

Understanding Prospective Teachers' Verbal Intervention through Teachers' Group Work Monitoring Routines

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Teachers' intervention in small groups is a research area that needs more research attention. Ehrenfeld and Horn (2020) identified *teachers' group work monitoring routines* that consist of four recurrent talk moves: 1) Initiation, 2) Entry, 3) Focus, and 4) Exit. To better understand prospective teachers' (PTs) intervention in small groups in mathematics classrooms, I investigated how PTs' intervention actions and purposes are related to the monitoring routines, particularly, in terms of Focus moves. I analyzed 26 PTs' responses to four written scenarios, each of which depicts interactions among students in a small group. I identified 1) types of PTs' math talk, 2) types of PTs' non-math talk, 3) types of intervention purposes, and 4) patterns of intervention actions and purposes by scenario. This study contributes to understanding PTs' intervention actions and purposes in mathematics instruction.

Keywords: intervention in small groups, teachers' group work monitoring routines, prospective teachers, mathematics instruction.

MESC Classification: B59

MSC2010 Classification: 97C70

I. INTRODUCTION

Prior research regarding group work in classrooms has addressed multiple topics, including group formation, group tasks, status issues regarding power dynamics in groups, and teacher talk in intervention in small groups (Webb, 2009). One of the topics that need more research attention is teachers' intervention in small groups. According to Webb (2009, 2013), this topic is crucial but has not received researchers' sufficient attention. This importance has been shared by several researchers (e.g., Chiu, 2004; Cohen & Lotan, 2014; Dekker & Elshout-Mohr, 2004; Gillies & Boyle, 2006; Hofman & Mercer, 2015), who explored ways teachers intervene in small groups in their classrooms. Knowing ways of practicing teachers' intervention in small groups may inform teacher educators of what

prospective teachers (PTs) should know and be able to do with respect to intervening in small groups. The ways to intervene were diverse depending on research purpose. Identifying stable procedures or routines may serve as a framework for teacher educators to help PTs think about different ways to intervene in small groups.

Recently, Ehrenfeld and Horn (2020) drew attention to the importance of this topic as they identified *teachers' group work monitoring routines*- "a consequential yet understudied aspect of when teachers oversee students' working together" in small groups in mathematics classrooms (p. 251). The monitoring routines elaborate on how experienced secondary mathematics teachers intervene in small groups. Research on ways teachers intervene in small groups is at an inchoate stage in relation to the monitoring routines. It deserves research attention given teachers' intervention may differ from context to context. However, research on intervention has paid great attention to practicing teachers. In this study, I use the monitoring routines as a framework to make sense of PTs' intervention in small groups.

I focus especially on PTs' intervention in small groups in relation to the monitoring routines. As Feiman-Nemser (2001) emphasized the importance of supporting PTs in learning to teach teaching expertise in teacher preparation programs, learning to implement small groups earlier may help PTs prepare to support students to engage in cooperative learning. In practice, teacher educators in mathematics methods courses have supported prospective teachers (PTs) to implement small groups as an instructional organization (e.g., Featherstone, 2011). This current paper can contribute to the teachers educators' support of PTs in learning to intervene in small groups.

This paper is exploratory to understand PTs' verbal intervention in small groups in mathematics instruction. In particular, this paper approaches the exploration with two foci in terms of *teachers' group work monitoring routines*: (1) identifying the types of PTs' verbal intervention and (2) identifying purposes related to PTs' verbal intervention. In this paper, I focus on the types and intentions because exploring both the types and purposes may lead the field to understand PTs' verbal intervention in small groups in *teachers' group work monitoring routines*. Building on that, I pose one research question that guides this research: How do PTs intend to intervene in small groups and for what purposes?

II. TEACHERS' GROUP WORK MONITORING ROUTINES

Cazden (2001) illustrates two dimensions of teaching, such as 1) *sequential* dimension and 2) *selectional* dimension, which explains classroom interaction between teachers and students. First, the *sequential* dimension is the relatively stable structure and routines that one expects to occur. The *sequential* dimension offers what teachers normally do in their teaching, which may constrain the individual teachers' actions. Second, the *selectional* dimension

describes how individuals interact with the larger structures and routines. The *selectional* dimension shed lights on teachers' agency within the structures and routines.

