

Evaluating Systems of Teacher Collaboration: A Framework for K-12 Educational Evaluators



Rebecca Woodland, Ph.D.
University of Massachusetts Amherst
School of Education

Rebecca.Woodland@educ.umass.edu EMAIL
http://people.umass.edu/woodland/Rebecca_Woodland/Home.html WEB

Why does teacher collaboration matter?



Teacher collaboration is
theoretically and empirically linked to
quality of instruction.



Quality of instruction is theoretically
and empirically linked to
student learning.

The need to evaluate collaboration...



Are you lonely?

Tired of working on your own?

Do you hate making decisions?

HOLD A MEETING!

You can –

- See people
- Show charts
- Feel important
- Point with a stick
- Eat donuts
- Impress your colleagues

All on company time!



MEETINGS

THE PRACTICAL ALTERNATIVE TO WORK

What does effective system of teacher collaboration entail?



TEAMS of teachers who share the same students,
and/or content area



Who have **TIME** to meet regularly and frequently during the
work day to



FOCUS solving authentic and immediate problems of practice related to real-time
teaching and student learning



Through a continuous **PROCESS** of inquiry involving dialogue, decision-making,
action-taking, and evaluation

AND

That are connected to all other teams so that **DIFFUSION** of innovation can flow
throughout a school

Teacher Collaboration: Five Factors that Affect Instructional Innovation and Student Achievement						Outcomes
TEAMS	TIME	FOCUS	PROCESS	DIFFUSION		Instructional improvement, diffusion of innovation and student achievement.
Every teacher is on a team whose membership includes those who teach the same students and/or subject area.	The entire team meets frequently, during the school day, throughout the academic year.	The focus of the team is on shared goals for instruction and student learning.	The team engages in disciplined cycles of dialogue, decision-making, action, and evaluation.	Every team is well-connected to all other teams in the school's formal communication network.	=	Instructional improvement, diffusion of innovation and student achievement. Sense of accomplishment and recognition. The right people, consistently working together, doing the right work, and achieving shared goals. Instructional improvement, innovation, and student achievement is recognizable, equitable, and brought to scale.
	+	+	+	+	=	Low esprit d'corp. Competing agendas. Independent actors working in isolation. Few, if any, shared goals for instruction and student learning. Changes in instructional practice and student learning will be autonomous, uncoordinated, and unequitable.
TEAMS		+	+	+	=	Frustration and disappointment. Team members recognize but do not have access to a work schedule that enables them to "work hard on the right work." Few coordinated improvements in instruction. Minimal changes in student learning and achievement.
TEAMS	+	TIME	+		+	Confusion and vulnerability. A wide array of low-leverage actions and tangential topics unlikely to affect student learning in a positive way are elevated and spread throughout the system. Lack of shared professional practices. People working hard on the wrong work.
TEAMS	+	TIME	+	FOCUS	+	False starts and lots of talk. Few evidenced-based decisions about how to change practice. Erratic or no action-taking. Spread of untested information and ideas or confirmation of current practices. Changes in instruction or student learning unknown and occur by chance.
TEAMS	+	TIME	+	FOCUS	+	Independent groups working in silos. Pockets of excellence, pockets of equity. Informal advice-seeking network the only mechanism for information exchange and school-wide innovation. Changes in instruction and student learning unpredictable, or not widespread.

Specific Evaluation Questions



1. What are the membership characteristics within a school's formal teacher team network?
 - Who is on what team?
 - What percentage of team members share the same school, content area, or grade level as the other members of their teams?

1. How much time is allocated for teacher collaboration?
 - What is the frequency and duration of teacher team meetings occurring during the workday, throughout the year?

Evaluation Questions



3. What is the focus of the teacher teams?

- For what purpose(s) do teams meet?
- Do teams specifically focus on teaching and learning and the instructional core (content, instruction, student engagement, & task)?

4. What process(es) do teacher teams use to carry out their work?

- To what extent do teacher teams engage in a full cycle of inquiry (dialogue, decision-making, action and evaluation)?

