

Preface

Is it Noticing or is it . . . ?

What is teacher noticing? Is teacher noticing different than *simply good teaching*? Is teacher noticing only an *in-the-moment* occurrence within a whole class setting or is it also akin to a one-on-one clinical interview? Is the framing of this practice as teacher noticing affording us an opportunity to reexamine, or more deeply examine, a crucial aspect of teaching? These questions continue to be discussed and passionately debated among our research team and colleagues. When one colleague was discussing *professional noticing* within mathematics, another was interpreting it as *professional vision*, while still another was attempting to envision it beyond a mathematics content perspective. These discussions caused us pause and we had to ask ourselves, “How IS all of this different? Or, is it?” So, “**is it noticing, or is it....?**”

In Sherin, Jacobs, and Philipp’s (2011) edited volume, several authors described the foundations of noticing. The roots are varied and the interpretations of the construct are many. Foundational research in professional vision (Goodwin, 1994) and the discipline of noticing (Mason, 2002) set the stage for additional research in this field. Further frameworks of noticing have surfaced, such as noticing (van Es, 2011; Sherin & Star, 2011), teacher noticing (Sherin, Jacobs, & Philipp, 2011), and professional noticing of children’s mathematical thinking (Jacobs, Lamb, & Philipp, 2010). As a result, one goal of this monograph is to seek clarification of the construct and its related branches. Our monograph explores recent developments in noticing and responds, in part, to the challenges Alan Schoenfeld put forth in the final commentary of the aforementioned volume by Sherin et al.

In his commentary, Schoenfeld (2011) left us with multiple questions to pursue with the goal of applying our researched knowledge to the development of effective teachers. Sherin et al.’s and Schoenfeld’s questions and our own successes and

struggles with defining and measuring teacher noticing led us to propose this monograph as a product of the 2013 Psychology of Mathematics Education-North America and 2014 International Group of the Psychology of Mathematics Education Working Groups, *Teacher Noticing: A Hidden Skill of Teaching*.

Many have contributed to its fulfillment. This work would not have been possible without the encouragement and guidance of Jinfa Cai, co-editor of the Research in Mathematics Education book series, the thoughtful contributions of the commenting authors, the compilation of years of work by the many researcher-authors whose work appears in this monograph, and the valuable feedback from the reviewers. Each proposal was submitted to a blind review process of at least three reviewers and full chapters were subsequently reviewed and edited by additional reviewers and the editors.

In planning the monograph, we sought to address not only some of the questions raised by previous authors, (Sherin et al., 2011; Schoenfeld, 2011), but also those questions that continued to emerge in the working sessions attended by researchers worldwide. The question, “What are the key components of teacher noticing?” led to the section, *Exploring the Boundaries of Teacher Noticing*. A related question is, “Can key components be isolated for study?” The chapters in the section, *Measuring Teacher Noticing*, illustrate multiple methods used by researchers to study the components. The section, *Noticing in Various Grade Bands and Contexts*, is in response to the question, “Is teacher professional noticing situation specific?” Of course, the study of teacher noticing is ultimately focused on improving student learning. The effects on student learning are addressed in the *Examining Student Thinking through Teacher Noticing* section. Finally, the section, *Extending Equitable Practices in Professional Noticing*, developed after the chapter proposals were submitted and this new and exciting theme emerged that we had not anticipated. Interestingly, the addition of this section itself illustrates a point regarding noticing that is raised by Mason in the introductory chapter herein, that of the distinction between listening-to and listening-for. Had we limited ourselves to the areas originally conceived for this monograph and only listened-for, we may have missed this important addition to the teacher noticing dialog.

Whether noticing is its own new construct or whether it is a rose by another name, the goal is to study, to learn, and to contribute to the increased effectiveness of teachers. Ultimately, if we are to prepare effective teachers, knowing what makes an effective teacher must guide this preparation. The research on teacher noticing attempts to define, describe, and capture that which is essentially invisible to the observer. In doing so, we hope to learn how to develop this ability in prospective and practicing teachers in order to build robust learning environments for all students.

Most importantly, this book is the result of the thought and work of many before us, including those whom we have never met but whose writing in diverse areas has

influenced our work and the work of the author-researchers within. Like a good conversation, good research builds upon the thinking of others to develop into a deeper understanding by all. Our hope is that the chapters in this volume contribute to the conversation.

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Perspectives, Contexts, and Frameworks

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