

PROFESSIONAL LITERACIES FOR THE PRESERVICE MATHEMATICS TEACHER

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Multiple “literacies” (see Ahmed, 2011) or “professional literacies” such as media literacy, and those of subject content knowledge, assessment and evaluation, leadership, learning disabilities, and pedagogy, to name a few, provide support for and a foundation to all teachers’ professional discourse. Mathematics teachers’ professional discourse requires a complex interplay of this plurality of literacies. For preservice mathematics teachers (PMTs), mathematical literacy may be arguably considered a necessary and underlying connecting literacy to their professional literacies. Thus no matter the length of a teacher preparation program, it is a relatively short amount of time compared to the length of a teaching career for exposure to and learning about the professional discourse of the mathematics teacher.

In conjunction with the literacies required of educators, the literacies that students use and learn are evolving, creating an additional impact on the literacies that teachers need. Learning to teach then becomes less about absorbing particular bits of information and more about acquiring specific literacies that will endure this evolution in communication practices (Pilgrim & Bledsoe, 2011).

The purpose of this study is to explore the nature of PMTs’ professional literacies and the relationship with mathematical literacy, and PMTs’ acquisition of these literacies. A phenomenological stance is being employed within the context of a preservice secondary school mathematics teaching and learning course. Data are being acquired from three questionnaires exploring PMTs’ recall and understanding of professional literacies, and a focus group discussing professional practice scenarios.

Available data and analysis will be used to create an in-depth understanding of PMTs’ perceptions and knowledge of professional literacies, and what these literacies mean to PMTs’ development of their professional practice. Changes in PMTs’ knowledge of these literacies may be tracked over the duration of the teacher preparation program, for example, from incorrect usage to buzz words to authentic expression. Understanding how these literacies are acquired and then hearing how PMTs perceive using these literacies in classroom scenarios may provide insight into what PMTs are learning, as well as into teacher preparation course design changes.

References

- Ahmed, M. (2011). Defining and measuring literacy: Facing the reality. *International Review of Education*, 57(1), 179-195.
- Pilgrim, J., & Bledsoe, C. (2011). Engaging preservice teachers in learning through social networking. *Journal of Literacy and Technology*, 12(1), 2-25.