District or State Administrator Interview Guide

Spring 2001

Policy Context for Science Education and GLOBE

What are some of the major areas of focus or reform currently within science education in your district and state?

How long has this focus or reform been in place? What are some of the key factors—political or otherwise—that will determine the longevity of this reform?

What resources are provided by the district/state to support schools in meeting expectations for students in science education?

What have been some of the responses of schools and districts to the state's standards in science?

Have you been surprised by some of the effects of science education reforms currently underway? Has the state/district had to modify its policies in response to these effects?

How involved are local schools, parents, and community members in shaping policy in your district and state?

What strategies has the district/state adopted to match expectations for students in science with the district and state testing and accountability system?

At present, how well matched are the expectations and testing system?

Are there important science skills or knowledge that the state or district would like students to learn that are not currently being tested?

Preparation for GLOBE

How did you first learn about GLOBE?

Have you been involved in GLOBE training in your district or state? If so, how?

How is GLOBE training structured in this district/state? How well integrated is it with other district/state professional development efforts in science?

Are there any other opportunities supported by the state or district where GLOBE teachers can share ideas and continue to learn about the program?

Have there been opportunities after training for teachers to explore and structure collaborations with other GLOBE teachers (either in within their own schools or across the district/state)?

What kinds of new skills or knowledge have you observed teachers bringing back from GLOBE training?

GLOBE in the School

Approximately how many teachers are implementing GLOBE in your district/state? At what grade levels is GLOBE being implemented?

What factors shaped the district's or state's decision to support the widespread implementation of GLOBE?

What kinds of challenges have you faced in implementing GLOBE in this district/state, and what strategies have you adopted to address them?

Have parents and community members been involved in the district- or state-level implementation of GLOBE in any way?

How do you know or measure what students are learning from GLOBE? (prompt for sources of in-class assessment data, such as tests, performance tasks, GLOBE assessments, questioning of students, observation, tests of protocol mastery)

GLOBE in Relation to Standards

Does your district or state have content standards (statements of desired outcomes) or performance standards (examples of level of expected mastery) in science? What are some examples of these standards?

Which set of standards, district or state, is more significant in the way teachers design instruction at this school?

Would you say the emphasis is more on mastery of a few science concepts or knowledge of a broad number of science concepts?

How congruent is GLOBE with your district and/or local standards? How helpful do you believe the GLOBE activities and assessments are to ensuring students meet these standards?

Does your district or state use as part of its standards system indicators of whether a school has the resources necessary to enable students to meet the performance standards? If so, are there resources for meeting these program delivery standards provided by the district or state? Have GLOBE resources been provided or made available through this process?

What choices do teachers have with respect to meeting standards? (Prompt for choices in science topics covered, instructional sequences and materials used)

What responsibilities do principals have for ensuring students meet state or district standards? What consequences are there for principals and schools when students do not meet standards?

What strategies do you typically use at the district or state level to make sure you're meeting science standards? How have schools responded to these strategies?

Have you adapted GLOBE to meet standards in any way? If so, how?

What are your plans for GLOBE in the coming year? Do you see the use of GLOBE by teachers increasing, decreasing, or staying the same? Why?

Principal Interview Guide

Spring 2001

Policy Context for Science Education and GLOBE

What are some of the major areas of focus or reform currently within science education in your district and state?

How long has this focus or reform been in place? What are some of the key factors—political or otherwise—that will determine the longevity of this reform?

What resources are provided by your district or state to support teachers in meeting expectations for students in science education?

Are the district's or state's goals achievable for all students in your school?

Are there any unintended consequences of science education reforms currently underway that affect your job as principal?

How involved are principals in shaping policy in your district and state?

How well matched are expectations for students in science with the district and state testing and accountability system?

Are there skills students learn in GLOBE that you would expect to be associated with gains in test scores?

Are there skills students learn in GLOBE that aren't currently tested, but that are important to your goals for students in this school?

How do local or state testing impact how the implementation of programs like GLOBE in your school?

Preparation for GLOBE

How did you first learn about GLOBE?

Have you attended any part of GLOBE training with your teachers?

What kinds of new skills or knowledge have you observed teachers bringing back from GLOBE training?

Were there opportunities after training for teachers to explore and structure collaborations with other GLOBE teachers (either in your school or elsewhere)?

How have GLOBE teachers shared what they've learned from GLOBE training or from implementing GLOBE with other teachers in the school?

GLOBE in the School

How many teachers are implementing GLOBE in your school? At what grade levels is GLOBE being implemented?

What factors shaped when your school began to implement GLOBE?

What kinds of challenges have you faced in implementing GLOBE in this school, and what strategies have you adopted to address them?

Have parents and community members been involved in GLOBE in any way at this school?

How do you know or measure what students are learning from GLOBE? (prompt for sources of in-class assessment data, such as tests, performance tasks, GLOBE assessments, questioning of students, observation, tests of protocol mastery)

How much time do students spend studying science at different grade levels each week now? How much time did students spend studying science before you implemented GLOBE? (elementary schools only)

GLOBE in Relation to Standards

Does your district or state have content standards (statements of desired outcomes) or performance standards (examples of level of expected mastery) in science?