Utilizing the two dimensions, Ehrenfeld and Horn's (2020) identified *teachers' group work monitoring routines*. They analyzed the data from eight secondary mathematics teachers, who participated in professional development related to cooperative learning, to understand experienced mathematics teachers' judgment particularly around groupwork monitoring. Ehrenfeld and Horn (2020) found the monitoring routines that consist of four recurrent moves: Initiation-Entry-Focus-Exit, which are considered to be the *sequential* dimension in the monitoring routine. In more detail, in Initiation moves, teachers initiate conversation as they move around the room. These moves could be initiated either by teachers or students. In Entry moves, teachers first say to the group as they enter the conversation (e.g., "What did you get for number 4?"), In Focus moves, teachers focus either on math talk (e.g., "Why that makes sense to use one over the other?") or non-math talk (e.g., "At least 5 points in your table is good"). In Exit moves, the teacher exits the interaction with students. the teachers leave the conversation opened-ended or close-ended.

These researchers also found in relation to teachers' agency in the *selectional* dimension in the monitoring routine that ways for the eight teachers to engage in students in small groups differed from teacher to teacher. In particular, teachers' interventions were more various in Entry and Focus moves than in the Initiation and Exit moves. For example, in relation to Entry moves, teachers listened or asked for a summary, asked students about results or progress, answered students' questions, or redirected students to "a new topic of conversation (mathematical or not)" (p. 260). For Focus moves, teachers focused on math and non-math talk. For math talk, teachers invite students to probe their sensemaking ("how and why questions") and to report results ("what questions") (p. 261). They also hinted at a next step to scaffold students' mathematical thinking. For non-math talk, teachers talked about "norms of participation," discussed "task goals," or "technical issues" that are "not directly about supporting students on the task" (p. 261). They also found that in Focus moves, teachers engaged in both math-talk and non-math talk in their interactions with students.

Ehrenfeld and Horn's (2020) *teachers' group work monitoring routines* allows me to make sense of how prospective teachers might intervene as they monitor group work in mathematics instruction. In relation to the *sequential* dimension, I attend only to Focus moves because the data allow me to see *hows* of PTs' intervention the most and because these moves are the ones where to observe diverse ways PTs use both math and non-math talk. It is also important to note that the *selectional* dimension is involved in teachers' judgement, but why they intervene in small groups the way they do is not explicit in Ehrenfeld and Horn's (2020) study. As such, I also explore in this current study why PTs intervene in small groups because the data were designed to explore why prospective teachers intended to intervene in small groups.

III. METHODS

1. PARTICIPANTS AND SETTING

Twenty-six elementary PTs participated in the study were from a large teacher education program in a Midwestern university in the U.S. IRB approval was obtained for this study and all participants provided consent. All PTs were in the student teaching stage of their teacher preparation program and were concurrently enrolled in a mathematics methods course during the Fall 2016 semester. After they had completed ten consecutive hours of teaching in mathematics in October, the PTs took a survey (described below) between late November and early December, 2016. I chose this particular time to administer the survey hoping that the PTs would have more sense of intervention in small groups from their recent teaching experiences and observations of their mentor teachers' teaching.

The methods course in which the participants were enrolled placed emphasis on student-centered teaching. The course encouraged PTs to adopt cooperative small groups as part of their teaching strategy in mathematics instruction. The course, for example, used the ideas from the five teaching practices related to facilitating mathematics discussions in small group contexts: anticipating, monitoring, selecting, sequencing, and connecting (Smith & Stein, 2011). Additionally, the PTs' placement classrooms varied widely in terms of their use of small groups.

