

# Science Approach

Science Approach, LLC promotes data discovery for learners of all ages.

## Mission

Science Approach creates e-labs that empower learners to explore how scientists visualize, measure, and analyze patterns in data that lead to new discoveries. Using visualization, simulation, and statistical analysis software built into the e-laboratories, students visualize relationships in the data, gather measurements, conduct statistical analyses, test hypotheses, and report and discuss results. The technologies deployed in the e-labs and apps are tailored to the tasks at hand, thus overcoming the complexity of using research software as a teaching tool and allowing students to focus on content learning rather than tool mastery.

Science Approach continues the legacy of the Center for Image Processing in Education (CIPE)

## Vision

Science Approach believes that all people can be empowered to conduct real science and become better citizens by understanding how science is conducted. In support of this vision, Science Approach introduces learners to authentic research experiences and the tools that scientists use to conduct their research.

## Competencies

- Translating scientists' research and data into inquiry-based lessons for learners
- Empowering learners to skillfully analyze data and come to their own conclusions about what their analysis means
- Developing instructional materials and conducting professional development workshops that engage learners
- Creating educational materials that teach rigorous academic content and support accomplishment of academic and professional standards of excellence
- Using visualization and other computational technologies to to teach basic science content and make learning relevant and engaging
- Modeling the process of science as a method for empowering learners to interpret the world around them and make choices that benefit themselves and society

