**Sound Of Fractions Preliminary Concept Study**

Who

The Third Lab ( <http://thirdlab.cs.vt.edu/> ) at Virginia Tech is seeking to work with school districts to begin preliminary studies with a novel approach to teach part/whole concepts and fraction math to struggling students through music, with our developed application Sound Of Fractions. The Third Lab has helped create several successful teaching programs, aids, and curriculum for the K-12 and higher education academic institutions.

What

We will be conducting research through personal instruction, clapping, discussion, and leading up to using an online webpage ( <http://compthink.cs.vt.edu:3000> ) that requires Google Chrome ( <http://www.google.com/chrome> ) and a microphone input to capture the rhythm tapping of students. We can provide a small number of laptops equipped with the necessary requirements to

When

Given that the strong competition in academic research, this project should begin immediately to begin collaboration with the appropriate teaching staff to select the appropriate group of students for small group feedback. To test the methodology, application, and provide sufficient initial data for scientific review, there would need to be 3 to 6 sessions with each group of students, with a few groups of students. The end of the 2014 calendar year should complete the sessions.

Where

At one or several schools, focusing on elective students in afterschool programs, tutor sessions, or dedicated math classes that have fewer students to allow for dedicated instruction and recording of quality feedback.

How

We are looking for formal commitments from districts to work with select schools and programs for the remaining portion of 2014 school year, with the potential to continue to a larger scale research implementation in the future. It is important to note that this research project is in its beginning technological stages, and that small-scale personal instruction is necessary to test, debug, and get feedback with students to progress the research. The Virginia Tech Institutional Review Board (IRB) has reviewed the initial study and approved the study per the guidelines for safety, ethical, research, and institutional concerns per IRB# 14-831 [ http://thirdlab.cs.vt.edu/wp-content/uploads/2014/04/VT-IRB-14-831-Approval-Letter.pdf ].

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](mailto:thirdlab@cs.vt.edu) in regards to this Sound Of Fractions study.