2. DATA COLLECTION

Initially, I collected the data to pursue this current study using an online open-ended survey that consists of four scenarios. In another paper, I used the data (Pak, 2019). The prior work is different from this current study in that it investigated how PTs scaffolded students in small groups, building on the contingent teaching perspective (Van de Pol, Volman, & Beishuizen, 2011). In this current paper, I pay attention to ways PTs intervene in small groups. The survey consisted of four scenarios. Each scenario was designed to relate to how PTs would intervene in small groups and for what purposes. Each item included a hypothetical scenario and three prompts. Specifically, I modified excerpts from Chiu (2004), Chapin, O'Connor, and Anderson (2009), and Dekker and Elshout-Mohr (2004) into Scenarios 1, 2, and 3, respectively. I also created an excerpt in Scenario 4 where a low-status student (Minjun) tried to contribute to a small group discussion (See Appendix A). In Scenarios 1 and 2, the conversation is initiated by students. In Scenarios 3 and 4, the conversation is initiated by teachers. I was open to the possibility that there would be a range of intervention actions and purposes on the part of the PTs.

Following each scenario, the first prompt asked PTs to write a brief description of their understanding of what was going on in the small group. The second prompt asked PTs to list

the comments/questions they would use (intervention actions) after reading each scenario. The third prompt asked PTs why they would intervene in that particular way (intervention purposes).

3. DATA ANALYSIS

To examine the survey response data, I took several analysis steps. First, I identified the numbers of PTs who made responses to the second (intervention actions) and third prompts (intervention purposes) in the first, second, third, and fourth scenarios. The numbers were 21, 20, 18, and 18 PTs respectively (see Table 1).

Table 1. Numbers of the PTs who responded to each scenario

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Total
Numbers of the PTs who made responses to both fields	23	18	16	18	75
Numbers of comments/questions in second prompt (intervention actions)	59	42	36	33	170
Numbers of reasons in third prompt (intervention purposes)	32	26	22	21	101

Second, I coded 170 comments or questions within each of the 77 responses to the second prompt (intervention actions). I began with codes from Focus moves in *teachers' group work monitoring routines* described in the framework section and categorized the codes into either math talk or non-math talk (Ehrenfeld & Horn, 2020). I focused on Focus moves in this analysis because the response data allowed me to make sense of intervention action related to Entry moves the most. Third, I coded 101 purposes in each of the 77 responses to the third prompt (intervention purposes). I identified emerging codes, such as evaluating students' mathematical ideas or mediating students' mathematical thinking. Fourth, I looked for patterns of intervention actions and purposes in each scenario. I identified the patterns by scenario to understand how PTs responded to two different situations: Scenarios 1 and 2 (student-initiated intervention) and Scenarios 3 and 4 (teacher-initiated intervention).

To determine inter-rater reliability, I worked with a mathematics educator whose research focus was on mathematics teacher education. We coded 22 percent of the 77 responses, including responses from each of the four scenarios, separately and later compared our coding. The agreement rate was 87 percent for intervention actions and 81 percent for intervention purposes. After discussing the reasoning behind our coding, the disagreements were resolved. Based on the refined codes, I analyzed the whole responses.

IV. FINDINGS

In this section, I present four findings related to (1) math talk in PTs' Focus moves and (2) non-math talk in PTs' Focus moves, (3) intervention purposes, and (4) patterns of intervention actions and purposes by scenario. I present patterns I identified across 26 PTs' responses. I decided to focus on the PTs' collective patterns, rather than individual PTs, because this study is to explore a range of PTs' verbal intervention action and purposes..

1. PTS' MATH TALK IN THE FOCUS MOVES

In relation to math talk, PTs made comments and questions that would (1) ask students to consider alternatives, (2) ask students to consider other students' approaches to problems, (3) ask students to explain their work, (4) probe students' conceptual understanding, or (5) provide product-help (Table 2).

Table 2. Math talk (Sc and PT ID stand for Scenario and PT ID number, respectively)

Intervention actions	Descriptions	Examples
Asking to consider alternatives.	PTs posed questions that would ask students to look for alternative ways to approach problems to solve.	"What other ways could we approach this?" (Sc 3, ID 1)
Asking students to consider other students' approaches to problems	PTs asked students to think about other students' approaches.	"Robin what do you think about what Ebbie and Kathy did with the shape?" (Sc 3, ID 9).
Asking students to explain their work.	PTs asked students to explain their mathematical work.	"Dan could you explain your thinking?" (Sc 1, ID 21)
Probing conceptual understanding.	PTs asked questions about what students already knew about certain mathematical concepts.	"Ebbie and Kathy, do you think you know what a line of symmetry is?" (Sc 3, ID 16)
Asking students to provide reasons.	PTs posed questions that asked students why they thought in certain ways, typically after confirming what students said in the scenarios.	"Why would you put a 13 in the square? Where did you get thirteen?" (Sc 1, ID 4).
Providing product-help	PTs gave students essential information helpful to solve problems.	"5 is really 5.0, which means that when you are adding that up, now what do you get?" (Sc 2, ID 1).

