HONORING TEACHER'S IDENTITY: A JOURNEY TOWARDS NON-EVALUATIVE LISTENING

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An evaluation of the impact of a professional development experience on participants' ability to explore student voices as input for improving the teaching of mathematics evolved into a self-study of our growth as non-evaluative listeners. This paper specifically describes our emergent awareness of the evaluative stance implicit within our attempt to examine teachers' writing samples with the goal of developing a framework, denying teachers agency and identity. This presented us with a living contradiction since this stance conflicted with our belief that learners deserve both.

Keywords: Equity and Diversity; Teacher Education–Inservice/Professional Development; Instructional Activities and Practices

Introduction

This paper exemplifies transition; it is the story of our journey along a continuum of professional growth. It is told in three parts, parts that defy the typical organization of a research report. We begin at our genesis: an evaluation of the impact of a professional development experience on participants' ability to explore student voices as input for improving the teaching of mathematics. We then describe the transition of our work from an evaluation project to a self-study of our growth as non-evaluative listeners. Our self-study resulted in an awareness of the evaluative stance implicit within our attempt to develop a framework by which to classify teachers' writing samples, thus denying teachers agency and identity. We end the paper with a discussion of the theoretical stance that grounds our work as we consider future teaching and research activity and the "living contradictions" (Whitehead, 1989) that have emerged creating new dissonances in our practices.

Genesis

We, the authors of this paper, were involved in the planning and implementation of a large scale Mathematics and Science Partnership for professional development. Our goals, identified in concert with district faculty and administrators, were to support teachers in becoming better listeners and in understanding the importance of listening to students as a major component of their practice. In conducting the workshops for teachers we were operating under norms for best practices for professional development as defined by the larger mathematics education community. Lesson study (Yoshida, 1999), using student interviews (Schifter & Fosnot, 1993), and Thinker-Doers (Hart, Najee-ullah, & Schultz, 2004; Hart, Schultz, & Najee-ullah, 2004) were all integral components of our program that are defensible with tomes of literature.

We began this project in an effort to evaluate one cycle of this professional development. Our research question was: "How effective had we been in supporting teachers to become better listeners and to understand the importance of listening to students as a major component of their practice?" Participants in our professional development had conducted clinical interviews with their students and had written a reflection paper summarizing their interpretations of students' mathematical understanding and the implications for their teaching. Therefore, we decided to use these data to explore our research question.

At this stage we were framing our work according to the norms of action research (Lewin, 1946) with an emphasis on a qualitative analysis of the teacher reflections. As action researchers we were looking for

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indicators of how our cycle of PD practices had impacted our teachers' listening strategies. We thought that our analysis would provide insights as to how teachers used the voices of students to make sense of students' mathematical understanding.

Early in our work we found ourselves positioning the teachers on two dimensions, as to whether they seemed teacher-centered or student-centered and whether they were analytic or descriptive in their reflections. In this positioning, we attempted to keep individual reflections intact and carried through the individual contexts in which those teachers were working. As our work progressed we found that some of the data allowed us to make clear decisions as to these two dimensions. However, some cases were much more difficult to categorize. Keeping the analysis at the level of the teacher became unwieldy and in our second attempt we agreed to work with excerpts or "chunks" from the papers. By reducing the grain size to passages rather than entire papers, we tried to keep the focus on abstract ideas rather than individuals. In Figure 1 we present two iterations of our framework. The early stage of analysis resulted in sorting the data according to a framework with two dimensions and multiple levels of nuance. As our analysis of the data evolved, we recognized the need for more encompassing and detailed categories leading from the framework on the left to that on the right.

Preliminary Framework			Extended framework			
			Inference			
Analytical Reflection			Critique			
Descriptive Observation			Description			
	Teacher- Centered	Student- Centered		Teacher	Student– Affective	Student – Mathematical Understanding

Figure 1: Evolving framework

As our work progressed we sensed personal disappointment in the work of the teachers. We had inadvertently understood the diagonal (from lower left to upper right) of our new extended framework to indicate growth along a listening continuum. We had hoped that more of our teachers' chunks would have been placed in the student-centered inference cell. To us this would indicate a teacher who listened and reflected on the child's understanding of mathematics. How could a professional development program grounded in best practices have had so little impact on teachers' listening strategies? We began to conclude that we had failed in the mission and goals of our program.