Evaluation Questions



5. How does the teacher team network support or constrain **diffusion** of knowledge and instructional innovation?
 - Number and location of connections
 - Existence and location of bridges, bottlenecks, pendants & isolates
 - Overall network density and centrality (amount of redundancy in the network)
 - Existence and location of sub-networks

Possible Sources of Data



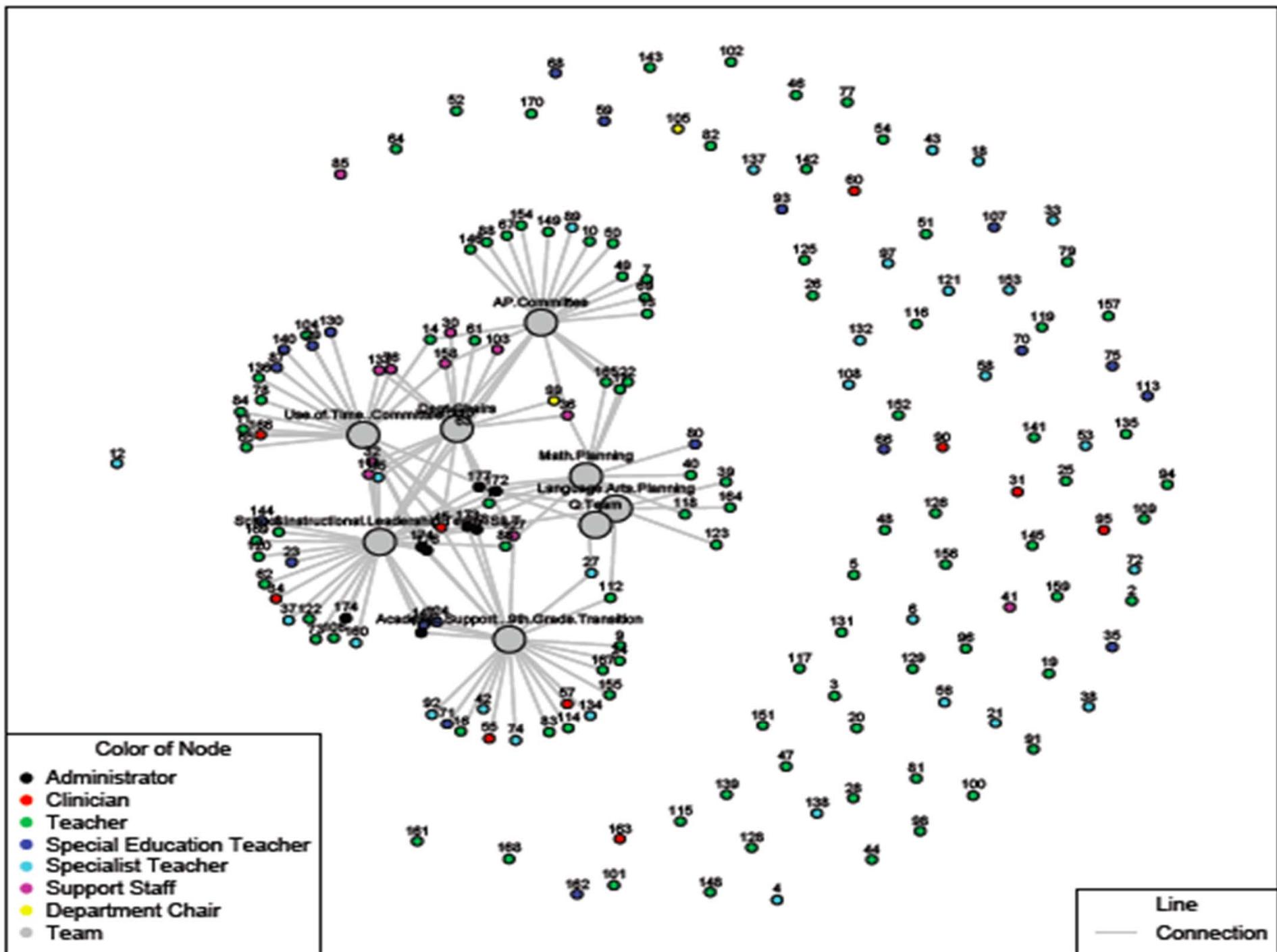
- **Teams, Time, Focus:** Principal and staff surveys, organizational charts, website data, meeting minutes/agendas (Woodland [nee Gajda] & Koliba, 2007, *American Journal of Evaluation*)
- **Process:** ©Teacher Collaboration Assessment Rubric, measures quality of team *dialogue, decision-making, action and evaluation*
(Woodland & Hutton, 2012, *American Journal of Evaluation*; Woodland [nee Gajda] & Koliba, 2008, *NASSP Bulletin*; Woodland, Kim, & Randall, in press, *Educational Evaluation and Research*)
- **Diffusion:** Teacher survey/interviews, social network analysis, sociograms & network matrices (Woodland & Hutton, 2012, *American Journal of Evaluation*; Woodland, Barry & Crotts, in press, *Journal of School Leadership*)

