RIC receives continued funding for science and literacy integration project

by Greg Kinsley, Professor of Elementary Education and Project Director of the Science and Literacy Integration Project

How does a teacher get students to arrive at a meaningful understanding of science concepts, while at the same time raise their level of proficiency in writing? Scientists’ notebooks: How do teachers move from “getting notebooks going” to “getting them good?” Lesson study!

Rhode Island College has received a Rhode Island Higher Education Partnership Grant of $107,475 for its continued initiative to improve inquiry science and literacy through the Science and Literacy Integration Project (SLIP). The College also received a second award of $10,000 from the Eisenhower Regional Alliance at TERC to support the project. TERC is a not-for-profit education research and development organization based in Cambridge, Mass.

This year’s primary focus is using scientists’ notebooks to improve inquiry science and information writing. Fifteen K-8 school teams

(75 participants) will be selected to participate in the 4th Annual SLIP Summer Institute to learn to use scientists’ notebooks and apply the lesson study process during the fall.

The project begins on May 7 with a leadership conference for teacher leaders and principals from participating school teams. During the 40-hour summer institute, school teams will develop their expertise in integrating inquiry-based science and scientists’ notebooks and prepare for lesson study. After the fall site-based lesson-study experience, school teams will reconvene on November 29 for a follow-up to the institute and lesson-study process.

Notebooks are a powerful tool for promoting scientific thinking and improving information writing. They also serve as excellent sources of data for assessing student learning. Teachers from across the country and Rhode Island are turning to scientists’ notebooks as a way of having a dialogue with the students about their understanding as they investigate the natural world.

Students use notebooks to establish the purpose of an investigation by posing a science question and hypothesis. They develop a procedure to test their ideas and record their observations by writing, drawing, and charting. Also, students use evidence from their observations to formulate conclusions and to propose next steps for further inquiry.

The “scientists’ notebook blueprints,” developed by two of the summer institute presenters, will be used by SLIP participants as a practical guide to improve student achievement in both science and language arts.

Lesson study is teacher-led professional learning. While students investigate science ideas, teachers from a school team inquire about students’ thinking and learning. School teams use a structured process that begins with collaborative planning of a lesson. One teacher conducts the lesson while others observe how and what students learn. After teaching the lesson, the team sits together to reflect on student learning and revise the lesson for teaching by a second team member.

Lesson study is an effective way to improve teaching and learning through shared professional knowledge. This method empowers teachers to collaborate in their school and to teach each other about teaching. It enables teachers to see themselves as contributing to the development of knowledge about teaching as well as to their own professional development.

Interest in lesson study is growing in Rhode Island school districts such as Pawtucket, Coventry and West Warwick.

It has a long and well-documented history in Japan where it is the most common form of professional learning.

Eight SLIP Institute faculty will join Joyce Tugel, science specialist from Regional Alliance at TERC; Michael Kletensky, superintendent, and Elizabeth Molina De La Torre of El Centro, California school district; and Laurie Thompson of the California Institute of Technology as institute presenters. This year’s SLIP faculty members from RIC include Jerry Melaragno, professor of biology, and Maria Lawrence, assistant professor of elementary education.

Team applications are due on April 7. Special consideration will be given to applicants from schools classified by the Rhode Island Department of Education as “In Need of Improvement” and serving high poverty populations. Applications can be downloaded at the project website: www.ric.edu/slip.

For more information, contact Erika Tuttle, project assistant for SLIP at 401-456-8559 or email SLIP@ric.edu.