

## POSITION AND SENSEMAKING IN REHEARSAL DEBRIEF DISCUSSIONS

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*Following rehearsals of instructional practices, teacher educators often facilitate debrief discussions for participants to reflect on and make sense of their experience. This study explores the ways in which rehearsing and non-rehearsing teachers, who act as teachers and students respectively, make sense of that experience collectively and how their positions as teachers and students are reflected in their talk. Data from eight rehearsal debriefs conducted with in-service secondary mathematics teachers during practice-based professional development are examined.*

Keywords: Teacher Education – Inservice / Professional Development, Learning Theory

Recent literature in mathematics teacher preparation focuses on how coached rehearsals can be used to support the learning of complex instructional practices (Ghousseini, 2017; Lampert et al., 2013). In these approximations of practice, one person typically takes on the role of teacher, while the rest of the group takes on the role of student. The rehearsal is facilitated by a teacher educator (TE) who takes on the role of coach (Kazemi et al., 2016). As these approximations of practice have gained prominence in both pre-service and in-service professional development, research has focused on the learning of participants who take on the role of teacher (Ghousseini, 2017; Lampert et al., 2013) and the structures used during the rehearsal to support the enactment of teaching practices (Kazemi et al., 2016). However, we know less about the ways in which debrief discussions following the rehearsal, in which both the rehearsing teachers (RTs) and non-rehearsing teachers (NRTs) participate, support the sensemaking and learning of both. In this paper, we contrast the experiences of rehearsing and non-rehearsing secondary mathematics teachers following rehearsals during a summer professional development institute. In particular, we describe how both RTs and NRTs make sense of their experiences during the reflective debrief discussions that follow each rehearsal, and ask how their position as student or teacher in the rehearsal is reflected in their talk.

### Prior Literature

Often, after a rehearsal, all participants (RTs, NRTs, and TEs) engage in a debrief discussion. This kind of reflective post-rehearsal discussion, facilitated by the TE, represents an opportunity for public sensemaking, or “collaborat[ing] on sensemaking as a shared group goal” (Ruef, 2016). Through public sensemaking, RTs, NRTs, and TEs all have a chance to learn from one another and reflect on the rehearsal experience. Public sensemaking is also valuable from an analytic perspective, because it gives insight into some (but not all) of participants’ sensemaking about a given experience. In this kind of reflective debrief structure, we wonder about what sensemaking RTs and NRTs share publicly and how they might collaborate to make sense.

What teachers can and do say during debrief discussions is influenced by the role they played during the rehearsal. While all participants are intended to learn as teachers, only RTs participate in the rehearsal as teachers; NRTs spend rehearsals acting as students. In other words, NRTs are asked to change their position, moving from student in the rehearsal to teacher during the debrief. How a person positions themselves or is positioned in an interaction can influence the obligations they feel (Aaron & Herbst, 2012; Herbst & Chazan, 2012). In particular, being positioned as a teacher or as a student can change how people react to the same contexts (Baldinger & Lai, 2019). Position is thus an important consideration that might help explain how public sensemaking is constructed in rehearsal debriefs.

We explore public sensemaking analytically through the lens of professional noticing. When engaging in the work of noticing, teachers *attend* to *interpret* specific details, imbuing them with meaning (Mason, 2002; Sherin et al., 2008). In the context of a debrief discussion, teachers might attend to and interpret an event that occurred during the rehearsal, elevating that event for public consideration. Because teachers' goals in participating in coached rehearsals are ultimately to inform and shape their teaching practice, teachers might also describe implications or connections that extend their thinking beyond the specific context of the rehearsal itself (Baldinger & Munson, 2020). This framework of noticing and implicating provides a lens through which we can describe the public contributions made during debrief discussions. Given this, we ask the following research questions: (1) How do RTs and NRTs use debrief discussions to publicly make sense of their experiences during rehearsals? (2) How is position reflected in RTs and NRTs sensemaking of the rehearsal during the debrief discussion?

## Methods

### Setting and Participants

This study took place in the context of professional development program for early-career (2nd-7th year) secondary mathematics teachers serving lower-income schools. This two-year fellowship included two-week summer institutes and ongoing online coaching during both school years. Our research considers the second summer institute, which focused on facilitating collaborative group work. Participants included 22 high school mathematics teachers from comprehensive public, magnet, and charter schools across the US.

