

# Exploring Focused Responsiveness as an Approach to Facilitation in Professional Learning

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Abstract: Meaningful professional learning (PL) for teachers needs to center their assets, aims, and needs while also bringing them into conversation with research-based instructional approaches that support student learning. In service of facilitating meaningful PL, this study introduces and aims to develop characterizations of focused responsiveness in PL. I draw on multiple literature bases and interviews with science teacher leaders who facilitated professional learning communities to build understandings of what focused responsiveness to teachers may entail and look like in PL, and associated tensions. Deeper understanding of this approach has the potential to contribute to the design and enactment of PL environments that value teachers as highly knowledgeable professionals and experienced co-generators of their own learning.

### Introduction

Formal K-12 educational settings in the United States are heterogeneous and ever-evolving landscapes of initiatives, priorities, and local constituencies. In science education, the field is amid ongoing reforms with the *Framework for K-12 Science Education* (NRC, 2012) and the Next Generation Science Standards (NGSS); calls to address "deep and enduring disparities in K-16 science education" (NASEM, 2021, p. 8); and liberatory efforts to center richly diverse student and educator repertoires (e.g., Warren et al., 2020). To meaningfully engage teachers within such landscapes, PL needs to focus on research-based instructional approaches shown to support student learning, while also centering teachers' assets, aims, and needs.

This study aims to develop characterizations of an approach to PL facilitation aligned with the vision above—focused responsiveness. Broadly speaking, focused responsiveness refers to facilitation that provides opportunities for teachers' voices to be valued in and shape PL (being *responsive*), echoing recent calls in PL literature for increased responsiveness and opportunities for teacher agency (e.g., Buxton et al., 2015; Cavendish et al., 2020), while also building toward broader goals for teacher learning (shaping *focus*). Responsive and goal-oriented facilitation can be mutually supportive but may also give rise to tensions common to PL that brings local actors and broader initiatives into conversation (e.g., Allen & Heredia, 2020).

Here, I draw on multiple literature bases and interviews with teacher leaders (TLs), who facilitated PL with science teachers, to stitch together initial contours of focused responsiveness as an approach to PL facilitation. Generating deeper understandings of focused responsiveness has the potential to contribute to the design and enactment of PL environments that support more localized, meaningful teacher learning opportunities and value teachers as the professionals and people they are.

## Theoretical underpinnings of focused responsiveness in PL facilitation

Facilitation matters for effective PL but is often an understudied component (Borko et al., 2014). Some studies exploring the nature of PL facilitation have identified generative sets of facilitation moves and practices linked to specific goals, such as promoting collaborative learning among teachers (e.g., Gibbons et al., 2021; Zhang et al., 2011). However, few studies have focused on how facilitators navigate being responsive to teachers. The work of Koellner et al. (2011) and Remillard and Geist (2002) are notable exceptions here, and the present conceptualization of focused responsiveness builds on insights from these studies and broader literatures on 1) responsiveness to student thinking in K-12 settings, 2) adult and teacher learning, and 3) features of effective PL. Together, these literature bases point toward several key facets of focused responsiveness.

First, focused responsiveness as an approach to PL facilitation foregrounds taking an asset- or resourcebased view of teachers and their contributions—presuming that what teachers bring to bear is valuable and generative. This stance is evident in work on responsiveness to students' contributions in K-12 settings (e.g., Campbell et al., 2016; Hammer et al., 2012) and work on teacher learning that treats teachers' knowledge and experience as assets (e.g., Horn & Kane, 2015; Remillard & Geist, 2002). For instance, Remillard and Geist explored how facilitators navigated "openings" in an elementary mathematics PL curriculum when teachers raised challenges or questions, and they ultimately framed such contributions as opportunities for learning. Second, focused responsiveness involves inviting and pursuing teachers' contributions and participation in directionsetting. This facet is evident across the identified literature bases, including perspectives on adult learning that emphasize the importance of adults determining the direction of their own learning experiences (e.g., Knowles, 1973). Pursuing teachers' contributions may occur in the moment within interactions, and/or over time when