During a professional conference we received positive feedback from members of the mathematics education community about the framework and the way we were analyzing our data. The exercise of discussing and negotiating with colleagues regarding where to place teachers' work on the framework proved to be stimulating and educational for us. It wasn't until colleagues suggested that this framework could be used to create vectors that characterized teacher growth over time that we started to sense a discomfort in the goals of our actions. This interpretation of our work, both in the moment and in its future retelling within our group, reflected to us like a mirror the true nature of our work. Juxtaposed with teaching teachers to listen non-evaluatively was our own story as teachers, listening in judgment of our students.

In hindsight, having someone challenge our framework could have caused us to realize the nature of our evaluative posture and pushed us further along the continuum of our professional growth. It wasn't until we started writing our findings and results that we became increasingly aware of our living contradictions. In theory we believed in (and taught project participants about) listening non-evaluatively to students in order to gain insights into their mathematical understanding. Yet, we were unable to enact the same non-evaluative listening practice with our own students (participants in our PD). We were listening non-evaluatively to our teachers' sharing of conceptual understanding during their mathematical

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activities, but were unable to suspend doubt (Harkness, 2009) and judgment when they shared genuine reflections about their practice.

In looking back now it is interesting to note that nearly a year went by during which we were naïve about the contradictions in our beliefs about teaching and our practices. Throughout that year we had engaged in activities that we believed would push us toward deeper understanding of our practice. We collaboratively reflected on our program, participated in a reading group on postmodern and critical theories, and attended professional conferences as a venue for vetting new ideas and receiving challenging feedback. However, to become more aware of our evaluative nature and the contradiction we were living, it would take three key catalysts: A personal reflection from a colleague, a revisiting of postmodern thinking, and efforts to situate our research within a shifting paradigm.

Major Transitions

Three Key Catalysts

A personal reflection, told in first-person narrative. A group of mathematics educators attending an international conference were invited to observe and experience local mathematics classrooms. The purpose was to understand the local context and culture of mathematics teaching, a context and culture unfamiliar to attendees. I traveled with a small group of mathematics educators to observe a day at a government-funded elementary school. We were given a warm welcome by children dressed in their best uniforms, wearing fresh flowers in their braided hair, performing traditional songs and dances. The lesson I observed was in a classroom studying 3-D geometry. There were interesting artifacts on display including local containers used to measure milk along with tins and boxes presumably used to talk about the volume of prisms. The teacher appeared proud of the lesson and artifacts used and eager to give students a stage on which to demonstrate what they knew. We witnessed many recitations and demonstrations by eager students who waived their hands wildly to signal to the teacher that they were ready to shine. Both the teacher and the children had worked hard to impress the visitors. At the end of the lesson, we were given the opportunity to ask the teacher questions about the lesson and about the school. Few questions were asked, and those few were along the lines of "How long has this lesson been going on?"

The next morning, the group of mathematics educators reconvened outside of the context of the school. Immediately, the conversation turned to a discussion of what we had seen. We had not been there in the capacity of evaluation, yet we automatically assumed this role. The criticisms flew around the table indicting not only the actions and decisions made by the teacher, but also the skill of the students. "*The lesson was taught by rote. The students were memorizing and not reasoning. There was too much focus on multiplication facts and too little on measurement concepts or problem solving. If the lesson had been rehearsed (it must have been), then who knows if the students even understood what they had been asked to recite and demonstrate?" I, like others in the group, was comfortable dissecting the lesson and took license in judging what we had seen without any further context or background.*

Once this story was shared within our current community, our group began to reflect on the act of observing and studying teaching and learning. This particular story evoked concerns about the evaluative stance that is so natural to this work. As we discussed the story together as a group, we discovered empathy for the teacher and the students and regretted the missed opportunity to understand the complexity of a specific act of teaching. The opportunity had been given to uncover that complexity and truly understand the dynamics of the lesson; the teacher had invited questions and discussion, yet no one had thought to ask about the specific needs of the teacher, students and community and why this particular lesson could help fulfill those needs. The group had denied the teacher and students reason. Who gives mathematics educators the right to judge teachers and their enactments? Are we such experts that we can, on first sight and without economic, political or cultural context, determine the value of an instructional episode? How quickly we strip teachers of agency (Valero, 2004) and identity (Brown, Jones, & Bibby, 2004).

