#teachertweets:
This is what democracy looks like

@DorisASantoro
Stephen Houser
Clare Bates Congdon

Bowdoin

@JessicaHochman
Bridget Gavlin

Pratt

AERA | Washington DC, 2016 | #AERADeweyToday

The New York Times

Teachers Are Warned About Criticizing New York State Tests

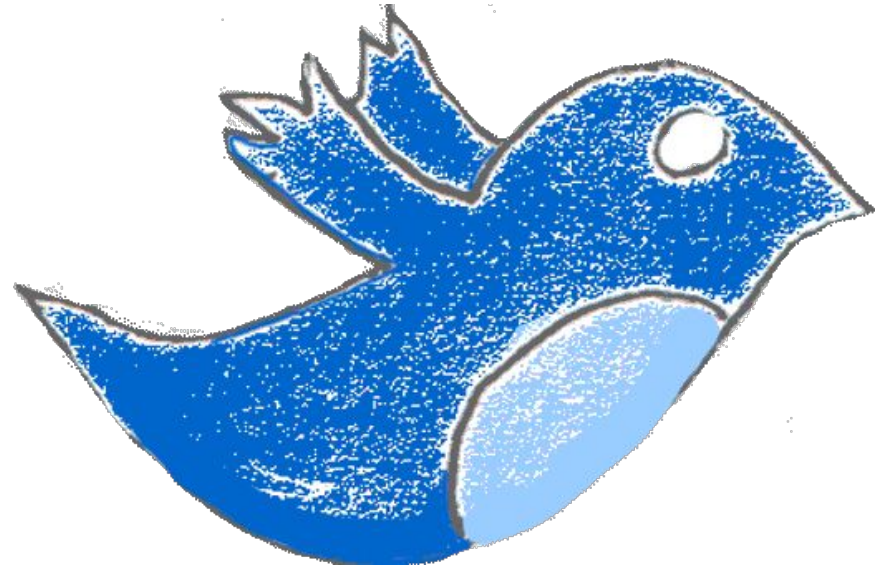By **KATE TAYLOR**   MARCH 24, 2016

Lisa Ripperger, right, the principal of Public School 234 in the TriBeCa area of Manhattan, where teachers

Why Twitter?

Q: Who are your activist allies?

A: They're all on Twitter.

Doris Santoro
@DorisASantoro FOLLOWS YOU
Associate Professor at Bowdoin College studying the meaning teachers make of their work.

Jose Vilson
@TheJLV
The teacher Gotham deserves. Author of This Is #NotATest. Keeper of the #EduColor vision.

Research Questions

- What categories of topics and ideas are teachers discussing on Twitter?
- Are teachers making moral claims about their work on Twitter?
- **Are teachers developing community on Twitter, per Dewey?**
- **How can teachers' use of Twitter be read through Dewey's joint concepts of democracy and education?**
- **What are some challenges to democratic discussion on Twitter?**

Twitter as Community

Communities develop by sharing common interests & purposes.

Shared language & meaning are paradigmatic indications of communities.

Communication creates & binds communities.

Homophily: people in communities share traits and values (Kadushin, 2011; Murthy, 2013).

Interplay of **egoistic** and **communal** tweets make Twitter interesting (Murthy, 2013).

Importance of strong and weak ties.

Twitter as Democratic Space

Dewey Asks:

How numerous and varied are the interests which are consciously shared?

How full and free is the interplay with other forms of association?

Twitter is **social** and **user-driven** (Gruzd, Wellman & Takhteyev 2011).

Teachers often describe it as a place of **"dialogue"** (Brenneman, 2015; Sawchuck, 2015) and **"connection"** (Lu, 2011; Rami, 2012).

Twitter as **"megaphone"** (Murthy, 2013).

Teacher Intelligence on Twitter

In democracies, all individuals express their intelligence.

In democratic communities people understand the meaning of their work in relation to social aims.

