



FACT SHEET: The Fleet Inquiry Institute (FII)

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The Fleet Inquiry Institute

The Reuben H. Fleet Science Center established the Fleet Inquiry Institute (FII) in 2002 to improve science education in the formal classroom environment by offering professional development to 3rd-8th grade teachers. Through several grants, the Fleet has been able to externally evaluate its efforts and link teacher participation in FII professional development to increased student achievement. These results have provided the Fleet with the evidence that the inquiry-based pedagogy so fundamental to learning on the exhibit floor can support student learning in the classroom. Through community partnerships the FII works with teacher education students at the community college level, pre-service teachers, beginning teachers, and high school teachers. The Fleet Inquiry Institute currently offers a weeklong training in inquiry free of charge for K-8th grade teachers each summer and winter.

Inquiry

Inquiry-based learning is an innovative teaching approach driven by the natural curiosity and wonder every child possesses. It begins when a student experiences something new or surprising that raises questions. Teachers begin inquiry lessons with a hands-on activity that allows students to experience a scientific phenomenon in action and react to it with spontaneous curiosity and questions. Those questions form the basis for further investigation, typically done in a small group setting, in which students interact with materials, make observations, propose tentative explanations, form test predictions and record their observations through writing or drawing. The activity culminates in a sharing of the understanding each group has arrived at, with the teacher/facilitator drawing upon the student findings to summarize the key science concepts covered in the lesson. As a result, the students learn not only science content, but the process of scientific inquiry – how to observe, how to form and test hypotheses and alternatives, and how to communicate what they have learned. An inquiry-based classroom is a lively, focused environment that encourages students to be imaginative, creative and responsible. Students who learn through inquiry become actively engaged in their learning and feel ownership of what they have learned and develop skills which lead to greater understanding, recall and achievement.