Revisiting postmodern thinking. Concurrently with our evaluation project, we were all involved in a book study of *Mathematics Education Within the Postmodern* (Walshaw, 2004). Each week we met to

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discuss a different chapter, each of us taking turns facilitating that discussion. Some chapters we discussed for multiple weeks, arriving at insights we valued and took personally. These discussions were humbling for many of us as we began to see similarities in our thinking about our "students" and the structures in our educational system that oppress students and teachers. The constructs of power, agency, privilege, identity and oppression were particularly central to our discussions and seemed relevant to our work with students and teachers.

This was all in a general abstract sense. It was not until we began considering these issues in our research practice and the reflection above was shared that our thinking on these matters became concrete and available for application. It was as if the pieces of a jigsaw were flying about in the ether, but had finally begun to arrange themselves in a way to create a picture of our research practice. It was very much like the experience shared by Valero (2004), "my postmodern attitude did not result from a conscious paradigm selection; rather, it was constructed as I met school leaders, teachers and students in different schools in the world whose lives shook me in significant ways" (p. 36).

Our colleague's personal reflection was an obvious example in which we could apply these new principles and identify the power structures that existed. Much more challenging was the application of these principles to our practice. As we continued to revise and reconsider our work in framing the work of teacher listening, we faced this challenge head on. Revisiting our previous discussions and readings from the study group caused us to question the act of characterizing individuals within any framework, and particularly the one we had developed. We expected our teachers to gain respect for the whole student and not parcel their perceptions into evaluative boxes like "mathematically correct." Yet, we were doing this for them. We were being evaluative listeners and positioning them according to our critical lens, denying them voice and reason in their own practice. At this point, our conversation and the purpose of our project shifted in substantive ways. As one member stated, "As I analyzed reflections, I felt more aware of the difficulty of what we were asking them to do and the vulnerability it required giving me more empathy for the teachers."

Acknowledging living contradictions in our work. According to Whitehead (2009), the practitioner addressing the question "How do I improve what I am doing?" will engage in a reflection that will illuminate their living contradictions. As he explains: "I am thinking here of 'I' existing as a contradiction in the sense of holding together a commitment to live certain values with the recognition of the denial of these values in practice" (p. 87). We frame this discussion of our living contradictions as it relates to our practice as researchers and teachers.

We chose a qualitative research design to best address our research purpose. The qualitative research design that we adhered to denied us our values—to respect and honor teachers' voices—the very values that we wanted our teachers to accept as a critical component of good teaching. In our quest to be scientific and methodical in our research process, we identified a data set, i.e., teachers' written reflections, that we analyzed and interpreted using the tools of qualitative inquiry. As warranted by the norms of academic research involving human subjects, we were concerned about preserving anonymity and remaining unbiased in our interpretations of data. This led us to devise coding mechanisms that masked teachers' identities. Also, in an effort to make more of their statements fit our framework, we cut up entire reflection papers into smaller chunks. All of this manipulation of data fragmented the teachers' work and thus created an abyss between the teachers' reflections and the context in which they had been operating. In concealing the teachers' identities we were no longer able to honor their voices and engage in non-evaluative listening. We realized that our chosen research paradigm denied us the opportunity to listen. We had interpreted teachers' writing without considering the social, political and cultural realities of teaching.

Just as we denied our values of respecting and honoring teacher voices in our research, we realized that the same could be said in relation to our teaching. What began as a study of our teacher's writing samples became this story about the development of a faulty framework – one that revealed to us the limitations of our thinking and the contradiction between assuming an evaluative stance (that gave teachers neither agency nor identity) and preaching that learners deserve both. As constructivist teachers, when teaching mathematics, we have, for the most part, learned how to give reason (Duckworth, 1996) to our students as we listen to their mathematical voices. We have learned how to embrace the mathematics of

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students in shaping our knowledge of mathematics. We are effective in suspending doubt (Harkness, 2009) as our students describe their mathematical thinking. For the most part, we honor and respect the mathematical voices of our students. For this reason we create a learning environment where we are co-constructors of mathematics with our students. However, our analysis of our work with teachers revealed to us another glaring contradiction—Why were we able to give reason to learners when dealing with mathematics, but so unable to give reason to the learner when dealing with teaching? We seemed to have a pre-conceived vision of what constitutes good teaching and were unable to hear the voices of teachers with alternative perspectives that grew out of living within a social, political and cultural reality to which we were strangers.