Judgments about one's work are expressions of intelligence.

Teachers use Twitter for professional development and to create PLN's (Carpenter & Krutka, 2014).

"Big Data" studies centered around hashtags, i.e., #commoncore and #blacklives matter.

We explore the moral claims of teachers.

Methodology by the Numbers

Pilot study

2000 tweets from 100 educator accounts

2 Instruments Developed:

- Qualitative codebook
- **Words of Interest list**

#teachertweets project

507 self-identified teacher accounts

550,508 tweets collected

4,335,085 non-stop words

10,000 trials in Autoclass

5 clusters generated

1 fingerprint

Gephi & Tableau used for visualizations

WORDS & HASHTAGS
OF INTEREST

GENERAL WORDS		
union	politi*	
teach*	job*	expulsion
test*	work	inclusion
students	TFA	include
community	gentrif*	listen
proficiency	charter*	retain
race	academy	engag*
black	policy	bilingual
white	educat*	multilingual
latin*	change	ELL
asian	reform	VAM
fund*	academic	score*
succ*	skills	Gates
classroom	participate	Koch
class	assess*	ALEC
budget	share	NCTQ
CCSS	evaluat*	PARCC
CC	implement*	RTTT
public	suspen*	time
school*	expel	Dewey

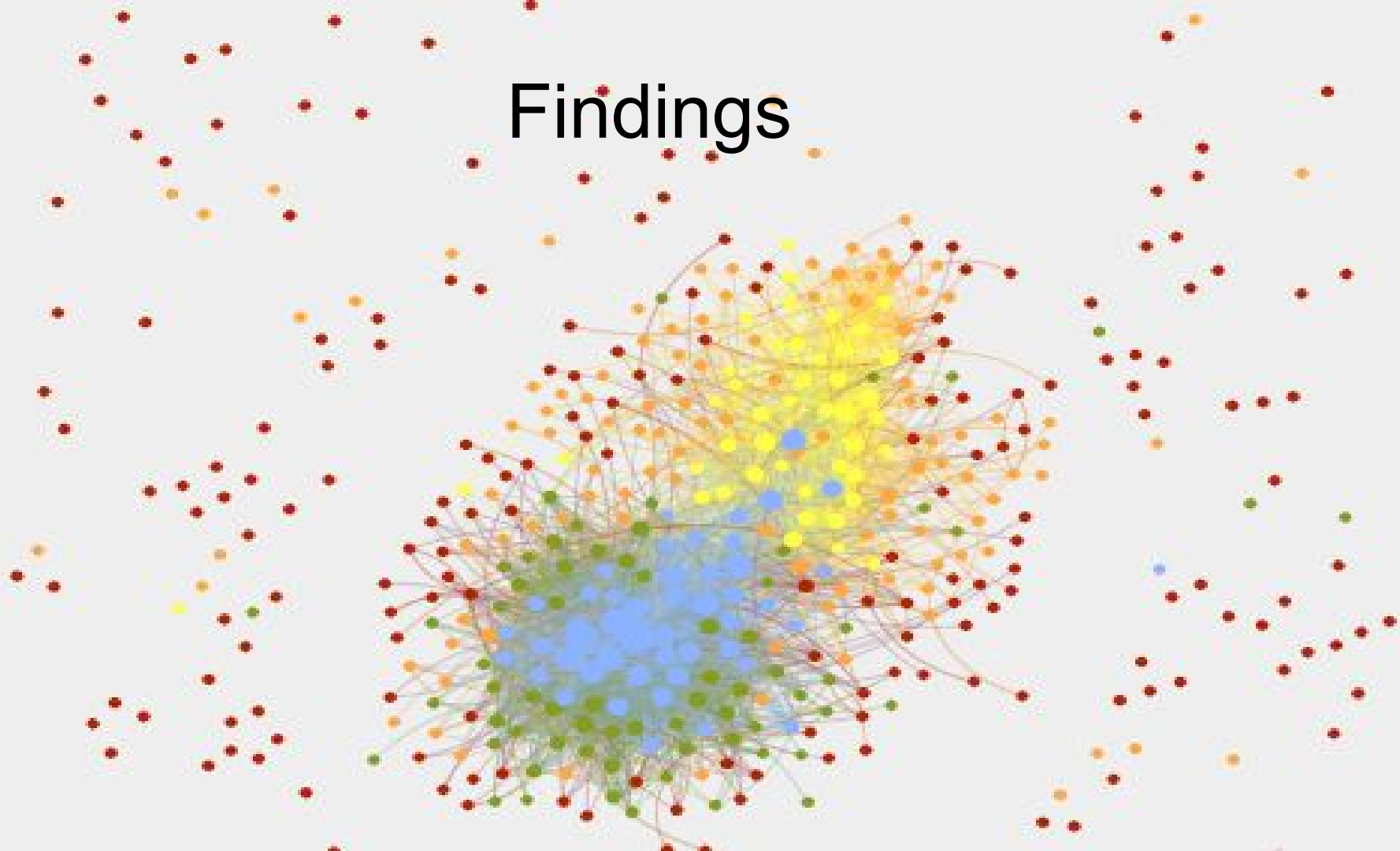| MORAL WORDS	
democra*	
neoliber*	love
need	cry
deserve	tired
trust	we
shame	activis*
privat*	fight
fair	demand
stake*	crisis
oppress*	tragedy
compl*	deserve
fidelity	advocat*
honest*	shortage
protest*	overrepresentation
poverty	underrepresentation
poor	*ethic*
rich	*moral*
privilege	strike
deform	unfunded
propaganda	underfunded
care	know