2. PTS' NON-MATH TALK IN THE FOCUS MOVES

In relation to non-math talk, PTs made comments and questions that would (1) remind students of assigned roles, (2) asking students to use each other as learning sources, (3) encourage students to involve actively in group work, (4) review students group work norms or process, (5) provide a model of how students would start interacting as a group, (6) check group agreement on questions asked by some students, or (7) acknowledge a student's potential contribution to group discussion (Table 3).

Table 3. Non-math talk (Sc and PT ID stand for Scenario and PT ID number, respectively)

Intervention actions	Descriptions	Examples
Reminding students of assigned roles	PTs made comments that asked students to remember their roles	"Remember that it is the entire groups job to work together to solve an answer." (Sc 4, PT ID2)
Asking students to use each other as learning sources	PTs made comments that told students to view each other as learning sources.	"When/If they look at me to confirm the answer respond with a smile, tell them to use each other as valuable resources and go observe another group." (Sc 1, PT ID8)
Encouraging students to involve actively in group work	PTs made comments that engaged students in small group work.	"I see that not everyone is being involved in this group..." (Sc 3, PT ID2)
Reviewing students' group work norms or process	PTs made comments that asked students to reflect on group norms.	"I would review the expectations of being respectful and working as a group." (Sc 3, PT ID4)
Providing a model of how students would start interacting as a group	PTs made comments or asked questions that modeled how to begin to interact with each other.	"Ebbie here is a way you can respectfully ask Robin to explain more: Robin, can you explain why you chose to do that?" (Sc 3, PT ID14)
Checking group agreement on questions asked by some students.	PTs made comments or asked questions to insure everyone in the small group agreed on the questions some students asked.	"Have you talked to your group about what their opinions are before you called me over? Shouldn't you ask Kay and Ada what they think?" (Sc 1, PT ID 8)
Assigning competence to low-status students	PTs acknowledging a potential contribution of a specific student's ideas to group discussion	"...but I believe that Minjun had an answer. I couldn't quite hear. Where do you think you should start with this problem, Minjun?" (Sc 4, PT ID 11)

3. PTS' INTERVENTION PURPOSES

I identified four intervention purposes: *mediating students' thinking*, *motivating student participation*, *treating status issues*, and *evaluating students' ideas*. I describe each intervention purpose below.

1) *Mediating students' thinking*

PTs recorded purposes related to promoting students' conceptual understanding by intervening to scaffold students' thinking process. In Scenario 2, a PT stated, "I think an explanation is important here because it seems like this group of students is really confused on how to add these two numbers and the way in which they should line them up to add them" (PT ID 13). The PT's response is focused on supporting students' mathematical thinking.

2) *Motivating student participation*

PTs attempted to make group interaction go smoothly. They considered small groups as a learning environment in which students feel safe and comfortable in expressing their ideas. For instance, a PT responded to Scenario 3, "I think these students are trying to discuss what they are working on but lack the communication skills group work requires. I think by giving them structure to help them word their answers it will have everyone explain more and develop a more accepting group environment" (PT ID 14). The PT thought that making students in small groups feel comfortable can contribute to group interaction going smoothly. This code reveals the purpose of promoting group interaction.

3) *Treating status issues*

PTs had a purpose of raising status of students, assigning competence to students who PTs thought were low status in the scenario. For instance, in Scenario 4, "First I would want to know what Minjun had said, because if it was important enough for him to mutter, it is important enough to be heard (hopefully it is not inappropriate or negative)" (PT ID 15). In this code, the PTs tried to support low status students to be heard by their peers. This purpose differs from *motivating student participation* in that PTs focus on the contribution of a low-status student's idea to the group discussion.