shaping lines of inquiry and associated structures (e.g., Hammer et al., 2012; Koellner et al., 2011). Third, focused responsiveness seeks to bring teachers' contributions into conversation with goals that matter for supporting student learning and experiences within classrooms. In other words, like responsiveness in K-12 settings that maintains connection with disciplinary ideas and practices (e.g., Hammer et al., 2012) and consistent with research on effective PL (e.g., Darling-Hammond et al., 2017), focused responsiveness in PL maintains connection with identified goals for teacher learning. The remainder of this paper explores these facets in the rich perspectives of teacher leaders (TLs) who facilitated science professional learning communities (PLCs) described below.

### Study context and methods

This study took place in the context of a partnership to support science teacher learning with a large urban district. Since adopting the NGSS, the district science office has emphasized two main instructional goals—enhancing 1) rigor and 2) educational equity in science instruction. Briefly in this context, rigor refers to learning opportunities that integrate the three dimensions outlined by the NGSS within cognitively demanding tasks and responsive and collaborative talk (e.g., Tekkumru-Kisa et al., 2019). Educational equity refers to learning opportunities that connect to and leverage diverse assets and ways of knowing (e.g., Warren et al., 2020) and work towards justice. The district is cultivating PLCs with foci connected to these goals, such as supporting student discourse or connecting to students' cultures. In 2020-21, sixteen high school science teachers were selected and supported in serving as TLs. PLCs led by these TLs met virtually six to eight times and engaged in inquiry cycles connected to teachers' aims within the PLCs' focus areas. Thus, PLCs and TLs have latitude to be flexible and responsive to teachers, *and* they are expected to advance rigor and equity in students' opportunities for science learning—making this a rich context for exploring focused responsiveness.

At the end of the 2020-21 school year, I conducted semi-structured interviews with six TLs who facilitated PLCs. Interviews invited TLs to share motivations for and experiences of leading PLCs, facilitation practices, and examples in which they felt they were able to be responsive to teachers or found it challenging to do so. I foregrounded responsiveness rather than focused responsiveness in my questioning as something more recognizable to TLs. All interviews lasted between 25 and 45 minutes and were audio recorded and transcribed.

I engaged in grounded, qualitative analysis (Charmaz, 2008) to explore characterizations of responsiveness from TLs' perspectives. I began by identifying examples and non-examples of responsiveness that TLs described. Examples involved a TL foregrounding or responding to teachers' contributions in the PLC, either in real-time or across sessions. Non-examples involved a TL explicitly depicting not being, feeling able, or feeling successful in being responsive. There were 19 examples and five non-examples of responsiveness across the interview corpus. For each, I drew on TLs' wording to characterize the nature of the responsiveness (or desired responsiveness, for non-examples), what the TL was responding to, whether the TL drew connections to PLC foci, and evident tensions. Finally, I looked across examples and non-examples to identify patterns in the data.

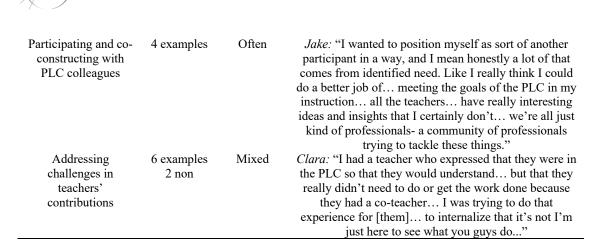
## Major findings: TLs' characterizations of responsiveness in PL facilitation

Each TL reported enacting multiple ways of being responsive to teachers in the PLCs. Table 1 summarizes several characterizations of responsiveness that crosscut examples and TLs. (All TLs' names are pseudonyms.)