HASHTAGS

#educolor
#commoncore
#CCSS
#BATS
#BAT
#testing
#blacklivesmatter
#edchat
#hiphoped
#nerdybookclub
#bookaday
#CTQ
#optout

Methodology: Inquiry Across Discourses

Community   Intelligence   Democracy   Moral

BIG DATA

Findings

#teachertweets are about teaching

teachers   schools   **need**   thanks   #tbats

students   great   **love**   teacher   want

new   kids   time   day   see

like   us   **know**   learning   public

one   education   people   **good**   think

TOP 20
INFLUENTIAL WORDS
IN CLUSTERS

Moral Words (bold)   *Top 100 Overall (italic)*

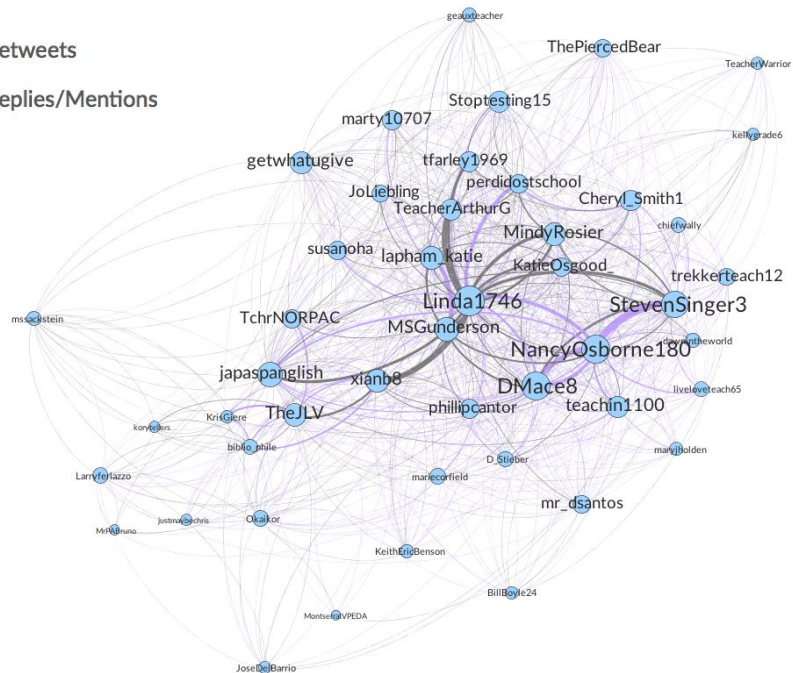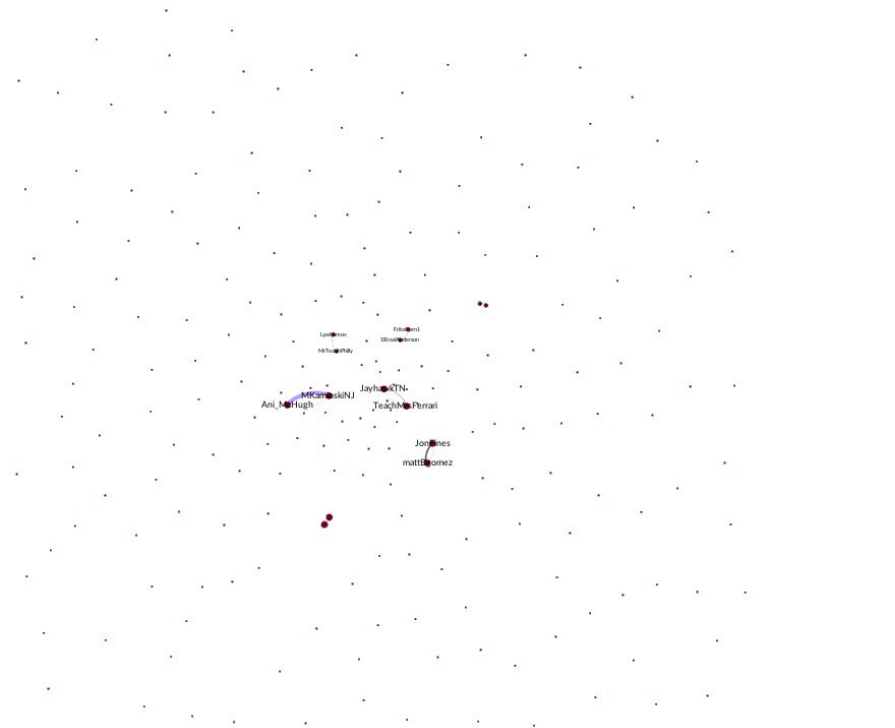|	0	1	2	3	4
Only Used				underrepresentat **unfunded** expulsion **underserved**	
Used More			union	**crisis activis** *fight* reform *public* **protest privat** *black* RTTT charter **racism** *strike* neoliber **democra boycott** politi	#bookaday *classroom* share *class* **love** skills engag *time* #nerdybookclub **we need** *#edchat* **know** work teach compl good change better assess