Example – Inventory data - Elementary School

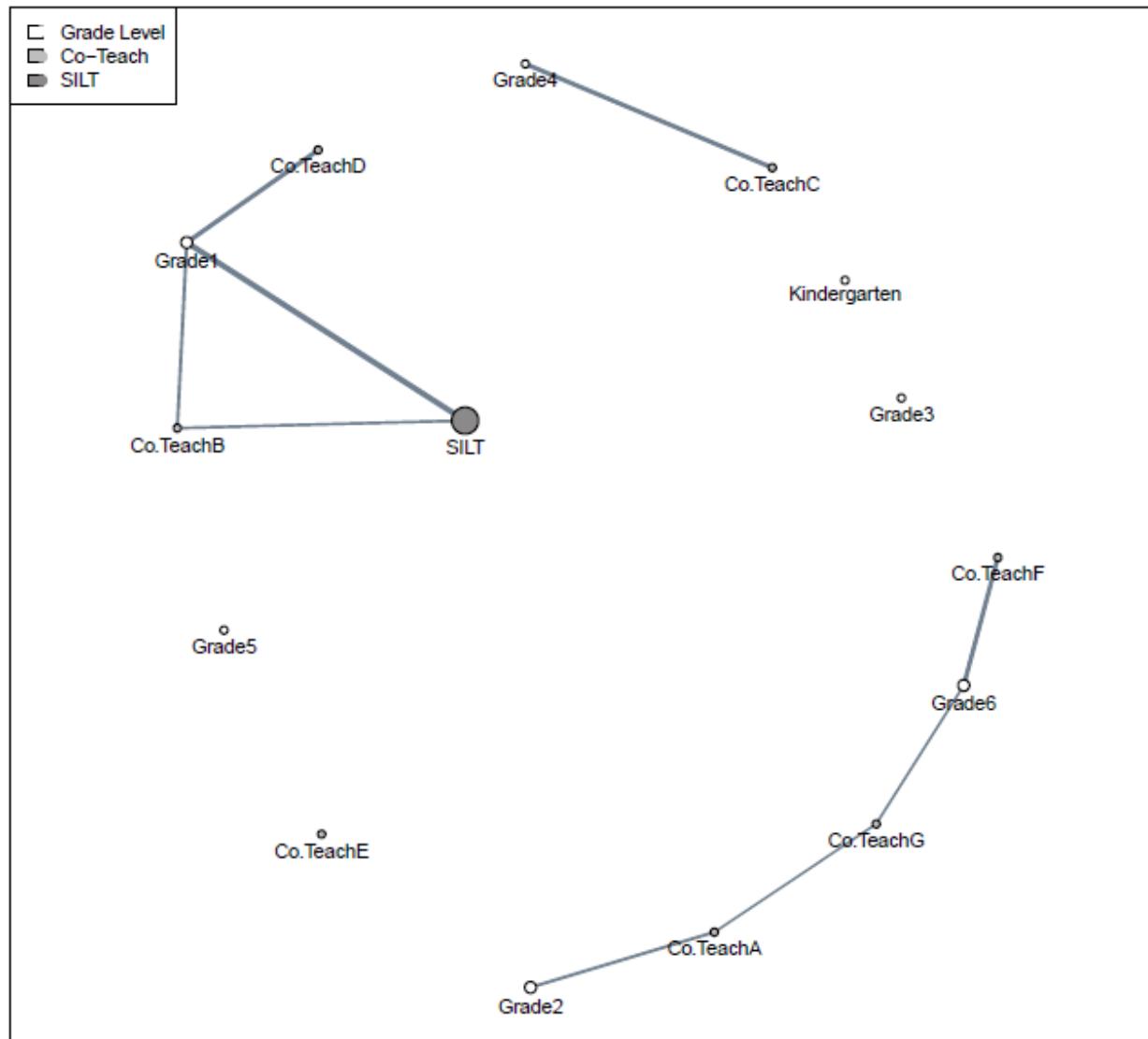
Name of Faculty/Staff Member	Pref team	K team	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Intervention	Second Step	Primary Reading	PBTS	Teaching ELL	3-6 Reading	Related Services	Library/Tech	Co-teaching	Mental Health	Resource	ELL	Assembly	PBTS Admin	SILT	Safety Captains	# of Teams to Which Each Faculty/Staff Member Belongs		
Mike	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13			
Derek																						x	x	6			
Emily																						x	x	5			
Kristen					x								x									x	x	5			
Molly												x	x	x	x	x	x	x	x	x	x	x	x	5			
Tara											x	x	x	x	x	x	x	x	x	x	x	x	x	5			
Toby											x	x	x	x	x	x	x	x	x	x	x	x	x	5			
Alex	x								x	x	x		x								x	x	x	x	4		
Elizabeth									x		x		x					x	x	x	x	x	x	x	4		
Kip								x			x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Leslie									x		x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Lucia										x	x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Michael	x							x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Pat										x	x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Stephanie	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4			
Alice						x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Alicia	x									x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Ben										x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Janet	x									x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Jasmine			x							x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Julie						x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Lauren	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Linda	x									x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Mary				x						x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Molly	x				x					x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Sandra					x	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Sharri			x	x						x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Terri									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3			
Alvie									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Alyssa									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Amy	x									x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Barbara						x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Carol			x						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Danielle				x					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Denise					x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Greta	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Hillary	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Ingrid									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Jen	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Judith	x								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Kara		x							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Linda								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Liz								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Pat								x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Roberta							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Susan							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2			
Terry							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
Cathy							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
Diane							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
Elizabeth							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
Kacey							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
Mary							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1			
# of Faculty/Staff Members in Each Team	7	3	4	4	3	3	3	4	5	6	8	10	5	7	4	2	13	4	13	3	9	5	6	10	7	10	

