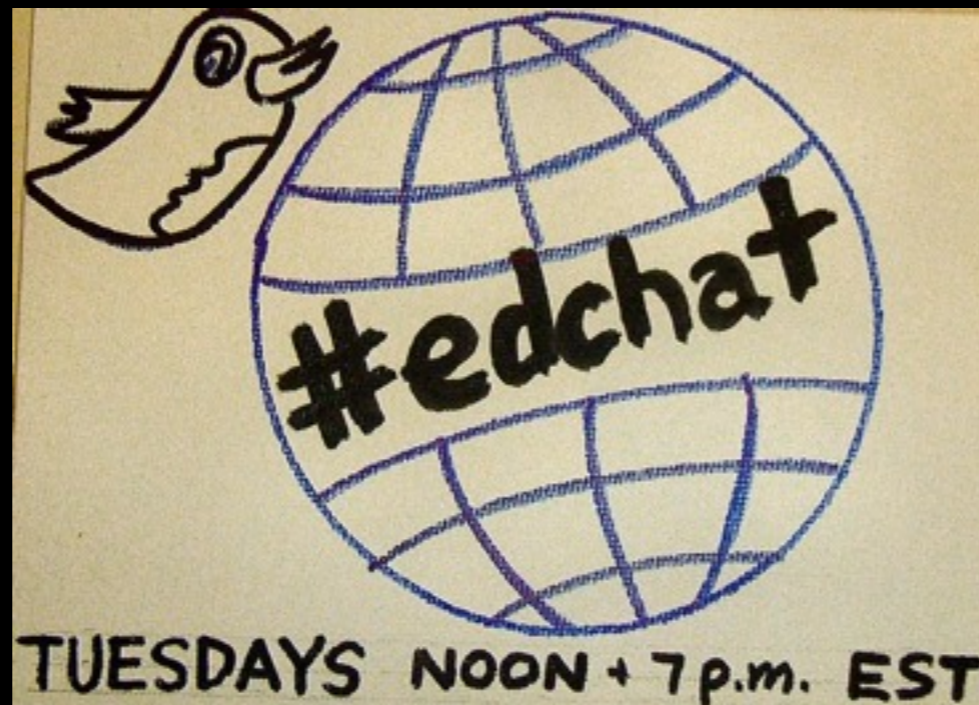
Content Analysis

- 2000 tweets

Who'd we talk to?


		Survey Respondents	Interviewees
	Male/Female	24%/76%	25%/75%
School Type	Public	64% (23)	50% (4)
	Private	30% (11)	40% (3)
	Charter	6% (2)	10% (1)
Grades Taught	K-5	35% (13)	38% (3)
	6-8	38% (14)	38% (3)
	9-12	51% (19)	38% (3)
	College	5% (2)	10% (1)
Topics Taught	Technology/CS	27% (10)	25% (2)
	Science/Math	38 (14)	50% (4)
	Language	38% (14)	50% (4)
	Social Studies	27% (10)	38% (3)
	Arts/Music	16% (6)	0
Months on Twitter	< 1	5% (2)	0
	1-12	16% (6)	0
	13-24	38% (14)	25% (2)
	> 24	41% (15)	74% (6)
	Avg. # Followers	334 <i>StDv</i> 412	363 <i>StDv</i> 449
	Avg. # Followed	254 <i>StDv</i> 254	269 <i>StDv</i> 247

What content did we look at?



800 #edchat
800 #mathchat
400 educator tweets


2000 tweets


Results for #edchat 


Related: #edtech


Tweets Top / All


20 new Tweets


 **Eric Sheninger** @NMHS_Principal
Schools are not doing enough to educate students on digital citizenship, responsibility, and footprints n.pr/LuMmQQ #edchat #cpchat
Expand

 **Dr. Justin Tarte** @justintarte 8m
If your students always ask "is this for a grade," then it's time to shift the focus in your classroom from grades to learning. #edchat
Expand ← Reply ↻ Retweet ★ Favorite