Used Less	*work* job ELL **we** **good** *time* CC *students class*	*fight* union test	*public* class **need** CC *time* fund **we** *right* school **know** work ELL **democra** test share		
Never Used	listen *need* **compl** change include **know better** race **right** *teach* **trust**	**privat** **propaganda boycott** koch **racism** *strike* **democra** #output #commoncore **neoliber** gentrif RTTT **deform** VAM **underfunded** #testing TFA	*#edchat* politi #nerdybookclub *classroom*		

Influence Summary (Moral Words)

Moral Words	neoliber	oppress	poor	poverty	privat	privilege	propagan..	protest	racism	refuse	rich	right	shame	shortage
0	0.534	0.631	0.804	0.735	0.690	0.741	0.616	0.645	0.701	0.715	0.761	0.849	0.782	0.688
1	0.535	0.360	0.261	0.163	0.637	0.237	0.612	0.404	0.575	0.452	0.269	0.408	0.201	0.178
2	0.042	0.027	0.289	0.228	0.299	0.019	0.180	0.261	0.121	0.161	0.262	0.419	0.181	0.147
3	2.435	2.328	2.245	2.235	2.545	1.833	2.034	2.547	2.457	2.352	2.222	2.036	2.342	1.760
4	0.228	0.012	0.306	0.057	0.196	0.342	0.124	0.207	0.040	0.033	0.270	1.011	0.155	0.008