#### Table 1

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Characterization:	Prevalence	Tied to	Indicative quote
Responsiveness as		PLC focus?	
Providing resources	5 examples	Often	Liza: "Like responding to people's [PLC focus] needs,
to meet teachers' aims or needs	1 non		in terms of ideas for what to do in certain scenarios we tried to be responsive to provide ideas for them, new things to try, and we tried to bring in based on where they were at what they said they needed"
Changing structures to meet teachers' aims or needs	4 examples 2 non	Not often	Veronica: " we decided to shift to more of a focus each session whoever the focus person was was really bringing their problem of practice that they want to work on and everyone could collaborate with them. So, that was one way we were trying to be responsive"

Teacher Leaders' Characterizations of Responsiveness in PL Facilitation



Depictions of responsiveness as *providing resources to meet teachers' aims or needs* shared several similarities. As in the example described by Liza, TLs depicted providing resources, ideas, or feedback typically specific to the PLC focus in response to what teachers brought up or requested. TLs pursued teachers' requests and direction-setting in this characterization, though TLs often took responsibility for providing resources themselves (rather than, for instance, drawing out resources from the group). Tensions arose for several TLs with respect to understanding and balancing teachers' requests and being responsive when they felt they did not have the requisite content or instructional knowledge; these were exacerbated by COVID and remote learning.

Another characterization of responsiveness described by TLs was *changing structures to meet teachers' aims or needs*. Structural forms of responsiveness included being flexible with protocols and timing or shifting activity structures (as described by Veronica). In another example, Clara intentionally integrated different kinds of structures in response to teachers' reported learning preferences. This characterization tended to be less connected to the PLC focus and more about process, and tensions arose when TLs felt unsure of teachers' aims or desires. One TL also reported a "self-imposed" tension of wanting to "get through the program."

TLs also depicted a responsive practice and framing of *participating and co-constructing with teachers in the PLC*. Here, TLs explicitly noted rich assets from teachers with respect to the PLC's inquiry, and they positioned themselves as co-learners in pursuing those together. Few tensions were noted here.

A final characterization was responsiveness as *addressing challenges in teachers' contributions*. As depicted in the name of this characterization, TLs did not focus on assets but rather what they perceived as challenges or issues to resolve. They tended to do so through providing targeted guidance or, as Clara described above, designing specific learning experiences for teachers. Responses were sometimes at odds with the PLC focus, depending on the nature of the challenge. TLs expressed tensions in how to address issues collegially, and again how to do so when they felt they did not have the knowledge or tools required.

#### **Conclusions and significance**

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This study articulates the initial contours of focused responsiveness as an approach to PL facilitation, contributing to needed understandings of how PL can be more responsive to teachers (Buxton et al., 2015; Cavendish et al., 2020). In conceptualizing focused responsiveness, multiple literature bases highlighted the importance of taking an asset- or resource-based view of teachers' contributions and attending to their participation in direction-setting, while seeking to bring teachers' contributions into conversation with goals that matter for supporting student learning and thriving. TLs' interviews added to and complicated this general conceptualization by illuminating numerous characterizations of responsiveness, in which TLs took certain kinds of actions (e.g., providing resources, changing structures) to respond to different aspects of teachers' contributions (e.g., teachers' aims, perceived challenges). The range of characterizations identified in this study add to the landscape of what focused responsiveness might look like in PL practice.

TLs' varied characterizations also demonstrated different facets of the literature-based conceptualization of focused responsiveness. For instance, in many cases, TLs demonstrated attention to and pursuit of resources like teachers' ideas and aims, but *addressing challenges in teachers' contributions* was less aligned with the assetbased facet of focused responsiveness. Additionally, characterizations ranged in the degree of focus on matters of science teaching and learning. Characterizations that centered the instruction-oriented substance of teachers' contributions often connected to the focus of the PLC, but examples of responsiveness that were more structural or process-oriented did not tend to emphasize the PLC focus directly. While such examples may ultimately be in



service of supporting the PLC's focused work, as some TLs noted, there were sometimes tensions in when and how to respond if not directly aligned with the PLC's focus.