 **Joe Bower** @joe_bower 57m
When people say class size doesn't matter, they are talking about other people's children. #edchat #abed #bced #edreform
Expand

 **Eric Sheninger** @NMHS_Principal 1h
Use Technology to Upend Traditional Classrooms bit.ly/JOd4Ny #edchat #cpchat
Expand

 **Lisa Johnson** @ComputerExplore 3h
Sharing a @listly of 40+ web tools to engage student's brains over the hot summer #edtech #edchat lnkd.in/62vdrx
Expand

 **Eric Sheninger** @NMHS_Principal 3h
RT @mccoyderek: New Pedagogies For the Digital Age edudemic.com/2012/05/new-pe... #edchat
Expand

What'd we do
with all that?

Analysis

Interview transcripts

- Iterative coding by one researcher to identify recurrent themes: professional development, classroom use, school policies, and internet safety and literacies

Tweets

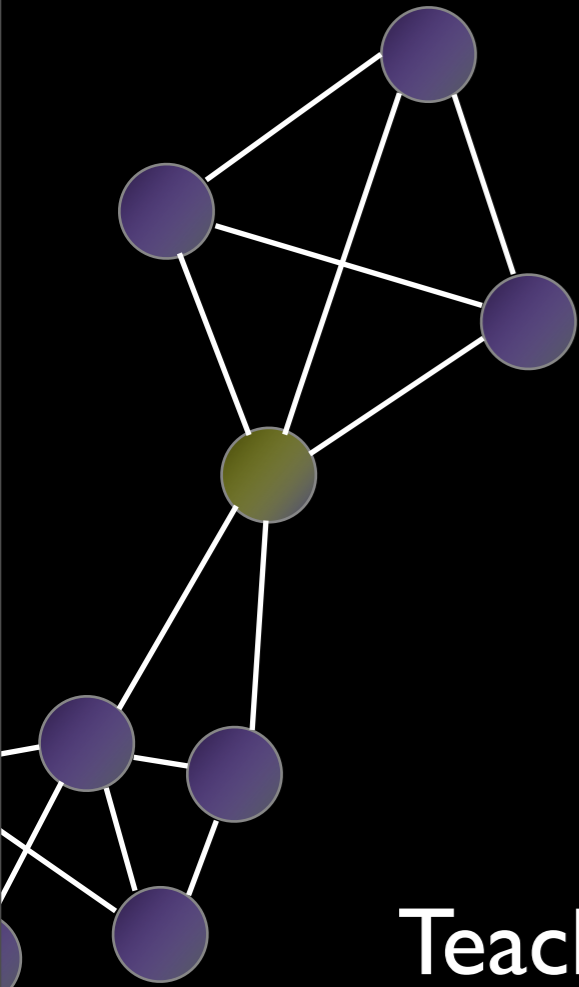
- Three iterations of coding by two researchers on test datasets to refine codebook
- Fourth iteration demonstrated high level of agreement between coders: 88.3% of observations (Cohen's kappa coefficient .82)

	Code	Examples
In	Information	
<u>InA</u>	Resources	links to tools; rubrics; assignments
<u>InB</u>	Education-related ideas	links to stories; news
Ph	Philosophy	
<u>PhA</u>	General Inspirational	"Achievement follows interest."
<u>PhB</u>	Concrete Advice	"Greet your students every morning with respect and happiness to see them."
Po	Policy	local, national, and global educational policies and laws; educational reform
Me	Personal	status/jokes
<u>Ev</u>	Events	conference <u>livetweets</u>; announcements
Ne	Networking/Self-promotion	introduction or links to own work
R	Request	requesting responses or action
RR	Response to Request	

Four Findings

- Tweeting Teachers' Perceived Networks and Audiences
- What Tweeting Teaching Hear and What They Do With That Information
- Privacy, Safety and Internet Literacies
- Policies and Barriers

I: Tweeting Teachers' Perceived Networks and Audiences



	Avg. # followed (std dev)	Avg. # follow by (std dev)
Local Teachers	2.6 (3.1)	3.7 (6.6)
Distant Teachers	171.8 (319.0)	277.4 (857.1)
Students	7.9 (19.1)	8.4 (18.0)
Parents	0.6 (1.9)	0.8 (2.5)

Teachers on Twitter act as network bridges whose Twitter connections give them access to resources and also position them to act as information brokers.

