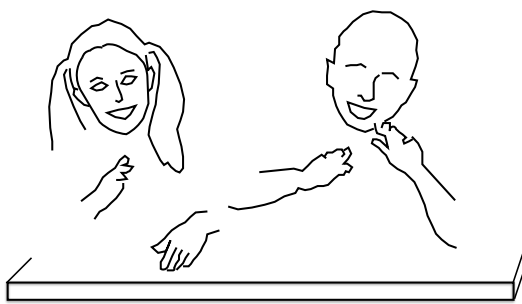


Sound Of Fractions Activities

Who The Third Lab (<http://thirdlab.cs.vt.edu/>) at Virginia Tech has helped create several successful teaching programs that integrate technology use, curricular design, and teacher professional development or co-design. Our orientation is towards classroom-based instruction and informal learning. The Sound of Fractions uses percussion to teach the relationship between parts and wholes that is so important in learning fractions. We employ embodied action and multiple modalities (kinesthetic, auditory and visual) to draw attention to patterns, gradually introducing more standard mathematical representations. Sound of Fractions is aimed at students who have experienced difficulty learning the idea of fractions, but may be used with a range of students.

What We are looking to test and refine this approach by working with small groups of upper elementary students (8-12 years old) in 3-7 1-hour sessions. We will start with clapping and drumming patterns, discussion, and instruction that will lead to using a browser-based application. Students will work on exploring questions with animated, runnable, auditory and visual representations of the patterns. We have plans for many small activities that involve small groups of students that discuss, discover and defend their findings with their peers in a setting that supports exploration in a guided way.

Timeline This project can begin as soon as we have a cohort of students and interested teachers. We would like to start by observing students in their current afterschool program. Then, we hope to get MAPS test-data for the cohort (not individual students). We then would need to hold 3 – 7 sessions with each group of students over the next few months of Fall 15 and gain MAPS data for the cohort at the next offering.



If you need any more information to expedite this wonderful opportunity with your school or district, please contact the Third Lab at thirdlab@cs.vt.edu in regards to this Sound Of Fractions study.