Less than Average Word Count
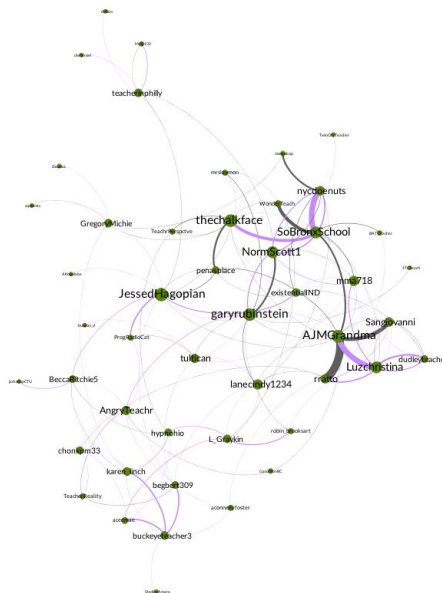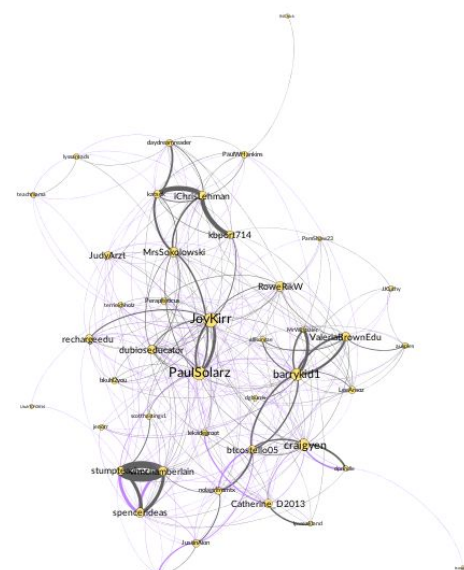
More than Average Word Count

