Where is the L in STEM? One Teacher's Integration Experiences with Literacy, Science, and Engineering

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ABSTRACT

The purpose of this qualitative case study was to gain a better understanding of how literacy is integrated within the context of STEM education (more specifically science and engineering) in a primary classroom through integration. Such a study is important due to the limited amount of research currently available that is specifically designed to look at integration and STEM education in elementary schools. The research was conducted in a first/second multi-grade classroom in a Title I elementary school in the Midwest. Data for this study was collected over a three-month period through classroom observations, teacher interviews and planning sessions, informal student conversations, and student work samples. The findings from this research provide evidence that, through inquiry and integration, teachers can move students from viewing literacy skills as isolated strategies to daily practices of scientist and engineers. In addition, constant teacher reflection can lead to more purposeful planning and implementation of lessons. Finally, recommendations are provided for classroom teachers, teacher education programs, and future research, including: development of seamless integration practices, the necessity of providing teachers with in-class supports, and the need for continuing research of the impact of STEM education and integration at the elementary level.