## Active Science Learning

Professional Development and Support for Hands-on Science

## NGSS K-8 SCIENCE TEACHER PROFESSIONAL DEVELOPMENT

Active Science Learning [ASL] offers professional development and support to schools and districts that are making the transition to NGSS and new student assessments. Our mission is to help teachers to make engaging, hands-on, inquiry-based science available to all their students – and thereby make science more engaging and improve students' use and understanding of the science practices.

## Active Science Learning can assist schools to.....

- Analyze [unpack] the Science Standards (NGSS, Mass 2016),
- Identify rigorous, higher order learning objectives and assessments,
- Develop or select appropriate and engaging curriculum and resources,
- Fully integrate the <u>science practices</u> into classroom instruction.



**Active** science is engaging, collaborative, project-based and **fun**. Iterative and age-appropriate investigations are the most effective way to build interest in science and the scientific mode of thinking. **Active science** encourages a love of scientific investigations for its own sake, and nurtures creativity, collaborative problem solving, critical thinking, as well as the skill of communicating ideas and findings to others.



Active **Science** is extended investigations and problem solving in engineering and science disciplines. It provides first-hand and direct experience of relationships, patterns and phenomena in the physical world.

Active Science *Learning* builds students' understanding of science concepts as well as their commitment to the using *science practices* now incorporated into the NGSS science standards. Experiences and insights based on direct interactions with "hands-on materials" are a strong foundation for lasting cognitive learning in the sciences.

ASL is led by Charlie Hutchison, a former elementary and middle school teacher and curriculum developer, and an experienced professional development leader. He has also conducted intensive coaching for individual middle school science teachers in public and private schools, focusing on creating engaging curriculum units and authentic assessments. Charlie holds an Ed. M (1990) from the Harvard Graduate School of Education and a BA, Human Ecology (1982) from College of the Atlantic in Bar Harbor, Maine.