Appropriating Tools to Foster Productive Professional Learning Conversations



Tianwen Li, Lindsay Clare Matsumura, Rip Correnti, Dena Zook-Howell

University of Pittsburgh

RESEARCH PURPOSE

Engaging in well-implemented dialogic text discussions can enhance students' reading comprehension, thinking and reasoning skills. Repeated participation in coach-guided reflection around artifacts of practice is key to developing teachers' adaptive expertise for facilitating dialogic classroom discussions (Lefstein et al., 2020). But skilled facilitation of productive professional conversations is a challenging endeavor.

Recent studies have revealed the huge potential of pedagogical tools (e.g., rubrics and observational protocols) to support productive professional learning conversations (See Figure 1). This study explores how coach-teacher dyads use tools to support productive professional conversations that develop teachers' dialogic teaching skills through encouraging specificity in teacher reasoning, establishing a dialogic stance, and making connections to general instructional principles (generalization).

Figure 1. Tools & Productive Professional Learning Conversations

- >Attending to specific evidence of teaching and learning · Assessing progress & identifying pedagogical
- >Establishing a dialogic stance
- · Positioning teachers as thinking authorities (Ippolito, 2010) >Connecting the specific aspects noticed in a lesson to broader teaching principles or
- learning goals Supporting knowledge transfer (Perkins & Salomon, 1992)

THEORETICAL FRAMEWORK & RESEARCH QUESTIONS

That all human action is mediated action is a central idea in Vygotsky's sociocultural theories of development. The relationship of people toward mediated tools can be characterized in terms of appropriation. Appropriation refers to the process through which a person adopts the pedagogical tools available for use in particular social environments and through this process internalizes ways of thinking endemic to specific cultural practices. (Bakhtin,1981; Grossman et al., 1999; Wertsch, 1998; Vygotsky, 1987). Drawing on this framework, this study explores how tools were appropriated in coach-teacher professional learning conversations. Specifically, we examine the following research questions:

- 1. Where and how frequently are tools used in the coaching routine?
- 2. How does the use of tools influence the quality of the professional learning conversation with respect to evidence-based specificity, dialogic stance, and connection of specific interactions to general principles?

STUDY CONTEXT

Literacy Coach Professional Development

The study is embedded in a year-long literacy coach professional development program (See Figure 2) designed to teach coaches how to implement Online Content-Focused Coaching (CFC). To examine how coach-teacher dyads use tools in professional learning conversations, this study particularly focuses on the phase of their professional training where they were coached by a master coach around their conferring with teachers.

Figure 2. Literacy Coach Professional Development



Online Content-Focused-Coaching (See Figure 3)

- Coaching Goal: To enhance teachers' dialogic teaching skills through building a nuanced understanding of how their discussion moves shape students' thinking opportunities through ongoing cycles of reflective dialogues around their videoed classroom discussions
- Coaching Content: Questioning the Author & Accountable Talk
- > Tools for supporting professional learning conversations Framework for Effective Text Discussion (FETD) & Accountable Talk Moves and Functions

Figure 3. Tool-supported Post-conference Routine



METHODS

Participants & Data Sources

- Coaches (N=4) & Case study teachers (N=4; 1 fourth grade, 2 fifth grade, 1 seventh grade)
- Post-conference transcripts (N=14): Reflection Questions & Teacher Responses (n=39)

Data analysis

Phase 1: Data reduction (RQ 1)

- Segmented transcripts by post-conference subroutines
- > Identified subroutines that contain the use of the FETD and ATMF tools

Phase 2: Comparing differences in discussion quality when tools were and were not

- > Developed rubrics to assess quality of conversations within each subroutine (See
- Assigned three scores to each subroutine (one per dimension), and then conducted descriptive statistical analysis

Subroutine 1: Reason	ng the Influence of Pedagogical Choices on Stud	lent Thinking		
Complete realization = 3	Partial realization = 2	No valization = 1		
A shared vision of success or problem space is clearly established by drawing or specific evidence of student periodic problems of the specific students prolopogical criticals understine goals for distrojic teaching in supporting student thinking.	A vased vision of success or problem space is partially eshablished by disseling on some evidence of student histoling polapsing those undermine goals for dislogic teaching in supporting student thinking.	A shared vision of success o problem space is incomplete, or it babs a does to be the orders or disabort friending and leading the control of the orders of the control of the orders of the control of t		
The coach-teacher dyad collaboratively establishes a shared vision of success or problem space.	The coach does most of the cognitive work of identifying the praiser, with only a limited effort to engage the leacher in a distingue about establishing shared vision of seconds or space. The coach makes efforts to encourage the teacher to do the cognitive work of identifying the problem but does not demonstrate much responsavences to their thinking.	The coach does the cognitive work of establishing a shared vision success or problem space whout engaging the teacher in a dialogue about problem identification.		
The discussion of a shared vision of success or problem space is linked to dislogic tracting principles. OR A shared vision or success or problem space is generalized A shared vision or success or problem space is generalized available in the future of teachers recognized similar patterns.	,	A shared vision of success o problem space is not generalized, which couldn't support Incombrige transfer whom similar problems arose in the future.		
	Complete resilization = 3 A shared vision of success or profiles agons in closely. A shared vision of success or profiles agons in closely. A shared vision of success or profiles agons in closely and extensive profiles agons for desired profiles and shared vision of success or profiles report and an advantage of the shared vision of success or profiles report in the shared vision of success or profiles report in the shared vision of success or profiles report in the shared vision of success or profiles agons in shared to shared profiles agons in shared to shared profiles agons in shared vision of success or profiles agons in shared vision of succe	Compiler realization = 3 A shared vision of accounts or problem specia is charged. A charged vision of accounts or problem specia is charged. A charged vision of accounts or problem special vision or accounts or problem special vision of accounts or problem special vision of accounts or problem special vision of accounts or account vision of accounts or problem special vision of accounts or account vision of accounts or problem special vision of accounts or account vision of accounts or problem special vision of accounts or account or acc		