EXAMPLE – Raw data, Middle School

	Team Membership		Time			Focus is instruction?	Process				
Team Name	# of Members	% Teachers	Frequency	Duration (hours)	Total/Week	yes or no	Dialogue	Dec. Making	Action	Eval	Overall
Curriculum Leaders	9	70%	monthly	1.5	.4 (24 minutes)	yes	4.62	5.38	4.60	3.78	4.59
Leadership Team	13	70%	monthly	1.5	.4 (24 minutes)	no	4.45	5.38	4.70	3.36	4.47
KMART	10	30%	weekly	1	1	no	4.62	5.38	4.60	3.78	4.59
Student Support	3	50%	weekly	1	1	no	4.45	5.38	4.70	3.36	4.47
Math	7	100%	monthly	1.5	.4 (24 minutes)	yes	4.68	4.69	4.63	3.32	4.33
English	6	100%	monthly	1.5	.4 (24 minutes)	yes	4.98	5.35	4.86	3.71	4.53
Social Studies	7	100%	monthly	1.5	.4 (24 minutes)	yes	4.76	4.60	4.52	3.22	4.28
Science	5	100%	monthly	1.5	.4 (24 minutes)	yes	5.18	5.53	5.26	3.44	4.85
Special Education	13	100%	monthly	1.5	.4 (24 minutes)	yes	5.24	5.38	5.08	4.07	4.94
ELL	2	100%	monthly	1.5	.4 (24 minutes)	yes	4.82	5.13	5.20	3.27	4.60
Exploratories	4	100%	monthly	1.5	.4 (24 minutes)	yes	4.62	5.38	4.60	3.78	4.59
World Languages	2	100%	monthly	1.5	.4 (24 minutes)	yes	4.45	5.38	4.70	3.36	4.47
PE	2	100%	monthly	1.5	.4 (24 minutes)	yes	4.62	5.38	4.60	3.78	4.59
Music	7	100%	monthly	1.5	.4 (24 minutes)	yes	4.45	5.38	4.70	3.36	4.47
Grade 7 English	3	100%	weekly	1	1	yes	4.68	4.69	4.63	3.32	4.33
Grade 8 English	3	100%	weekly	1	1	yes	4.98	5.35	4.86	3.71	4.53
Grade 7 Math	3	100%	weekly	1	1	yes	4.82	5.13	5.20	3.27	4.60
Grade 8 Math	3	100%	weekly	1	1	yes	4.62	5.38	4.60	3.78	4.59
Grade 7 Science	3	100%	weekly	1	1	yes	4.45	5.38	4.70	3.36	4.47
Grade 8 Science	2	100%	weekly	1	1	yes	4.68	4.69	4.63	3.32	4.33
Grade 7 Social Studies	3	100%	weekly	1	1	yes	4.98	5.35	4.86	3.71	4.53
Grade 8 Social Studies	3	100%	weekly	1	1	yes	4.76	4.60	4.52	3.22	4.28
Swift River	5	100%	daily	1	5	no	5.18	5.53	5.26	3.44	4.85
Quabbin	7	100%	daily	1	5	no	5.24	5.38	5.08	4.07	4.94
Metacomet	4	100%	daily	1	5	no	4.82	5.13	5.20	3.27	4.60
Amethyst	5	100%	daily	1	5	no	5.24	5.38	5.08	4.07	4.94
Wyola	7	100%	daily	1	5	no	4.98	5.35	4.86	3.71	4.83
PBIS	11	50%	monthly	1.5	.4 (24 minutes)	no	4.76	4.60	4.52	3.22	4.28
Counselors	5	0%	weekly	1.5	1.5	no	5.18	5.53	5.26	3.44	4.85
Administrative Team	3	0%	twice/week	1	2	no	5.24	5.38	5.08	4.07	4.94



Example: Instructional Innovation Sub-Network



Findings are used to...



1. Make evidence-based decisions about how to configure teacher teams to intentionally increase diffusion of knowledge and to bring instructional innovation to scale.
2. Compare teacher advice-seeking networks to formal (org chart) networks. Reduce redundancies, breakdowns, and inefficiencies. Reconfigure team membership.
3. Identify specific training and skill development needs (e.g. use of protocols for dialogue, see <http://www.nsrpharmony.org>).
4. Determine where and how communication flow is strong (central actors in the network) and make targeted choices about where to introduce innovations and initiatives into the school's system of teacher collaboration.
5. Determine correlations between strength/attributes of teacher collaboration, instructional quality, and student achievement/engagement.

See: Zito, M. (2011). Is working together worth it?: Examining the relationship between the quality of teacher collaboration, instruction, and student achievement. Available at:

<http://proquest.umi.com/pqdweb?did=2423420471&sid=1&Fmt=2&clientId=70548&RQT=309&VName=PQD>;

Sullivan, M. (Feb. 2013). Is the Presence of a Results-Oriented Professional Learning Community Predictive of Student Achievement? Doctoral Dissertation. American International College.



Teacher collaboration—skillfully implemented and supported—constitutes a powerful lever to advance student learning.

- Croft et al., 2010



Questions?