

Utilizing Learning Walks to Notice and Discuss
Effective Mathematics Teaching Practices

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OverviewMethodology

The National Council of Teachers of Mathematics ([NCTM], 2014) identifies eight effective mathematics teaching practices that support ambitious mathematics teaching, and further highlights collaborating on instruction as an essential element of effective mathematics programs. Teachers can utilize learning walks as a way to learn together by observing each other’s teaching practices for shared focal aspects and then discussing the observation afterward. In an effort to continuously be improving mathematics instruction, the focal goal of the learning walks in this study was the effective mathematics teaching practice, “Implement tasks that promote reasoning and problem solving” (NCTM, 2014, p. 17).

For this study, we analyzed the debriefing conversations from a small group of middle school teachers after completing learning walks in two colleagues’ math classrooms four times throughout a school year. We report on the focus of the debriefing conversations, and the ways in which these foci connect to the focal effective mathematics teaching practice.

Research questions:

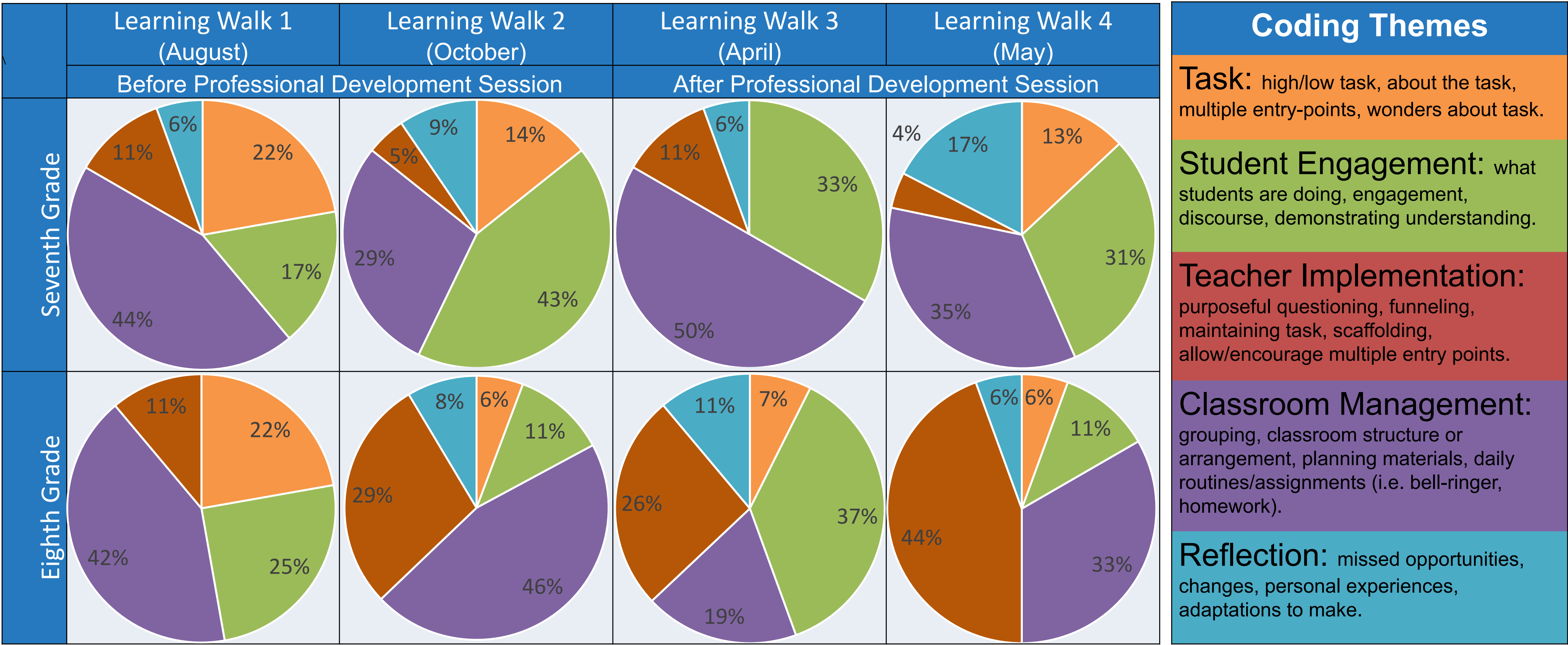
1. What is the focus of the debriefing conversations following a learning walk?
2. In what ways do these foci connect to the effective mathematics teaching practice “Implement tasks that promote reasoning and problem solving” (NCTM, 2014, p. 17)?

Participants: Eight seventh and eighth grade mathematics teachers in a local middle school.

- Teachers previously participated in a book study on NCTM’s (2014) *Principles to Actions: Ensuring Mathematical Success for All*.
- Observation goal: “Implement tasks that promote reasoning and problem solving” (NCTM, 2014).

Data Sample: Eight learning walks and debriefing conversations (Two before and two after a professional development session).

Methods: Conversations were divided into chunks based on topic change and coded using grounded theory open coding (Glaser,1978).



Preliminary ResultsImplications and Next Steps

- Teachers focused on classroom management and student engagement the majority of the time, and less on the task.
 - The amount of time teachers’ discussed the focal effective mathematics teaching practice (tasks) did not seem to increase following the professional development session about that practice.
 - Teachers reflected on teaching in most of the conversations.
 - Overall, teachers spent little time discussing their observation goal: “Implement tasks that promote reasoning and problem solving” NCTM, 2014, p. 17).
- References**
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.
- National Council of Teachers of Mathematics. (2014). *Principles to actions: Ensuring mathematical success for all*. Reston, VA: Author.
- Teachers who are not provided with an observational lens tended to notice and discuss surface elements of a classroom, such as classroom management or routine.
 - It is important to have an observable focal aspect. We recognize now that “Implement tasks that promote reasoning and problem solving” occurs mainly in the planning therefore might have been difficult to observe. We believe practices such as “Posing purposeful questions” or “Facilitate meaningful mathematical discourse” may have been easier to observe and thus taken up more in the debriefing conversations (NCTM, 2014, p. 10).
 - We hypothesize that the amount of time between the professional development and the next learning walk was too large to encourage teachers to carry the effective mathematics teaching practice over as an observational lens.
 - Our next steps include investigating the initial data codes with inter-rater reliability.

Acknowledgements

Special thanks to Mr. Stanley Prevost for assistance with funding for this project through the Prevost Honors Research Grant and to Dr. Sarah A. Roller for her mentorship and assistance with this project.