Seattle Children's Research Institute

SCIENCE ADVENTURE LAB

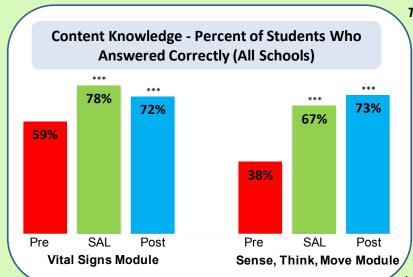






2013/14 Assessment Results From our NIH-funded Science Adventure Lab Project "Engaging Families to Enhance Science Learning and Interest in STEM Careers"

In the second year of our grant project, participating schools received two visits from the Science Adventure Lab where students completed our new neuroscience-focused module called "Sense, Think, Move: Exploring Brain Functions" and the module on Vital Signs that was introduced in the 2012/13 school year. We also enjoyed interacting with students and their families as they participated in science activities together during the Family Science Nights and Field Trips to Seattle Children's Research Institute.



This year we measured the content knowledge, interest in science learning and awareness of STEM careers in our new cohort of 650 grade four students at the ten participating schools, as well as re-assessing the fifth grade students who made up our cohort in year one of the project. Here are the combined results of the fourth grade student's performance on the content knowledge questions from all ten schools for the 2013/14 school year. Baseline knowledge was assessed with pre-test (Pre), and gains in knowledge measured while the students were onboard the Science Adventure Lab (SAL), and once all project activities were complete (Post). We were very excited to once again see statistically significant gains (***p <0.001) in content knowledge for students completing each of the modules. We were also very excited to find that the gains in content knowledge, interest and engagement we saw last

year had persisted beyond fourth grade and into fifth grade (data not shown).

Interest and engagement in science learning and STEM careers are equally as important as content knowledge. Family engagement was a key part of last year's success with many parents able to participate in a Family Science Night, the Field Trip to the Research Institute, or both. The engagement data from both students and parents was very encouraging and suggests we are seeing the outcomes we had hoped for.

We sincerely appreciate the efforts of all of the participating teachers who deserve equal credit for these amazing results, and we look forward to beginning our science adventures with a new cohort of fourth grade students and their families this year!

If you have any questions, or would like to receive additional information about the SEPA project please contact Dr. Amanda Jones at amanda.jones@seattlechildrens.org

Student and Family Engagement 80% of **73**% of 62% of students students students said they said STEM_ said thev eniov helps to would like learning improve to do a about people's STEM job **STEM** lives 246 82% parents attended of parents felt Family Science Night more confident and/or the Field Trip discussing STEM with their child