### Design

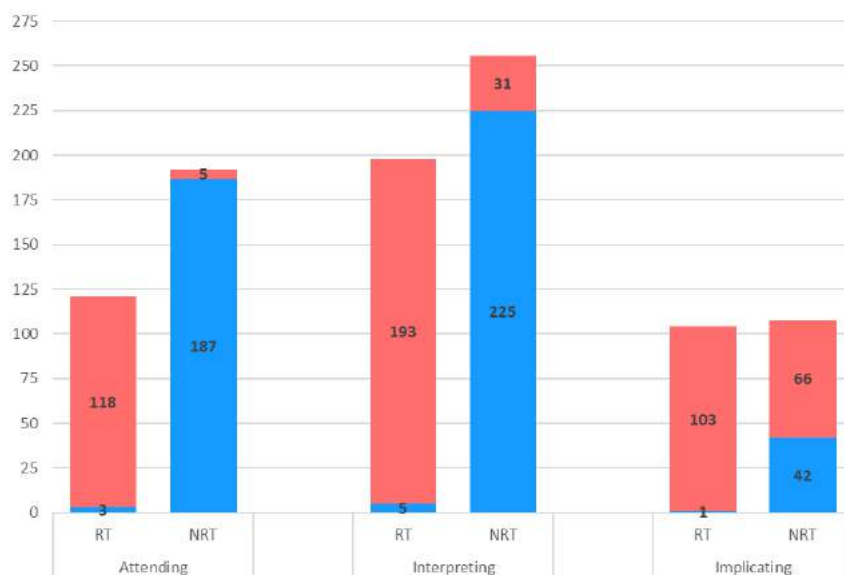
The summer institute culminated in a full day during which all participants had the opportunity to rehearse leading collaborative group work. Rehearsing teachers focused on the practice of conferring (Munson, 2018) to support productive engagement in cognitively demand task and equitable participation within collaborative groups. Teachers were randomly assigned to one of two rehearsal rooms. Four rehearsals were conducted in each room (eight total rehearsals), so that each teacher had the opportunity to rehearse the focal practice once and participated as an NRT three times. Additional math teachers were recruited to participate as NRTs to increase the class size in each room. After each rehearsal, the TE prompted the group to discuss the experience, beginning by asking RTs to share “some of the things in your head right now” and then pose any questions they had for the NRTs. Debriefs then pivoted to NRTs addressing any RT reflection questions and segued into general reflection. All debriefs ended with “final thoughts” from the RTs.

### Data Sources and Analysis

This study draws on audio and video recordings of the debrief discussions following each of the eight rehearsals. Debrief discussions ranged in length from 14 to 23 minutes. Each was professionally transcribed for qualitative analysis. Each talk turn ( $n = 961$ ) was coded by participant (RT, NRT, TE). All RT and NRT talk turns were then segmented and coded based on the type of sensemaking represented in the speech, (i.e., attending, interpreting, implicating), where *attending* and *interpreting* were defined by prior research (Sherin et al., 2011) and *implicating* was defined as making connections beyond the rehearsal (e.g., to the speaker's own classroom) or considering alternative pathways for the rehearsal. Any speech that did not fit these codes was not coded. Each talk turn segment was then coded for the position the speaker took (i.e., teacher, student). If an utterance took more than one position, it was further segmented such that each utterance could be given a single position and sensemaking code pair ( $n = 983$ ). Code matrices were developed within and across the eight rehearsals to explore patterns of participation.

## Findings

While the TEs structured the debrief by inviting RTs and NRTs to reflect during different parts of the discussion, the ways they participated in sensemaking were strikingly similar. Of the coded talk turn segments, 29% of RT talk and 34% of NRT talk attended to observable details about the rehearsal, while 47% of RT talk and 46% of NRT talk interpreted the details of the rehearsal, indicating the meaning the speaker made of events (see Figure 1). Together, these acts of public noticing made up approximately the same proportion of speech, 75% of RT and 80% of NRT coded talk turn segments. The vast majority of all contributions in the rehearsal debrief focused on noticing the rehearsal, making specific details of events public and offering ways of understanding the meaning of those events.