“I know only one other teacher at my school that has a Twitter account. And that’s something that I would like to be able to share with staff at a staff development on how to use Twitter as a personal learning network. Because that’s where I feel I’ve gotten such great ideas.” ~ T7

“It’s still at a point where ‘isn’t that cute?’ If a problem comes up then one of the first things I do is tweet it out and they’re like ‘oh, that’s nice, Mary.’ [laughs] Until I get an answer back and then they’re like whoa, that’s cool.” ~T5

Interpretation

The recurrent theme of evangelizing the value of Twitter to local peers suggest that teachers on Twitter are:

- Reform minded
- Open to change
- Interested in restructuring their local communities environment to include web-based and social media tools.

2: What Tweeting Teachers Hear and What They Do With That Information

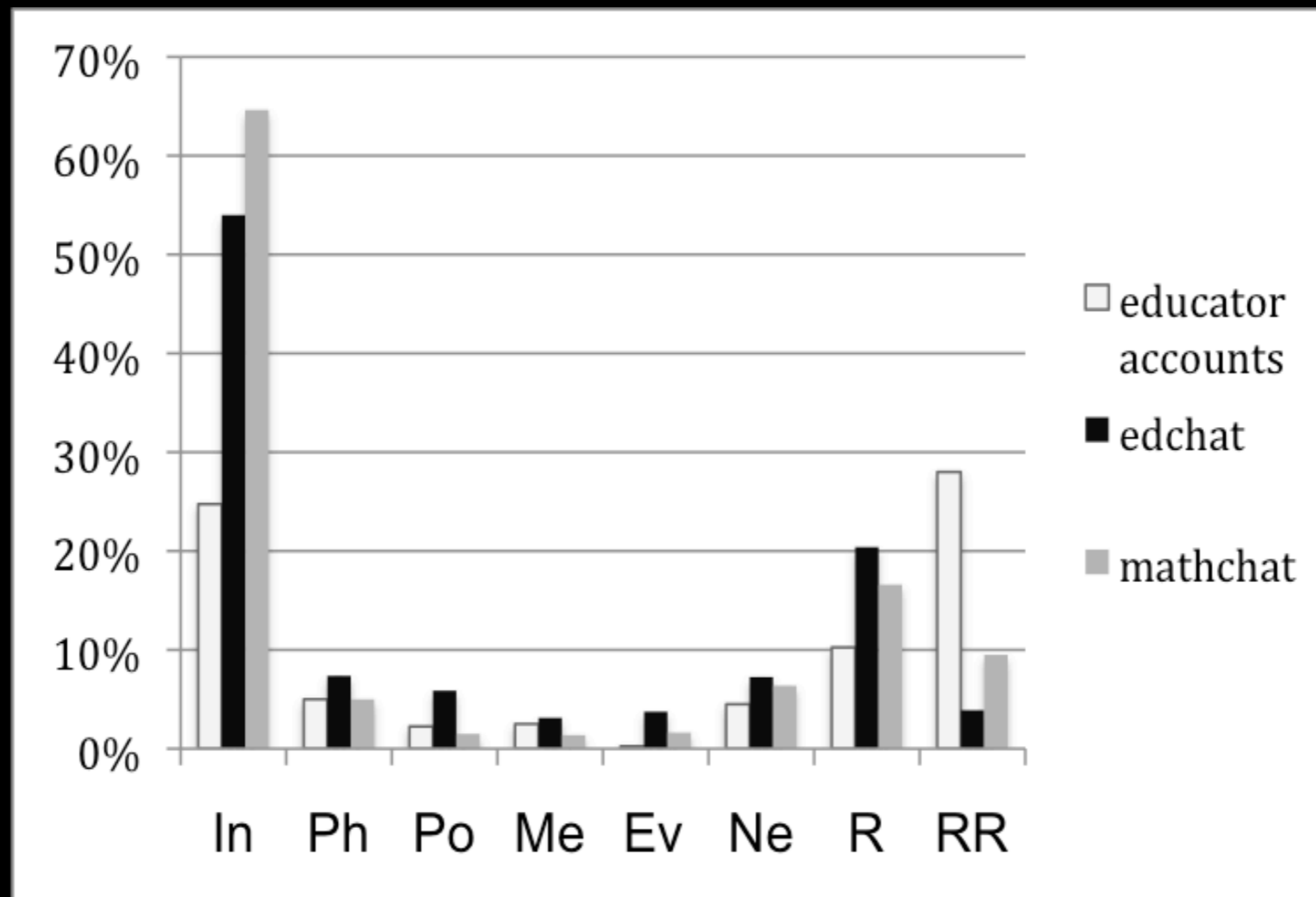
I would say that primarily what's changed [with Twitter use] is my exposure to different tools that are out there. It's given me more different ways to get at different things. ~ T6