Cluster 3

Cluster 0

Retweets

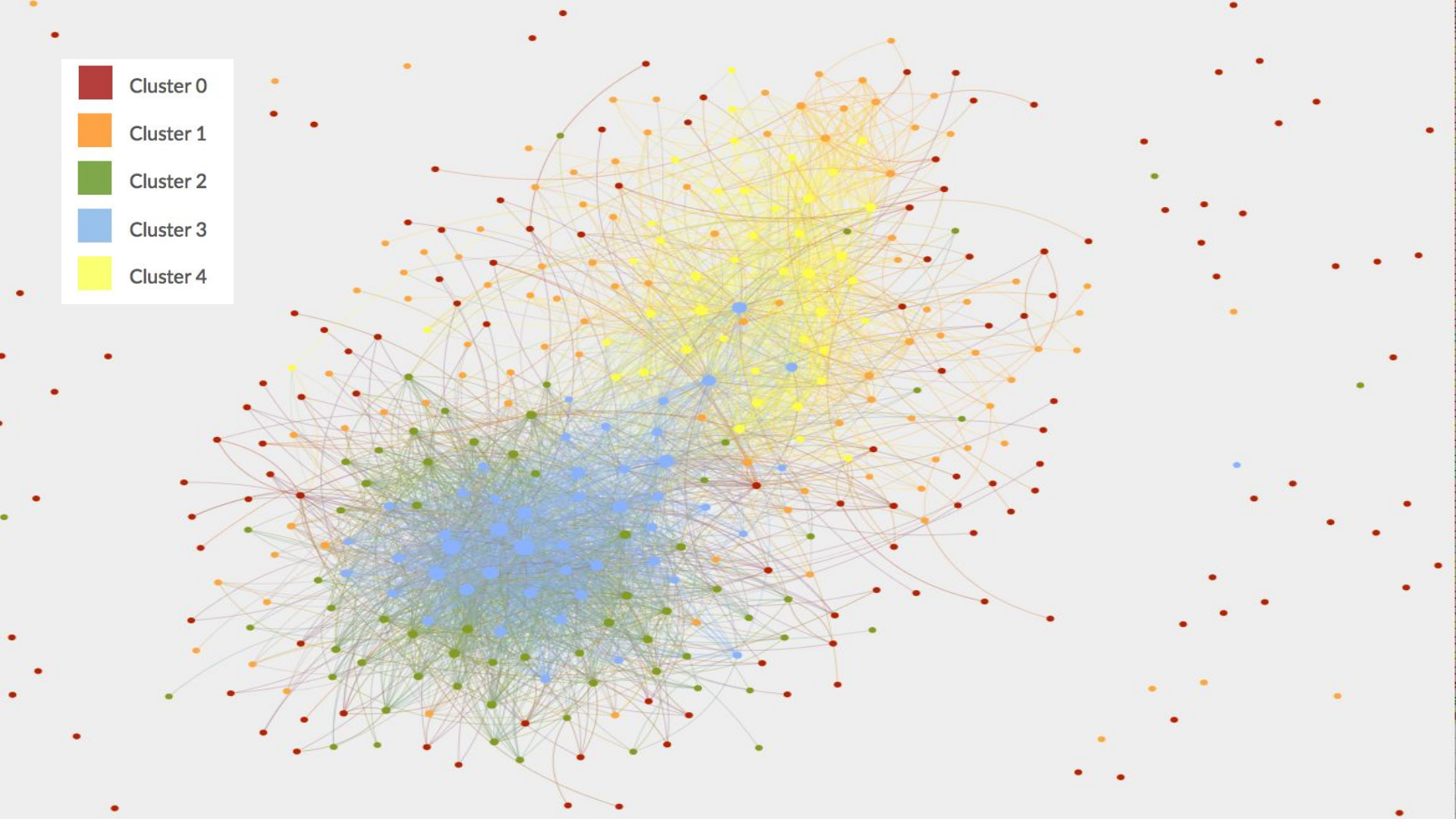Replies/Mentions

geauxteacher
ThePiercedBear
TeacherWarrior
marty10707
Stoptesting15
kellygrade6
getwhatugive
tfarley1969
perdidostschool
JoLiebling
Cheryl_Smith1
TeacherArthurG
chiefwally
MindyRosier
susanoha
lapham_katie
KatieOsgood
trekkerteach12
TchrNORPAC
Linda1746
StevenSinger3
MSGunderson
NancyOsborne180
idownintheworld
japaspanglish
xianb8
DMace8
liveloveteach65
TheJLV
phillipcantor
teachin1100
KrisGlere
msscoeclstein
koryteiers
biblio_phile
maryjholden
Larryferlazzo
marlecorfield
D_Stieber
MrPeBruno
justnusybechris
Okaikor
mr_dsantos
KeithEricBenson
BillBoyle24
MontseralVPEDA
JoseDelBarrio

Lpalomov
Frito9om1
HiTeachPhilly
SBoudreadeeon
AniM_McHugh
MikaroskiNJ
JayhawKTN
TeachMaPerrari
JonBnes
mattbgomez