**Figure 1: Attending, interpreting, and implicating talk turn segments for RTs and NRTs, by teacher (red) and student (blue) position of the speaker.**

For the balance of coded talk turn segments, RTs (25%) and NRTs (20%) made implications, moving beyond the rehearsal as it occurred to consider the meaning the events might have for teaching or alternative scenarios for the rehearsal. All the data generated through noticing the rehearsal fueled reasoning about teaching and learning when implicating. These overall patterns of talk were not substantively different across the two rooms or any of the eight rehearsals.

While RTs and NRTs noticed and implicated in similar proportions, there were pronounced differences in the positions each assumed when speaking (see Figure 1). RTs overwhelmingly (98%) maintained their position as teacher when speaking, regardless of whether they were attending to or interpreting the rehearsal, or drawing implications beyond it. There was a coherence in their role throughout that is reflected in these data; as teacher-learners they were asked to act as teachers and learn from those acts as teachers. NRTs were asked to perform a more complex position move; as teacher-learners they were asked to act as students and learn from their experience as teachers. In contrast to RTs, NRTs overwhelmingly noticed the rehearsal from the position of student (92%). But when implicating beyond the rehearsal, NRTs took on a more complex stance, at times maintaining their rehearsal position of student (39%), but more often flipping to their learner position of teacher (61%).

Notably, while RTs were largely fixed in their position as teachers, they actively sought the perspectives the NRTs gained from being students, data to which they would otherwise not have

access. These rhetorical moves from the RTs were striking in how they shaped the ongoing discussion in the debrief and contributed to the “expected” patterns described above. RTs asked pointed questions of their NRT colleagues to unearth how the teaching moves they used were experienced by the students in the rehearsal. They prompted NRTs with statements such as “I kinda want to know how it [the rehearsal] was from your [NRT] lens,” “I’m curious to get feedback on... the groupworthiness of the task,” and “Was there ever a moment when you [NRTs] wished we [RTs] had jumped in and we didn’t?” to elicit the student position experience.

Conversely, when NRTs offered their own noticings, there is evidence in the data that these could fuel implications from RTs. For instance, after a string of 12 talk turns in when three NRTs attended to and interpreted a challenge they faced setting up graphical representations during the task, one RT made the following implication:

What I’m hearing is, there’s the potential for this to hang up a group? ... So maybe if I had caught onto the idea that you were really hung up here, if I had observed that... I might have like, nudged you forward.

In this excerpt, the RT took up the NRTs’ noticings to consider what they could have done differently, particularly if the RT had noticed, in the moment, what the NRTs did, that their struggle was impeding their mathematical progress. When NRTs offered their noticings as students, they were simultaneously supporting their own sensemaking of the experience and providing insight to RTs who wanted to understand how students experienced their teaching. These results foreground the interactive nature of sensemaking among RTs and NRTs.

### Significance

The similarities of the proportions of talk across participants’ roles, across both rehearsal rooms, and all eight rehearsals points toward the possibility that public sensemaking grounded in a shared experience like a rehearsal may more generally focus on noticing with a smaller portion of implicating beyond the experience. In previous work (Baldinger & Munson, 2020), we have suggested that debrief discussions may be venues for NRTs to develop adaptive expertise (Hatano & Inagaki, 1986) in the wake of rehearsal by promoting data-driven forward reasoning. This new analysis suggests that rehearsal debrief discussions may serve a similar function for RTs; future work could investigate whether the nature of what is noticed by RTs and NRTs and the types of implications they draw supports such a claim.

Position played a critical role in the ways that RTs and NRTs publicly made sense of their experience together. Prior research is premised on the safe environment that rehearsing among colleagues can provide to teacher-learners (Lampert et al., 2013), but the current research indicates that the roles NRTs play can provide an additional advantage. The rehearsal experience and the debrief discussion that followed offered participants a window into the experiences of students, supporting NRTs in learning from a rehearsal in which they did not teach and RTs in learning about the ways in which their pedagogical choices impacted students. NRTs were then not just safe colleagues with whom to approximate practice, but safe students from whom to elicit feedback on instruction. Future research could investigate how the structure of the debrief discussion can support RTs in gaining access to the student experience data in ways that can inform their learning from the rehearsal experience.

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