It's almost like it self-generates learning opportunities. ~ T4

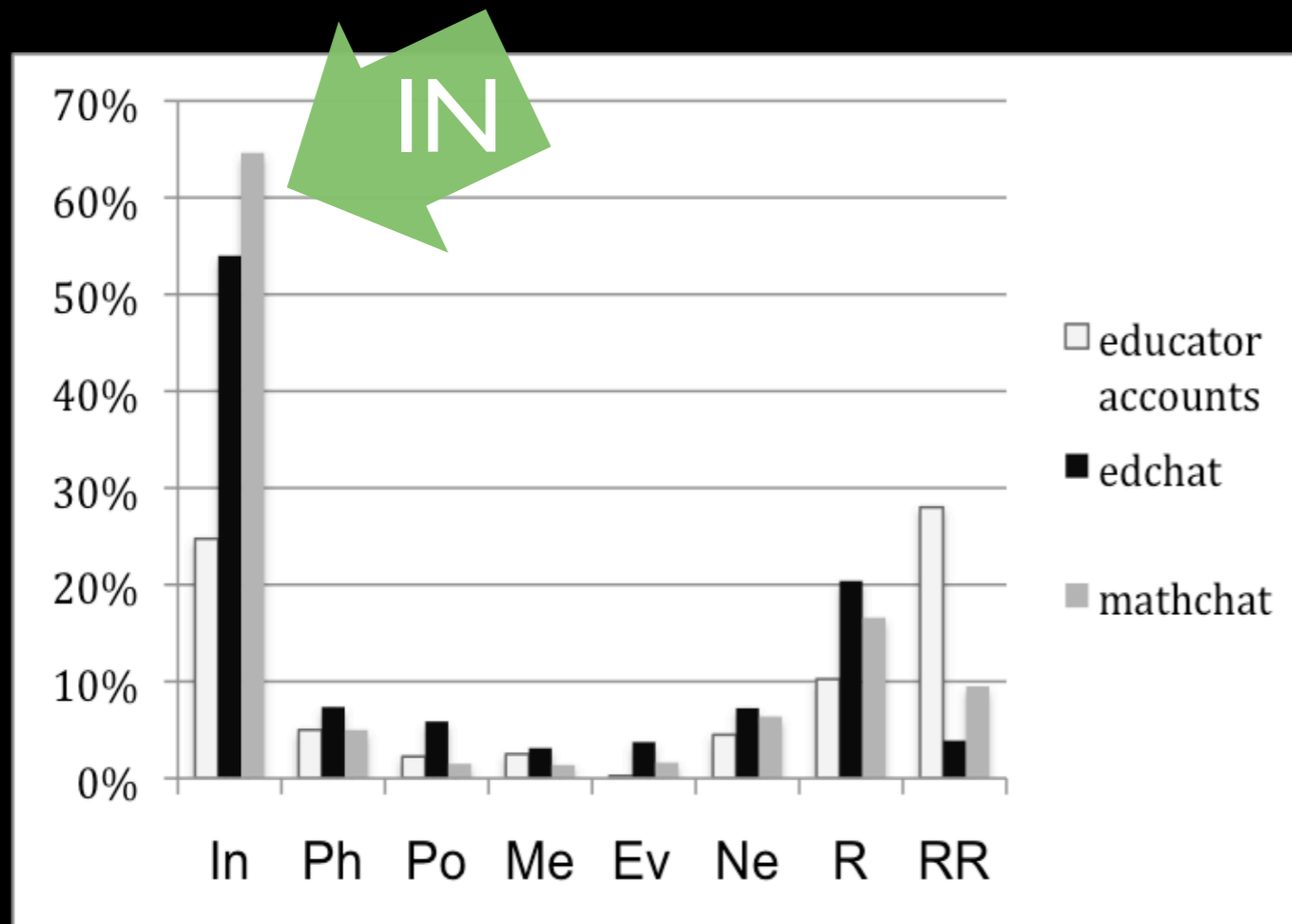
Codebook