4) *Evaluating students' ideas*

PTs agreed or disagreed with how students had made sense of mathematical concepts in given math problems. For example, in Scenario 1, a PT responded, "I would ask these questions to try and find out what the students know and what they don't know" (PT ID 10).

The PT's response is intended to diagnose students' mathematical understanding.

4. INTERVENTION ACTIONS AND PURPOSES BY SCENARIO

I looked for patterns of PTs' intervention actions by scenario in terms of math and non-math talk. I also looked for patterns of intervention purposes (e.g., *mediating students' thinking*; *motivating student participation*; *treating status issues*; and *evaluating students' ideas*) by scenario in terms of what purposes they had in each scenario.

1) PTs' intervention actions in scenario

I found that there were certain patterns in relation to how intervention actions appeared in each scenario. As shown in Figure 1, PTs engaged in Focus moves in different ways in different scenarios. As a reminder, intervention in Scenarios 1 and 2 are initiated by students. For example, in Scenario 1, a student initiates the conversation, "Teacher! I have a question! [You walk over.] I think I need to put 13 in the square [pointing to the square]." When students initiated the intervention, 55 and 38 PTs intended to engage dominantly in math talk. On the other hand, PTs engaged in both math talk and non-math talk in Scenarios 3 and 4 in which they are expected to initiate the intervention.

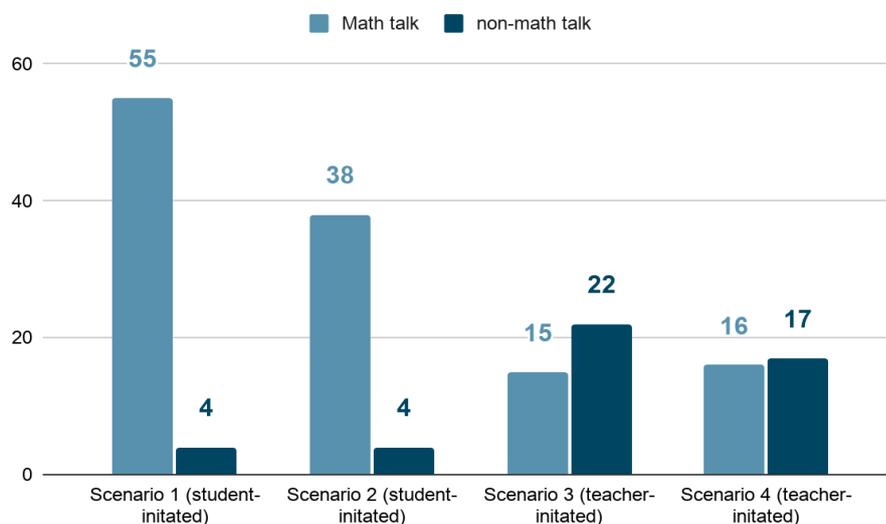


Figure 1. Patterns of PTs' intervention actions in each scenario.