Cluster 1

Cluster 2

Cluster 4

Cluster 0
Cluster 1
Cluster 2
Cluster 3
Cluster 4

mssackstein

Cluster 0
Cluster 1
Cluster 2
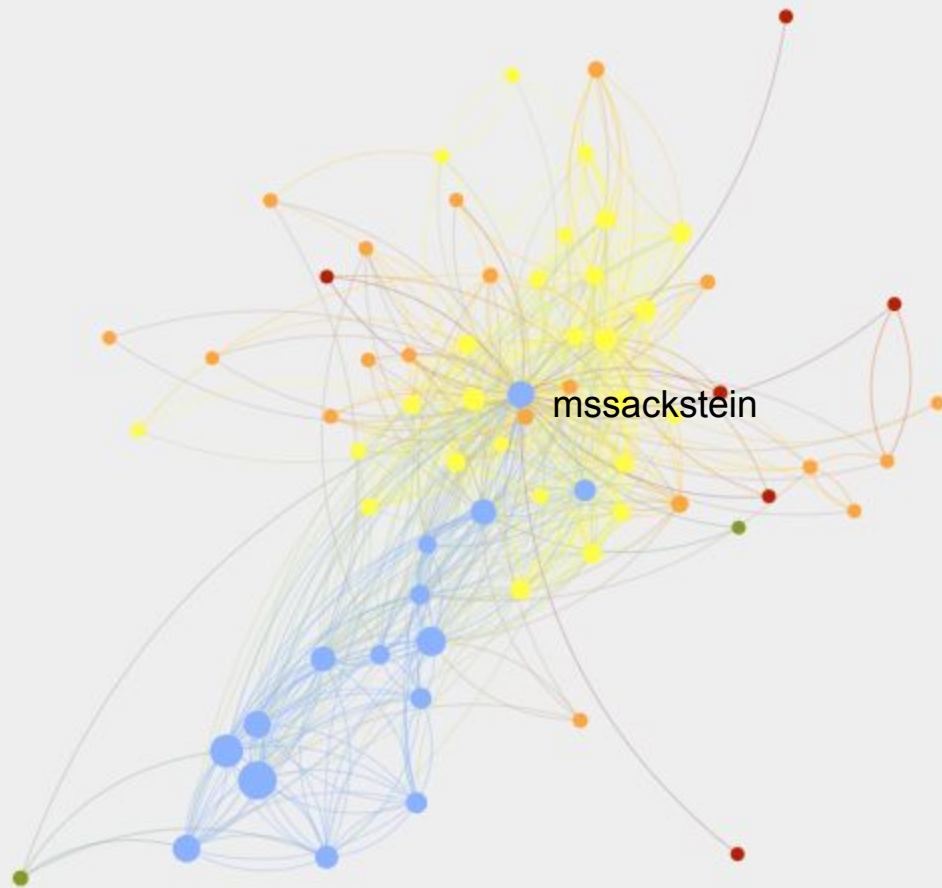Cluster 3
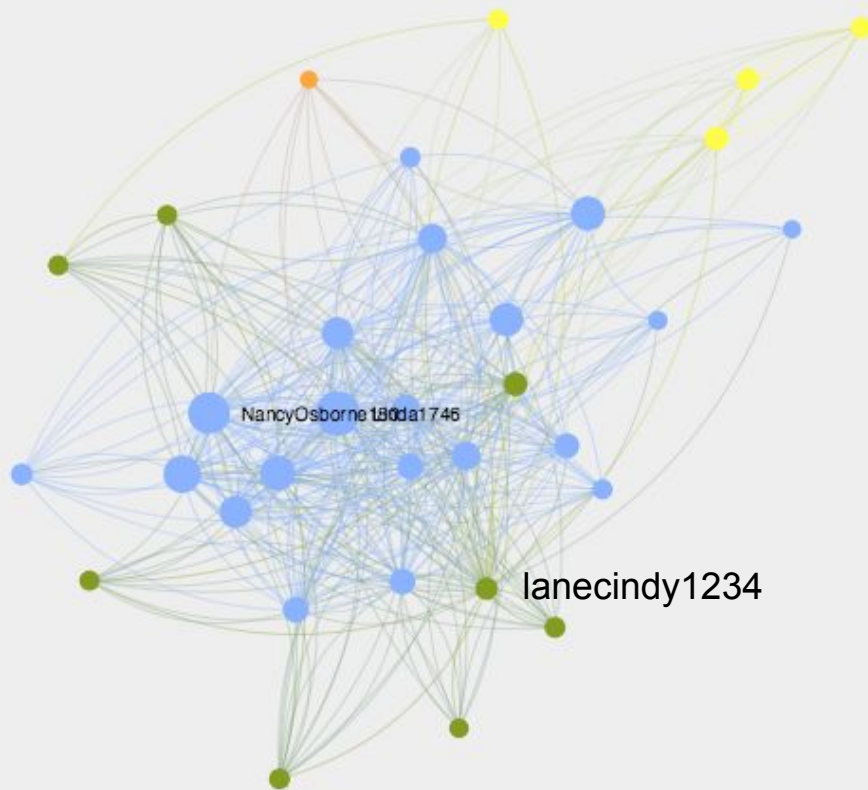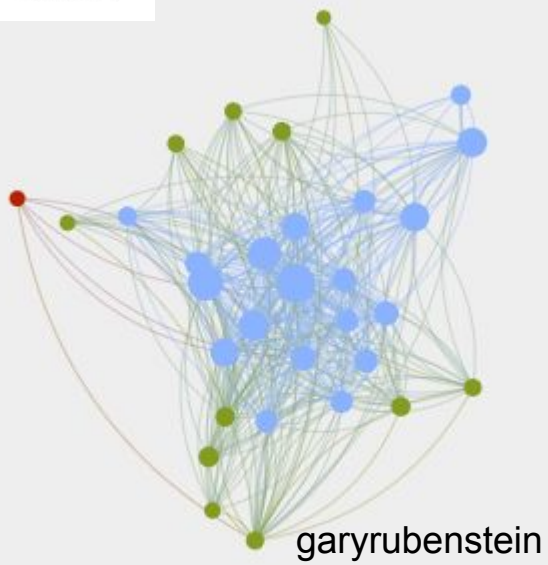Cluster 4