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Content of Teachers' Tweets



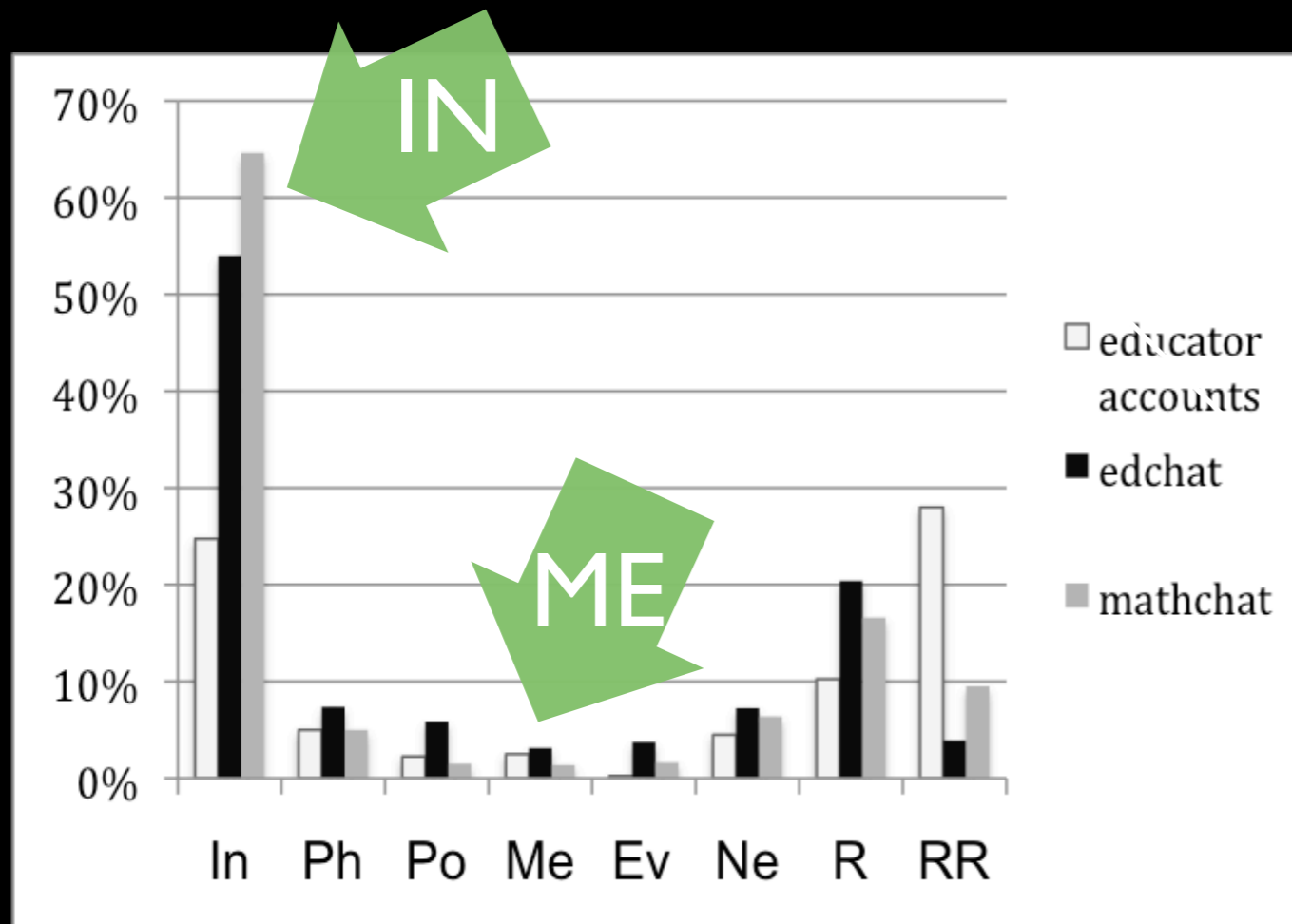
Compared to Most...



