# **PROJECT SUMMARY**

CSI is a research study conducted by the National Center for Research on Rural Education (R<sup>2</sup>Ed) at the University of Nebraska-Lincoln

- Funded for two years by the U.S. Department of Education
- Involves approximately 160 middle and high school teachers over two years
- Consists of both experimental and control groups
- Year 1 control group has first option for year 2 experimental group

## THE RESEARCH QUESTION

What is the impact of professional development on guided scientific inquiry with follow-up coaching (treatment) vs. no professional development (control) on (a) teacher inquiry knowledge, skills, selfefficacy and beliefs, and (b) student inquiry knowledge, skills, engagement and science attitudes?

## **CSI PROFESSIONAL DEVELOPMENT TARGETS:**

- Nebraska State Standards for science inquiry
- Science inquiry instructional strategies
- Supports for classroom implementation
- Student engagement in science inquiry

## **CSI: RURAL SCHOOLS IS SPECIFICALLY DESIGNED FOR:**

- Middle and high school science teachers in rural schools (grades 6-12)
- Teachers who are looking to expand their instructional tool box
- Teachers who are looking for professional development readily transferrable to classroom practice

## **TEACHER BENEFITS**

- Expanded range of instructional strategies
- Opportunity to receive personalized instructional support not typically available in rural settings
- Make contributions to the understanding of effective instructional strategies, especially in science and rural settings
- Stipend for participation in the study (both control and experimental groups)
- Travel expenses related to summer institutes
- Money for instructional materials

## **CSI PROFESSIONAL DEVELOPMENT LOGISTICS (2013-2014)**

- Summer institute June 3-6 and June 10-13, 2013, in Lincoln, Nebraska
- Implementation of science inquiry lessons during the 2013-14 school year
- Ongoing coaching support provided via distance technologies







# csiruralschools.unl.edu





## **TEACHER EVALUATION OF COACHING PROCESS**

**Coaching helped me understand the inquiry approach and its implementation.** 

Coaching changed my instruction in ways that benefit student learning.

Coaching improved my teaching skills.

Coaching encouraged self-reflection.

**Coaching identified student outcomes and teaching strategies to support outcomes.** 

Coaching provided valuable feedback.

Overall, how would you rate the coaching you received as part of the CSI project?

# PRELIMINARY RESULTS



|                                  | SUMME |
|----------------------------------|-------|
| PEDAGOGICAL<br>CONTENT KNOWLEDGE | F     |
| SCIENTIFIC<br>INQUIRY KNOWLEDGE  |       |
| OVERALL<br>INQUIRY KNOWLEDGE     |       |
| TEACHER SELF-EFFICACY            |       |
|                                  |       |

**ICS INSTITUTE OF** EDUCATION SCIENCES

## **R INSTITUTE PROFESSIONAL DEVELOPMENT**