Subroutine 2: Considering Alternatives						
Dimension	Complete realization = 3	Partial realization = 2	Emerging realization = 1			
Evidence-based specificity Two leacher moves and one connected language example for each move are identified.		One language example connected to the teaching model is identified. OR Teacher moves are called without corresponding language examples.	No alternatives are identified despite initial efforts.			
Dialogic stance	Teacher offers alternatives to which the coach responds; the coach might also offer alternatives as building knowledge.	Coach makes a pro-forms invitation, make some effort to invite a teacher to offer an atternative, but does not follow up on teachers' ideas	The coach alone generates alternatives (i.e., does the cognitive work); the teacher is not invited to offer alternatives.			
Generalization	The impact of alternatives on student thinking is linked to dislogic teaching principles. OR The alternatives are generalized and identified as common solutions that could be applied in the future if teachers recognized stanker situations.	,	The impact of alternatives on student thinking is not linked to dislog teaching principles, which couldn't support knowledge transle when similar problems arose in the future.			

FINDINGS

RQ 1: Where and how frequently are the FETD and ATMF tools used in the coaching routine? (see Table 2)

Table 2. Frequency of Tool Use in Post-conference Routine

	No tool use in post-conference routine	Tool used in asynchronous reflection	Tool used in synchronous reflection		
Subroutine 1	68%	23%	9%		
Subroutine 2	46%	32%	22%		

RQ 2: How does the use of tools influence the quality of the professional learning conversation?

Subroutine 1: Reasoning the Influence of Pedagogical Choices on Student Thinking (see Table 3)

- > Enhancement in specificity and dialogism levels
- > No enhancement in generalization

Table 3, Quality of Professional Learning Conversations in Subroutine 1

S Dimension Mean	s	Subroutines co	nes contain the tool use Subroutine does not contain the				cool use	
	Complete realization n (%)	Partial realization n (%)	Lack of realization n (%)	Mean	Complete realization n (%)	Partial realization n (%)	Lack of realization n (%)	
Specificity	3	10 (100%)	0 (0%)	0 (0%)	2.71	15 (71%)	6 (29%)	0 (0%)
Dialogism	2.7	7 (70%)	3 (30%)	0 (0%)	2.57	13 (62%)	6 (29%)	2 (9%)
Generalization	1.6	3 (30%)	1	7 (70%)	1.19	2 (10%)	1	19 (90%)

Soutine 2:Considering Alternatives (see Table 4)

- Enhancement in specificity and dialogism levels
- No enhancement in generalization

Table 4. Quality of Professional Learning Conversations in Subroutine 2

Dimension	Subroutines contain the tool use			Subroutine does not contain the tool use				
	Mean	Complete realization n (%)	Partial realization n (%)	Lack of realization n (%)	Mean	Complete realization n (%)	Partial realization n (%)	Lack of realization n (%)
Specificity	2.93	14 (93%)	1 (7%)	0 (0%)	2.23	3 (23%)	10 (77%)	0 (0%)
Dialogism	2.93	14 (93%)	1 (7%)	0 (0%)	2.69	10 (76%)	0 (0%)	3 (24%)
Generalization	1.4	3 (20%)	1	12 (80%)	1.31	2 (15%)	1	11 (85%

CODING EXAMPLES

Subroutine 2 that contains tool use

Teacher: Me repeating back everything they say, I could have the kids repeat back. My para suggested, "Well, you could have them repeat back what they were talking about."

Specificity Coach: Yes. I'm just looking at ATMF.
There's an example here for keeping the channels open, where you as the teacher channels open, where you as the teacher might say, "Paul, can you please say back what so and so said." So now they're not just listening for their opportunity to talk, but

they're really listening to what each other is saying. And then when you think about that, how do you see this impacting the text discussion overall? stance Teacher: I feel it would make for a real conversation and they would really own the reading and have that accountability of

really listening to each other. Coach: That is actually a goal of QTA, right? practice (listening to and building on each other) that students will actually pick up.

Subroutine 2 that does not contain tool use

Coach: From some of the kids, they were still problem solving through this. how could you have helped the students solidify

that big idea of child labor? Teacher: I guess as a guick check in maybe giving examples and seeing a thumbs up or a thumbs down and see how

kids react to different types of work Coach: That could be one way of doing it. but that might take you away from where you want it to be.

Teacher: Right.

Coach: Something you could do like,
"Okay boys and girls, we've got this
discussion going on between chores and
Specificity whether or not chores is child labor. We've got this opinion that the author doesn't think necessarily that chores are child labor. What's our evidence?" I think really opening it up, again, bringing it back to the whole group, what's our evidence? Is our



Dialogic

stance