2005–06 Local Systemic Change Classroom Observations Guidelines for Evaluators

The Classroom Observation Protocol should be used to record and rate observations of mathematics/science lessons for the core evaluation. Pre- and Post-Classroom Observation Interview Protocols are provided to assist evaluators in learning about the context of the observed lessons. Each project will conduct 16 classroom observations in the Baseline Year, again in Year Two, and once more in its Final Year. Since 2005–06 is the last year of data collection for the LSC core evaluation, all active LSCs will be in their Final Year of data collection and will conduct their required number of classroom observations from January to March of 2006.

All classroom observers must successfully complete HRI's certification process in order to be eligible to conduct classroom observations for the core evaluation. NSF has indicated that all observers must have the necessary content background and science/mathematics education experience to conduct classroom observations. As with all members of the evaluation team, all observers must be approved by NSF; potential observers must be approved by NSF prior to attending the training.

Sample Selection

HRI will select the teachers to be observed from the Teacher Sampling Frame provided by the project. In the event that any teachers from the original sample cannot be observed, evaluators should observe a teacher from the backup sample.

Setting Up Observations

Follow whatever procedures you and the PI deem appropriate for gaining access to classrooms selected for observations. This may include a letter or phone call from you or the PI to the principal of each school and/or to the teachers in the sample a week or two before the observations. Some projects may prefer to send a letter to all principals and teachers in the project, explaining all of the LSC data collection activities planned (i.e., teacher questionnaires, principal questionnaires, classroom observations, and teacher interviews) and asking in advance for their cooperation. In any event, it is important that teachers realize that the evaluator is seeking to understand mathematics/science instruction in the district, not to evaluate them personally. Evaluators should assure teachers that information collected in their classrooms is anonymous and confidential; the identity of the teacher observed is not known to the PI or project staff. Rather, the information will be aggregated across teachers to provide important feedback for improving the project.

Teacher Incentives

NSF has approved the use of core evaluation contract funds to provide incentives to teachers who agree to participate in the classroom observation component of the evaluation. Projects will no longer have the option of obtaining redeemable vouchers from HRI. Instead, your project may bill HRI for \$25 times n (where n equals the number of completed classroom observations from those required for the core evaluation this spring). Projects will then be able to use these

funds (and additional funds, if they wish) to provide whatever incentives make sense to them for individual teachers and/or schools. Note that teachers included in "supplemental observations" *do not* figure into the incentive allotment for the project, although projects may decide to provide incentives to them as a matter of equity.

Pre-Observation Interview

The Pre-Classroom Observation Interview protocol provides suggested questions for learning about the context of the lesson to be observed. Two or three days prior to the observation, ask the teacher (by phone or in person) for background information using the Pre-Classroom Observation Interview protocol. You can modify the questions to fit your interviewing style, but be careful not to ask anything that would lead them to change their plans. The contextual information gained through the interview should aid you in completing the Classroom Observation Protocol and, ultimately, in answering the core evaluation questions. Write-ups of pre-observation interviews should *not* be sent to HRI.

Classroom Observation

Prior to conducting classroom observations, review the Classroom Observation Protocol so that you can focus your attention on the specific areas addressed in the protocol. You may wish to complete the first page (Classroom Demographics) while the lesson is in progress and then take the kind of field notes you would ordinarily take. We recommend that you *do not* complete any other parts of the form during the observation.

During the observation, you may want to note additional questions to ask the teacher in the Post-Classroom Observation Interview that will help you complete the ratings and assess the overall quality of the lesson for the capsule description.

Post-Observation Interview

Conduct a brief post-observation interview with the teacher as soon after the classroom observation as possible. Use the Post-Classroom Observation Interview protocol and ask any additional questions that you think are necessary. As with the Pre-Classroom Observation Interview, this information should aid you in completing the Classroom Observation Protocol and, ultimately, in answering the core evaluation questions. The results of post-classroom observation interviews should *not* be sent to HRI.

Completing the Classroom Observation Protocol

The Classroom Observation Protocol form should be completed as soon after the observation as possible. The form is designed to be completed by the person conducting the observation, whether that is the Lead Evaluator or another member of the evaluation team who has been trained and certified in the use of the protocol. Please refer to the Annotated Guide to the 2005–06 Local Systemic Change Classroom Observation Protocol for clarification of specific items on the protocol.

Observers should base judgments for all ratings on current standards for exemplary practice. Refer to the following documents for background: NCTM's *Principles and Standards for School Mathematics* (2000) and NRC's *National Science Education Standards* (1996).

Section One: Contextual Background and Activities

Section One requests basic descriptive information about the lesson and does not require ratings. Mark the items that are applicable to the observed lesson, skipping over items that do not apply.