garyrubenstein

NancyOsborne180da1746

lanecindy1234

Limitations, Challenges, Critiques

Twitter Research

What incentives do people have to go outside their groups? (Dodds, Muhamad, & Watts 2003)

Is tweeting "slacktivism"? (Lutz, Hoffman, & Meckel, 2014)

How can tweeters avoid the echo chamber effect? (Bakshy, Messing, & Adamic 2015)

#teachertweets

We chose the words of interest.

Lack of tweet context.

Deweyan Lens Limitation: may not have a robust account of how absence is significant.

Conclusions

Teachers are creating democratic communities on Twitter.

They are talking about their work and what it means to them.
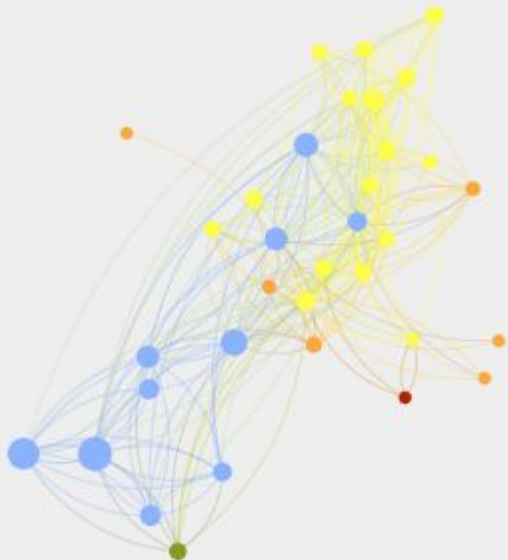
They are using moral language.

Next steps

Thinking more deeply about our methods.

Different forms of discourse analysis through AI and human coding.

Targeted network analysis to better understand flow of information.

"Deep dive" into this data through reading targeted groups of tweets and qualitative coding.

#teachertweets

Contact us:

@JessicaHochman

@DorisASantoro

@TeacherTweetsPI