PARTICIPANT RESEARCH ESSAY
FOR DIME RESEARCH TEAM

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I have been obsessed with the phenomenon of understanding for the most part. In my dissertation, I sought to characterize the lived experience of understanding—both that moment that one can say that one has come to understand as well as the structure of experience that surrounds such a moment.

This “obsession” began in a mostly traditional vein through my interest in the phenomenon of transfer as studied in cognitive psychology. The issue of “how to effect transfer in a learner” somehow morphed into the question of “How does one define learning in such a way that transfer occurs?”

My thinking, framed mostly in a traditional vein of meaningful learning vs. rote learning (a la, Brownell) and procedural and conceptual knowledge (i.e., Hiebert), eventually moved toward the Neo-Vygotskians (a la, Lave and Wenger). But because I felt intimidated, turned off, and a bit lost by all the Marxist theorizing, I took what resonated to my experience, and just left the rest on the table.

I took a class on phenomenological inquiry with Francine Hultgren at the University of Maryland, and then later, with Max van Manen through an online course. Having been a long-time meditation practitioner, this manner of examining phenomenal reality seemed to fit well with my own “personal” manner of being in this world. So, I am most interested in phenomenological inquiry and it seemed a good match for my research needs. The subject of that inquiry does not matter so much to me on any personal level, but since I work as a mathematics teacher, it seems only fitting that I continue to examine experiences around the teaching and learning of mathematics.

I teach now in a mathematics department at a teaching institution. I have published a handful of papers mostly in collaboration with mathematician colleagues around some mathematical exploration. One of the ideas from my dissertation was the relevance of doing mathematics in the life of a mathematics teacher in sustaining a sense of “relationship” to the subject that one teaches. So, it seemed only fitting that I do mathematics myself and publish (mostly in practitioner journals), however tiny and insignificant the explorations or results.

I will be teaching a class for future secondary teachers where I hope to get each of them into doing mathematics and seeking publications, similar to the typical Research Experience for Undergraduates (REU’s) in mathematics, but with a slight pedagogical bent. That “bent” comes from the explorations having (some) pertinence to K-12 mathematics.

As a researcher, I will be using this class to gather preliminary data on the stories that such students tell of their “relationship” to mathematics, both before, during, and after the course. In addition, I also hope to collaborate with as many of my students as possible in their own self-initiated explorations.

I have also been collecting data on a small project concerning the experience of preparation and planning. At this point, I have interviewed a handful of musicians and mathematics teachers, and I hope to expand the types of persons I speak with regarding this phenomenon. I would like to speak with teachers of other subjects, as well as politicians, athletes, and other such persons who perform. At this preliminary point, I can begin to characterize how prepara-
tion and planning can both support and enrich the subsequent “performance” experience while also hampering and obstructing it, depending upon the stance or intention that is brought forth to the act of preparation/planning.

I have also been involved in more conventional types of research projects in mathematics education (such as textual analysis of the CMP curriculum, a study on pre-service elementary teachers’ understandings around proportional reasoning, and a re-examination of the conceptual/procedural knowledge framework), but since I have little to no interest in them at this time, I have relegated them to the parentheses of this one sentence.

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Whilst writing this brief paper, I am reminded of the view that this textual representation of the evolution of my research program is likely to remain incomplete because of the crisis-laden nature of dispassionate academic language (Granger, 2006). Thus, I give my personal (and professional) voice against such an academic language via narrative, poetic and visual genres to address (but not to fully resolve) the representational crisis. Written in the form of a letter to my possible readers, this paper presents a brief sketch of how my research program evolved in the last seven years. I begin by describing how I employed my lived experiences to unpack the problem of culturally decontextualized mathematics education in my Master’s project. Giving a preview of the research problem and research methodology, I illuminate some key features of my recently completed doctoral research. Toward the final section of this paper, I present my current research program together with research projects being undertaken by Masters and PhD students under my supervision.

Doubting the Golden Standards
After the completion of my first Master’s degree in 1998, I started my career as a mathematics teacher educator in a recently established university. During a period of three years, I interacted with teachers about their perceptions of the recently changed mathematics curriculum. Perhaps the change was understood to be very important by policymakers, curriculum designers and some university professors. However, for teachers it was just another fad with which to incorporate new topic areas into the syllabus without paying much attention to ways that can make mathematics meaningful, culturally contextualized and life-affirming. In hindsight, I could see teachers demanding a more reality-based image of mathematics, whereas the experts’ image of mathematics could be close to the hegemonic nature of mathematics as a body of decontextualized knowledge. Being puzzled by such a contradiction, I questioned to myself: Can there be any research methods that enable me to undertake an inquiry into the problem of culturally decontextualized mathematics education? It was due to such a contradictory situation that I began to suspect the usefulness of positivistic research model (a priori, fixed research design, unresponsive to context (Luitel, 2009b) in responding to emergent problems of mathematics education. Nevertheless, I was not aware of the epistemic possibilities I could bring to bear for