Moving Forward on the Continuum of Professional Growth

How do we live with our living contradictions? We face the personal challenge of positioning ourselves as mathematics education researchers within a new research paradigm that is more aligned with our values. The pressures of our discipline require adherence to a strict code of long standing expectations regarding what counts as valued research. In fact, these constraints sometimes feel oppressive as we work to align our values to our practice. Still the awareness of the living contradiction in our research will guide our future projects.

The living contradiction in our teaching has caused us to question many of our typical practices as mathematics educators, especially in the role of professional development providers or math consultants to districts and schools. We have often engaged in practices such as:

- Accepting the challenge of helping a teacher "improve" her practice based on just a few observations;
- Watching short video-clips of teachers at professional conferences and drawing inferences about their practice as a whole;
- Making judgments about teacher practices from knowing the textbooks adopted by their districts;
- Consulting with schools or districts and accept the administrator's assessment of their staff; and
- Designing professional development experiences based upon our expert analysis of student performance data.

In hindsight, we realize that in each of these instances we have positioned ourselves as experts and denied our teachers agency and identity. The challenge that remains for us is to find a way to enact our new perspective on our role in professional development. What does it mean to engage in professional development with teachers without assuming an evaluative stance; to go into our work together with teachers without a preconceived notion of what is to be learned or taught? We want to do work that respects and maintains the dignity of our teachers and gives them autonomy in crafting a picture of ideal practice. We have begun to acknowledge the value of co-constructing meaning alongside teachers, but need to explore models for how this can be accomplished. We want to move from being imparters of teaching knowledge to being co-conspirators in the act of defining good practice. Perhaps the best next step we can take is to talk about our own learning and to continue to document a living theory (Whitehead, 2009).

References

- Brown, T., Jones, L. & Bibby, T. (2004). Identifying with mathematics in initial teacher training. In M. Walshaw (Ed.), *Mathematics education within the postmodern* (pp. 35–54). Greenwich, CT: Information Age.
- Duckworth, E. (1987). "*The having of wonderful ideas*" and other essays on teaching and learning. New York: Teachers' College Press.
- Fernandez, C., & Makoto, Y. (2004). Lesson study: A Japanese approach to improving mathematics teaching and *learning*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Harkness, S. S. (2009). Social constructivism and the Believing Game: A mathematics teacher's practice and its implications. *Educational Studies in Mathematics*, 70, 243–258.

Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.). (2012). Proceedings of the 34th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Kalamazoo, MI: Western Michigan University.

- Hart, L., Najee-ullah, D., & Schultz, K. (2004). The Reflective Teaching Model: A professional development model for inservice mathematics teachers. In R. N. Rubenstein & G. W. Bright (Eds.), *Perspectives on the teaching of mathematics*. Reston, VA: National Council of Teachers of Mathematics.
- Hart, L. C., Schultz, K., & Najee-ullah, D. H. (2004). Thinker-doer paired problem solving: A long-term teacher development activity. In G. Bright & R. N. Rubenstein (Eds.), *Professional development guidebook for perspectives on the teaching of mathematics* (pp. 31–44). Reston, VA: National Council of Teachers of Mathematics.
- Lewin, K. (1946). Action research and minority problems. Journal of Social Issues, 2, 34-46.
- Meaney, T. (2004). So what's power got to do with it? In M. Walshaw (Ed.), *Mathematics education within the postmodern* (pp. 181–200). Greenwich, CT: Information Age.
- Schifter, D., & Fosnot, C. T. (1993). *Reconstructing mathematics education: Stories of teachers meeting the challenges of reform*. New York: Teachers College Press.
- Valero, P. (2004). Postmodernism as an attitude of critique to dominant mathematics education research. In M. Walshaw (Ed.), *Mathematics education within the postmodern* (pp. 35–54). Greenwich, CT: Information Age.
- Walshaw, M. (Ed.). (2004). *Mathematics education within the postmodern*. Greenwich, CT: Information Age. Whitehead, J. (1989). Creating a living educational theory from questions of the kind, "How do I improve my
- practice?" *Cambridge Journal of Education*, 19(1), 41–52.
 Whitehead, J. (2009). Self-study, living educational theories, and the generation of educational knowledge. *Studying Teacher Education*, 5(2), 107–111.
- Yoshida, M. (1999). Lesson study: An ethnographic investigation of school-based teacher development in Japan. Unpublished doctoral dissertation, University of Chicago, Chicago.