boyd et. al. (2010) found that about 41% of tweets with a hashtag include a link.

55-65% of tweets with education-related hashtag included a link to a resource.

Compared to Most...



Using similar methods, Namaan et. al. found most Twitter users are “Meformers” (80%).

In contrast, 2.5% of tweets from educator accounts contained personal updates or information.

“Some parents freak out and flat out said, ‘my child will not be doing something as silly as Twitter.’ It’s like, ok. That’s fine because, you know, most people think it’s like, to tell people you’re going to the bathroom or, most people think of social and unprofessional use of it.” ~ T2

“If I find somebody that all they do is talk about what they’re doing now or what they’re having for supper I probably won’t follow them any longer.”
~ T8

3: Privacy, Safety and Internet Literacies

Concerns about younger students online:

They're still at the point where things like Twitter feel dangerous to them rather than sort of safe places to be.

Which is probably ok, given that I teach 13 year olds. –T5



Twitter and Facebook are great social networking tools, but I don't know how I feel about 5th graders in that kind of public forum. –T7

Publicness as a Solution

All my kids develop a webpage about the topic they're studying in [my class] and that webpage is open for the world. And I think this is because we don't train the kids younger, I always find that the kids don't even think about what they're putting up out there... kids don't think enough when they put things up on Facebook. It's not open enough to the world. –T8

[students] would post a link to their blog and it was kind of nice because sometimes their blog articles would get picked up by companies they had mentioned or some other outside person decided to go ahead and retweet them. So they started learning about the real world – and I guess that was one of the things I appreciated about it as a teacher was seeing the kids talk to an outside audience. –T2

4: Policies and Barriers

Many teachers raised issues of creating good policies and educating policy makers as though they considered it to be a part of their job.

One of the successes we've had here at school is convincing our administration that whether it's Twitter, Facebook, chat, whatever, to just have a blind policy that says we're going to block it doesn't work. Kids find their way around it. And then the only people that think it isn't open are the teachers. – T8

A Story in Four Acts

- 1: The structure of teachers' professional networks
2. What teachers say and do on Twitter (and in their classrooms)
3. Tweeting teachers' beliefs about social media in schools
4. School policies and how they affect tweeting teachers

Interpretation

Social capital, which is often viewed as an asset to individuals, is a social good (Putnam).

The strength of many individuals' ties to one another sustains civic engagement and enables collective action (Granovetter).

These teachers are well-positioned to lead reform efforts, have the communication mechanisms in place, and the motivation to do it.

Questions?

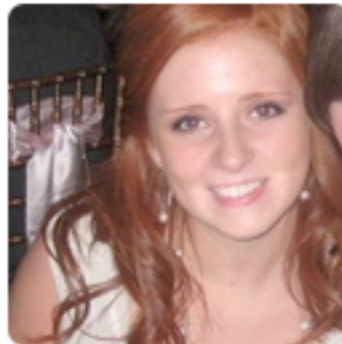


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