Section Two: Ratings

In Section Two, observers are requested to complete a series of ratings of the lesson, beginning with ratings of several distinct categories and ending with the selection of a capsule description that best represents the lesson. Note that the evaluator will need to be thoroughly conversant with the instructional materials designated for use by the LSC in order to complete the observation ratings.

Key Indicators: Section Two contains four categories with key indicators to be rated. The categories are Design, Implementation, Mathematics/Science Content, and Classroom Culture. We anticipate that you may mark a number of the individual items in each category "Don't Know" or "N/A" (Not Applicable) since any one lesson is not likely to provide evidence of every possible component of classroom practice. Ratings of "not applicable" should be made when the attribute described in the key indicator is not there, but its absence is not detrimental to the class. If the attribute is one whose absence negatively impacts the quality of the lesson, it should receive a low rating.

In most cases, your ratings will be based on what you actually observed during the lesson, not on the teacher's interpretation of what would or did happen. (There are a few ratings that depend on the contextual information the teacher provides in the Pre- and Post-Classroom Observation interviews. For example, your ratings of the appropriateness of the degree of "sense-making" might vary depending on the purpose of the lesson. You would expect more attention to making sense out of the data at the end of an exploration than at the beginning.)

Synthesis Ratings: You should provide a synthesis rating for each of the four categories in the protocol. Your synthesis rating in a category should not be a simple average of ratings for the key indicators, but should reflect your judgment of the importance of various indicators in determining the quality of the lesson.

Supporting Evidence for Synthesis Ratings: You should provide supporting evidence for your synthesis ratings, noting the factors, including information from the Pre- and Post-Classroom Observation interviews that were most influential in determining the overall rating for each category.

Overall Ratings of the Lesson: This last section is one in which you should synthesize all available information about the lesson, assess its likely impact on students, and select a capsule rating that best describes the overall quality of the lesson you observed.

- A. Likely Impact of Instruction on Students' Understanding of Mathematics/Science While the likely impact of a single lesson may well be limited in scope, you are asked to judge the extent to which the lesson is likely to help move students in the desired direction. Rate the likely effect of the lesson with regard to each of the areas indicated on the form.
- B. Capsule Description of the Quality of the Lesson

On the final page of the Classroom Observation Protocol, provide a capsule description of the lesson. The observer should choose the "level" that best describes the observed lesson and provide a rationale for the selected capsule rating.

Submitting the Classroom Observation Protocol via the Web

The observation protocol must be submitted to HRI via the Web. All Classroom Observation Protocols must be submitted by May 1, 2006. A recent standards—compliant web browser (e.g., IE 6.x, Netscape 7.x, Mozilla 1.x, or more recent versions) is recommended.

URL (web address)

The online observation protocol is available by selecting "Online Forms" from HRI's LSC core evaluation website at:

http://www.horizon-research.com/LSC

Username and password

The online forms are password-protected. When prompted, enter the username "****" and the password "*****" (note that both the username and password should be all lower-case letters).

Partial vs. Complete Forms

Classroom Observation protocols need not be completed in a single sitting. To submit a partial form, use the "Submit Partial Form" button. You may return to the form later to make changes and submit the form as complete using the "Submit Complete Form" button. Note that in order for a classroom observation protocol to be considered "received" by HRI, it must be submitted as complete; partial forms will not be included in a project's compliance data provided to NSF. Lead Evaluators and Principal Investigators may monitor their project's data collection status using the Lead Evaluator and Principal Investigator sections of HRI's LSC website.

When a complete form is submitted, several checks will be performed to ensure that the form has been completely and consistently filled-out. If necessary, you will be asked to correct any problems and submit the form again.

Important: When a form has been received (whether as partial or complete), a screen confirming that your data have been successfully submitted will be displayed. This page will also display all of your completed responses; please print a copy for your records. If you do not see the phrase "successfully submitted", your form has not been received and your data will not be saved.

Extra observations

"Extra" observations (i.e., observations a project chooses to conduct in addition to the required HRI-drawn sample) may be submitted, if the project wishes to do so. When submitting extra observations, please choose as an LSC ID any of the ID numbers beginning with "8" under the heading "EXTRA" in the LSC ID pull-down menu (while only three extra LSC ID's will appear in the pull-down menu at one time, new, sequentially-generated extra ID's will replace any previously submitted extra ID's every time a new form is begun).

Downloading data

Lead Evaluators may download their project's classroom observation protocol data from the Lead Evaluator section of HRI's LSC website.

For Assistance

E-mail Kristen Malzahn (lsc@horizon-research.com) at HRI if you have any questions about the Classroom Observation Protocol (or any other aspects of the core evaluation).