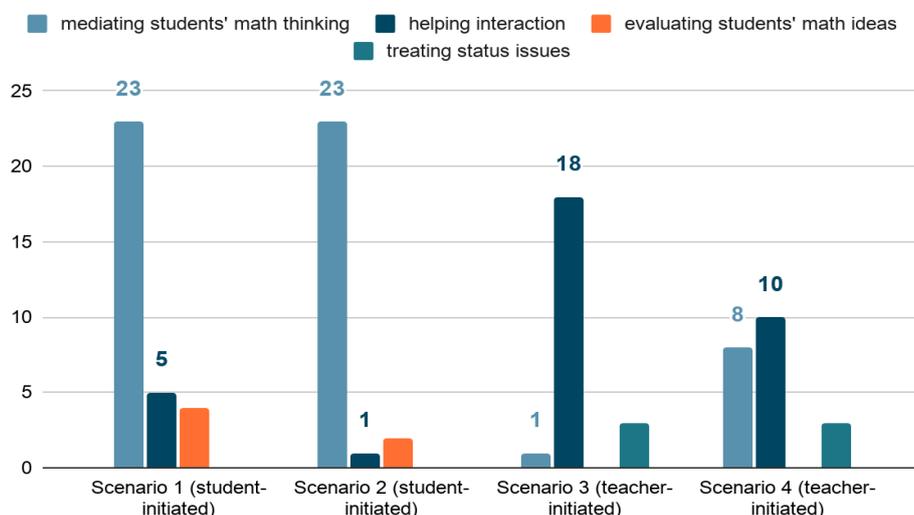


Figure 2. Patterns of PTs' intervention purposes in each scenario

2) PTs' intervention purposes in each scenario

I found that there were certain patterns in relation to how intervention purposes appeared in each scenario. As shown in Figure 2, in Scenarios 1 and 2, which PTs' intervention is student-initiated, PTs had a dominant purpose of mediating students' thinking. For example, a PT made a response in Scenario 1, "I want the students to think through the process they are working with. I want them to go back and analyze why they have 13 and what that 13 means in this problem" (ID 4). In Scenario 3, PTs intervened in small groups for a dominant purpose of helping interaction. For example, in Scenario 3, another PT intervened in the small group to treat a specific student' status issues, "This will help Robin's voice to be heard again and for her to get back to her confidence" (ID 5). In Scenario 4, PTs intervened in small groups to help interaction go smoothly and treat status issues.

V. DISCUSSIONS AND IMPLICATIONS

In this section, I discuss three salient discussion points and implications in relation to findings. First, PTs may have a range of intervention actions in terms of math talk and non-math talk. In this study, I found that the 26 PTs intended to use five types of math talk (e.g., probing students' conceptual understanding) and seven types of non-math talk (e.g., reviewing students' group work norms or providing a model of how students would start

interacting as a group). In Ehrenfeld and Horn's (2020) study, the experienced teachers engage in three types of math talk related to how and why questions, what questions, or hints, and three types of non-math talk related to norms of participation, task goals, or technical issues. The finding related to the range of the PTs' intervention action in Entry moves suggests that PTs could engage in Entry moves using math talk and non-math talk in diverse ways. Given this finding is based only on PTs' Entry moves in *teachers' group work monitoring routines*, further research could explore ways how PTs monitor and intervene in small groups in the monitoring routines in actual classrooms.

Second, PTs may have a specific purpose(s) in mind as they intervene in small groups in particular ways. As mentioned earlier, Ehrenfeld and Horn's (2020) study focused on teachers' group work monitoring routines in terms of Cazdan's (2001) two dimensions- the *sequential* and *selectional* dimension. The *selectional* dimension, which is related to teachers' agentic decision-making, could be beneficial from exploring intervention purposes. This current study shows that PTs had a specific purpose(s) in relation to their intervention in small groups, which is an important contribution of this current study to the field. In particular, given PTs need to develop more expertise related to decision-making in teacher preparation programs (Feiman-Nemser, 2001), investigating PTs' intervention purposes may support teacher educators to understand PTs' decision-making process in relation to intervening in small groups in the monitoring routines.

Third, PTs may approach students' group work differently from context to context. The analysis related to intervention actions and purposes in each scenario shows the big discrepancy in terms of the PTs' responses to students-initiated intervention context (Scenarios 1 and 2) different from teacher-initiated intervention context (Scenarios 3 and 4). For example, in Scenarios 1 and 2, dominant numbers of the PTs intended to engage in math talk and have the purpose of mediating students' mathematical thinking. On the other hand, In Scenario 4, the PTs intended to engage both in math talk and non-math talk for the multiple purpose (e.g., helping students' interaction go smoothly and treating students' status issues). I conjecture that these different intended intervention actions and purposes depend on what kinds of students' needs PTs think are significant at the moment of intervening in small groups. When students explicitly ask teachers for help related to mathematics, PTs are likely to respond to students with math talk. On the other hand, when PTs initiate interaction with students, they are more likely to address different aspects of group work that they think are important to address (e.g., reminding students of group norms and probing their mathematical understanding). As such, this study suggests that ways PTs intervene in small groups are contingent on contexts.

