Learning By Teaching: Microteaching in Geoscience Content Courses For Preservice Elementary Teachers
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1. Do you teach science classes for future teachers?

2. What is Self Efficacy Belief (SEB)?

3. Self Efficacy matters a lot for effective teaching

4. Measuring SEB’s with the STEBI-B

5. Microteaching as a form of content delivery

6. What microteaching looks like in a classroom

7. Microteaching includes elements that are known to improve self-efficacy

8. STEBI-B @ CSUN

9. STEBI-B is reliable within +/- 5 points

10. High SEB is not correlated with strong content knowledge

11. Microteaching is more effective at increasing SEB than a traditional content-focused course.

Conclusions:
Future teachers don’t always start off feeling like they can be good instructors of science. In traditional, ‘content-focused’ science classes, they learn content without any change in self efficacy. Microteaching is an effective strategy for teaching content and improving self-efficacy beliefs.

Details

SEB (Self-Efficacy) is a very important dimension of performance. Many students have very high scores on SEB, but others don’t. What I do won’t matter.

Comparison of two instructional methods

<table>
<thead>
<tr>
<th>Instructional Method</th>
<th>Mean SEB Score</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>60</td>
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In microteaching, 25% of students will still stop. In our microteaching course, almost half don’t.