Deeper Learning: How Do Elementary Mathematics and Science Teachers Acquire Strategies and Content Knowledge to Promote Student Success?

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We will identify strategies and content knowledge elementary math and science teachers have learned through their careers. Elementary education majors are interested in learning how teachers continue in their profession and our research design will facilitate gathering targeted information that addresses "deeper learning" in math and science. Our participants will be a sample of Virginia elementary teachers in grades two through five. Survey questions from the 2018 National Survey of Mathematics and Science Education (NSMSE) will be used to develop an online survey. The goal is to establish the key professional learning pathways teachers report are valuable and effective in helping students excel in mathematics and science. In addition, our focus group will help us gather insight into how curiosity is integrated into their teaching philosophies. We intend to distribute our findings at several conferences, highlighting common strategies veteran teachers suggest for future teachers.