This study has three limitations. First, the analysis depended on responses from particular PTs in a single teacher preparation program at one particular point in time after they had some field experiences. Thus, this study cannot tell whether the responses would be different earlier

or later in the program. Second, I used written scenarios as a data collection tool. I did not observe PTs' teaching practices, so I cannot tell how closely their intended interventions aligned with their interventions in practice. Third, I used the small number of scenarios to investigate the *selectional* dimension of teachers' group work monitoring routines. The four scenarios might not be enough to understand the full picture of the PTs' intervention purposes in Focus moves in the monitoring routines. Despite these limitations, the findings contribute to understanding of PTs' group work monitoring routines in the initial stage of a teacher learning trajectory regarding intervention in small groups.

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Appendix A.

1) Scenario 1

(1) You are teaching second grade students about the meaning of the equal sign. You asked students in small groups to work on a math problem: $8 + 5 = \square + 7$. When you are circulating around the classroom, you hear what students in a small group are saying.

Dan: What are we supposed to do?

Ada: [Shrugs her shoulders] add 8 to 5 [counting on with her fingers]. So we get 13.
It goes into the square.

Dan: But how about 7?

Ada: I don't know...

Kay: I think we...need to add 7 to the square... [mumbles something quietly but unclear]

Dan: Teacher! I have a question! [You walk over.] I think I need to put 13 in the square [pointing to the square]

2) Scenario 2

(2) You are a fifth grade teacher. Your students are working together in small groups on decimal addition problems. One of the small groups is working on a decimal problem: "5 + 0.4". You are hearing their talk as follows as you monitor.

Anna: I don't think it matters which way you do it.

Andy: Let's use one of the word problems to see if it makes a difference. [she reads] "Andy put 5 gallons of gasoline into the gas can. He kept filling and adding another four-tenths of a gallon. How much gas is now in the can?"

Jesse: I think maybe Hank is right. I thought you just lined up the numbers but if you add five and point four like this [Kei writes the problem down], the answer is wrong; it's too small. Like five gallons of gas plus four-tenth more is more than five.

$$\begin{array}{r} 5 \\ +0.4 \\ \hline \end{array}$$

Hank: I think it is because we have to add the same things- like we add hundreds and hundreds with big numbers so now we have to add tenths and tenths or ones and ones.

Anna: But where are the tenth in five? [Raises her hand for your help and talks to you] We need your help.

3) Scenario 3

(3) You are teaching fourth grade students about lines of symmetry for two-dimensional figures. You are asking them to work together on a task: Identify line-symmetric figures and draw lines of symmetry. On a one-page handout, there are six figures, four of which are line-symmetric figures. At the introduction of the lesson, you clarified to the whole class your role and expressed your expectations. You will not provide any help with the content. Your expectation is that students need to work collaboratively and discuss, showing each other their work, giving each other explanations, and critiquing each other. As you monitor, you listen to the interactions between students in a small group. You decide to keep listening to their talk.

Kathy: Do you think that your way works out?
 Robin: Yes... You did it first like this (pointing to a line of symmetry Kathy drew on the handout).
 That's not the way I thought.
 Ebbie: Stop it now, man... You need to explain...
 Kathy: We have to talk a lot, so
 Robin: Okay, then I will listen...
 Ebbie: Okay, we now have to choose one of the figures and fold it in halves...

Some time later, Kathy and Ebbie discuss closely together and Robin doesn't seem to participate. You notice this and you decide to intervene in this small group.

4) Scenario 4

(4) You are a third grade teacher. You asked students in small groups to solve an open-ended task: Jane had [8, 9, 15] candies. Her mother gave her [3, 6, 18] candies. How many candies does Jane have now? You assigned individual students in small groups to roles: recorder, facilitator, checker, and cleanup. Now you are monitoring small groups. You are listening to students talking in a small group.

Jimmy (facilitator): How should we start to solve it?
 RuAnn (checker): Pick two numbers and... I don't know...
 Minjun (cleanup): ... (shrugs his shoulder.)
 Jimmy (facilitator): What do you think (stares at group members.)
 Ashley (recorder): I don't know.
 Minjun (cleanup): ...
 RuAnn (checker): What do you think, Minjun?
 Minjun (cleanup): I think... we need to... first...make numbers easy to add...(shrugs his shoulder, looks away, and, as usual, mumbles something quietly. But nobody can hear.)