

Fast Facts

- Any accredited public or private school may participate in the pilot – you do not need to be a member of an Educational Service Center (ESC).
- For a school to be considered for the pilot, all grades in the school and a minimum of 80% of students must participate. All teachers instructing inquiry science with the modules should attend 5 days of professional development in July 2010. (If schools adopt, there will be an additional 5 days next summer.) Building principals will need to attend two days of administrator training and participate with their teachers for three days during the summer and attend administrator specific training during the school year.
- Pilot participants will need to use the 2 modules (1 semester of material) we recommend and use assessments during the pilot to measure results. Modules are designed to last 8-10 weeks.
- We are working so that teachers may earn a stipend or graduate / continuing education credits upon completion of the training and implementation of the curriculum in their classroom.
- Schools that have already adopted inquiry-based science may participate in the pilot by using our 2 recommended modules – this can be combined with modules already in use.

Frequently Asked Questions

- 1. What is the current state of student achievement in science and how do we measure that in Indiana?**
 - Student achievement in science is measured by ISTEP+ at the end of 4th and the end of 6th grade and then at the end of Biology I in high school. The 4th grade assessment has been in place since 2003 and the 6th grade assessment has been in place since 2005 (prior to 2009 the 4th grade ISTEP+ was given at the beginning of 5th grade and the 6th grade ISTEP+ was given at the beginning of 7th grade). During that time, in general science achievement has remained flat with an average % passing of 63% for grade 4 and 55% for grade 6 for all demographics.
- 2. Is there evidence that this initiative will improve science, math and literacy scores?**
 - Yes. We are working with national experts using a model that has been successful in school districts and in other states.
- 3. If schools want to participate in the pilot, what is their commitment?**
 - There will be a Memorandum of Understanding (MOU) between the school district, Department of Education, regional ESC, I-STEM, and institutions of higher education. Teachers and administration must attend professional development. Schools must use the recommended curriculum and assessments.
- 4. How will we measure the success of the research-developed curricular materials?**
 - We will use Indiana's student growth model, attendance rates, formative and summative assessments (I-STEP+, publisher end of course review, etc.) to evaluate the program's success.
- 5. What are the responsibilities of principals and school leaders?**
 - Principals will need to complete professional development prior to their school receiving the curricular materials. It is imperative that all school leaders support the initiative and understand the implementation of research-developed science instruction.
- 6. Will teachers receive stipends for training?**
 - This is dependent on grant funding, corporate donations, Title II money and other factors.

7. How much will the materials cost?

- Our long-term objective is to provide research-developed inquiry science materials for a price comparable to current textbook fees through sharing materials and large-scale refurbishment. We are working with publishers so there will be little or no cost for materials during the pilot phase.
- We estimate that the cost will be approximately \$20 / student / year for curricular materials and refurbishment after science adoption.

8. How will professional development be funded?

- We plan to use a variety of funding options. Schools with Title I funding can opt to use this funding by aligning their school improvement plans with improving performance in science, math and reading. Title IIa funding can be used to fund professional development focused on improving teacher quality and/or helping to provide an equitable distribution of highly qualified teachers. We are also seeking funding from corporations, foundations, grants, etc.

9. When will professional development occur?

- Professional development for the pilot will take place in July in each region.
- Long-term professional development will include intensive summer training, school-year workshops and just-in-time resources.

10. Who will lead training?

- Leaders will include Indiana experts who have completed standardized training and when necessary, experts from the curricular material publishing companies.

11. Will there be lead teachers in the school?

- After the pilot year, training will be provided for school teacher leaders.

12. Will there be specialists / additional resources to help in the classroom?

- After the pilot year, we will work with institutions of higher education as well as practicing scientists to provide specialists who will support teachers on a regular basis. It is also possible that a district would opt to use Title I or Title IIa funds to hire a district specialist.

13. Will the newly revised science standards be affected by work on science standards at the federal level?

- The National Academy of Sciences is working on a conceptual framework of core ideas in science that will be completed in October. We have aligned our newly revised science standards with NAEP, which they are using as a guiding document. We incorporated feedback from the College Board Standards for College Success. We do not foresee major changes that will affect implementation of science curriculum.

14. Will science textbook adoption process be affected by work on science standards at the federal level?

- No. The work on the conceptual framework for science will not be completed for two years and we will go forward with our science adoption as planned.

15. Will a school have enough money to fund the adoption of research-developed curricular materials during the first year even though they don't have 6 years of textbook money?

- Yes. This will work similar to the current process with textbook fees. Money will be paid back over the 6-year period.

16. How will the curricular material rotation work with quarterly Acuity testing?

- Acuity testing can be tailored to the content of your curriculum as you are teaching. If districts have any problems using this feature they can contact the Office of Student Assessment at the Indiana Department of Education (chopkins@doe.in.gov).

To learn more about how you can become an advocate, visit www.indianascience.org or contact Teresa Morris at I-STEM Resource Network, morrist@istemnetwork.org, (765) 494-8093 Direct Line, (765) 494-2757 Main Office