Moving forward, future work could explore instances of focused responsiveness *in situ* in PL facilitation contexts and impacts on teachers' experiences in PL and on their learning and practice. Building on findings from this study, research could also examine ways of reinforcing asset-based perspectives with facilitators and the role(s) of facilitators' knowledge in focused responsiveness—including when "not knowing" may be an affordance, as potentially in the characterization of *participating and co-constructing with teachers*. Focused responsiveness in facilitation has the potential to contribute to the design and enactment of meaningful PL environments that center teachers as highly knowledgeable and experienced co-generators of their own learning.

#### References

- Allen, C. D., & Heredia, S. C. (2020). Reframing organizational contexts from barriers to levers for teacher learning in science education reform. *Journal of Science Teacher Education*, 32(2), 148-166.
- Borko, H., Koellner, K., & Jacobs, J. (2014). Examining novice teacher leaders' facilitation of mathematics professional development. *The Journal of Mathematical Behavior, 33*, 149-167.
- Buxton, C. A., Allexsaht-Snider, M., Kayumova, S., Aghasaleh, R., Choi, Y. J., & Cohen, A. (2015). Teacher agency and professional learning: Rethinking fidelity of implementation as multiplicities of enactment. *Journal of Research in Science Teaching*, 52(4), 489-502.
- Campbell, T., Schwarz, C., & Windschitl, M. (2016). What we call misconceptions may be necessary steppingstones toward making sense of the world. *The Science Teacher*, 83(3), 69.
- Cavendish, W., Barrenechea, I., Young, A. F., Díaz, E., & Avalos, M. (2020). Urban teachers' perspectives of strengths and needs: The promise of teacher responsive professional development. *The Urban Review*, 53, 318-333.
- Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), Handbook of emergent methods (pp. 155-172). The Guilford Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Gibbons, L. K., Lewis, R. M., Nieman, H., & Resnick, A. F. (2021). Conceptualizing the work of facilitating practice-embedded teacher learning. *Teaching and Teacher Education*, *101*, 103304.
- Hammer, D., Goldberg, F., & Fargason, S. (2012). Responsive teaching and the beginnings of energy in a third grade classroom. *Review of Science, Mathematics, and ICT Education, 6*(1), 51-72.
- Horn, I. S., & Kane, B. D. (2015). Opportunities for professional learning in mathematics teacher workgroup conversations: Relationships to instructional expertise. *Journal of the Learning Sciences*, 24(3), 373-418.
- Knowles, M. (1973). The adult learner: A neglected species. Gulf Publishing Company.
- Koellner, K., Jacobs, J., & Borko, H. (2011). Mathematics professional development: Critical features for developing leadership skills and building teachers' capacity. *Mathematics Teacher Education and Development*, 13(1), 115-136.
- National Academies of Sciences, Engineering, and Medicine (NASEM). (2021). *Call to action for science education: Building opportunity for the future.* The National Academies Press.
- National Research Council (NRC). (2012). A framework for K-12 science education: Practices, crosscutting concepts, and core ideas. The National Academies Press.
- Remillard, J. T., & Geist, P. K. (2002). Supporting teachers' professional learning by navigating openings in the curriculum. *Journal of Mathematics Teacher Education*, 5(1), 7-34.
- Tekkumru-Kisa, M., Schunn, C., Stein, M. K., & Reynolds, B. (2019). Change in thinking demands for students across the phases of a science task: An exploratory study. *Research in Science Education*, 49(3), 859-883.
- Warren, B., Vossoughi, S., Rosebery, A. S., Bang, M., & Taylor, E. V. (2020). Multiple ways of knowing: Reimagining disciplinary learning. In N. S. Nasir, C. D. Lee, R. Pea, & M. McKinney de Royston (Eds.), *Handbook of the cultural foundations of learning* (pp. 277-294). Routledge.
- Zhang, M., Lundeberg, M., & Eberhardt, J. (2011). Strategic facilitation of problem-based discussion for teacher professional development. *Journal of the Learning Sciences*, 20(3), 342-394.

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