SYMPAB - (15925) - EXPLORING FUNDS OF IDENTITY IN EARLY CAREER ELEMENTARY SCIENCE TEACHERS

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Short Abstract

Science identity researchers have identified a need for greater understanding of science teachers' identities and identity's effects on classroom practices (Avraamidou, 2014). Recent scholarship rooted in Funds of Knowledge theory (FoK; Moll et al., 1992) and Funds of Identity theory (FoI; Esteban-Guitart & Moll, 2014) suggests that FoI can be a useful framework for investigating connections between science teachers' sociocultural assets and their teaching identities and practices. An FoI approach focuses on individuals' strengths and counters deficit thinking (Hogg & Volman, 2020) and can be useful in studying elementarylevel teachers, whose contributions are vital to supporting students' early science experiences (National Research Council, 2007; Osborne & Dillon, 2008).

In this qualitative study, four early career elementary teachers were studied longitudinally from the beginning of teacher preparation through their second year of certified teaching to determine what FoI they express or demonstrate in the context of education, and to what effect they use these FoI in their science or STEM teaching. Initial findings indicate that teachers who identified their FoI related to teaching were better able to apply those FoI to enact science teaching, even if their own science content knowledge was less secure or their school environment less conducive to teaching science. The most potent applications of a teacher's FoI emerged when some aspect of a teacher's FoI meshed with their students' backgrounds and FoK, increasing not only student engagement and learning, but also teacher persistence in enacting inquiry science or STEM.

Applying FoI theories to teacher education and professional development can help teachers identify and leverage their FoI for greater enactment of high-quality STEM or science teaching. More broadly, a focus on FoI as a theoretical framework for science identities scholarship can help researchers connect existing science identities lenses to FoI research in other areas.