Which set of standards, district or state, is more significant in the way teachers design instruction at this school?

Would you say the emphasis is more on mastery of a few science concepts or knowledge of a broad number of science concepts?

How congruent is GLOBE with your district and/or local standards? How helpful are GLOBE activities and assessments to ensuring students in your school meet these standards?

Does your district or state use as part of its standards system indicators of whether a school has the resources necessary to enable students to meet the performance standards? If so, are there resources for meeting these program delivery standards provided by the district or state? Have GLOBE resources been provided or made available through this process?

What choices do teachers have with respect to meeting standards? (Prompt for choices in science topics covered, instructional sequences and materials used)

What responsibilities do principals have for ensuring students meet state or district standards? What consequences are there for principals and schools when students do not meet standards?

What strategies do you typically use to make sure you're meeting science standards? How have teachers responded to these strategies?

Have you adapted GLOBE to meet standards in any way? If so, how?

What are your plans for GLOBE in the coming year? Do you see the use of GLOBE by teachers increasing, decreasing, or staying the same? Why?

Teacher Interview Guide

Spring 2001

Policy Context for Science Education and GLOBE

What are some of the major areas of focus or reform currently within science education in your district and state?

How long has this focus or reform been in place? Based on your experience as a teacher, how long do you expect this focus to last?

What resources are provided by your district or state to support teachers in meeting expectations for students in science education?

Are the district's or state's goals achievable for your students? For all students?

Are there any unintended consequences of science education reforms currently underway that affect your teaching practice?

How involved are teachers in shaping policy in your district and state?

How well matched are expectations for students in science with the district and state testing and accountability system?

Are there skills students learn in GLOBE that you would expect to be associated with gains in test scores?

Do local or state testing impact how you implement GLOBE?

Preparation for GLOBE

How did you first learn about GLOBE?

Where did you attend GLOBE training? For how long?

Upon completion of training, what did you feel most prepared for in GLOBE? What did you feel least prepared for?

To what degree did the training help you to:

Teach GLOBE protocols across investigation areas?

Facilitate learning activities?

Help students interpret GLOBE data?

Structure investigations about GLOBE data?

Did you discuss in GLOBE training the relation of GLOBE to your district or state's standards?

Were there opportunities either during or after training to explore and structure collaborations with other GLOBE teachers (either in your school or elsewhere)?

Did GLOBE expand in any way your knowledge and understanding of any of the investigation areas covered in the training?

Did you learn anything significant about GLOBE implementation from sources outside the training?

Have you made any presentations about GLOBE made to groups outside the school or been a GLOBE trainer?

GLOBE in the School

How many teachers are implementing GLOBE in your school? At what grade levels is GLOBE being implemented?

If more than one GLOBE teacher: how has your school decided to distribute responsibility for implementing GLOBE and reporting data?

How long after training did you begin implementing GLOBE?

What factors shaped when you began to implement GLOBE?

Are there GLOBE trainers or more experienced GLOBE teachers in your school you can turn to for support or ideas?

What GLOBE equipment do you have at your school? How did you/the school acquire it?

Describe your study site(s). Where are they, and how often do you visit them?

What GLOBE investigation areas and learning activities have you implemented?

What GLOBE functions have you implemented with students? (prompt for data collection, data reporting, data analysis, use of visualization software, design of investigations)

How have you adapted GLOBE to student interests and experience? To different levels of student knowledge, understanding, and ability?

What strategies do you use to ensure students make links between GLOBE and other concepts studied in science to build their understanding of environmental science over time?

Do students in your class make a link between being an active GLOBE participant and being a good student in science?

How do you know or measure what students are learning from GLOBE? (prompt for sources of in-class assessment data, such as tests, performance tasks, GLOBE assessments, questioning of students, observation, tests of protocol mastery)

Do students use any self-assessment tools in GLOBE, such as journals or investigation logs/books?

How much time do students spend studying science each week now? How much time did students spend studying science before you implemented GLOBE? (elementary teachers only)

Are there any multi-grade/multi-school GLOBE activities in which students in your class participate?

GLOBE in Relation to Standards

Does your district or state have content standards (statements of desired outcomes) or performance standards (examples of level of expected mastery) in science?

Which set of standards, district or state, is more significant in the way teachers design instruction at this school?

Would you say the emphasis is more on mastery of a few science concepts or knowledge of a broad number of science concepts?

How congruent is GLOBE with your district and/or local standards? How helpful are GLOBE activities and assessments to ensuring your students meet these standards?

Does your district or state use as part of its standards system indicators of whether a school has the resources necessary to enable students to *meet the performance standards? If so, are there resources for meeting these program delivery standards provided by the district or state? Have GLOBE resources been provided or made available through this process?*

What choices do teachers have with respect to meeting standards? (Prompt for choices in science topics covered, instructional sequences and

What approach do you typically use to make sure you're meeting science standards?

Have you adapted GLOBE to meet standards in any way? If so, how?

What are your plans for GLOBE in the coming year? Do you see your use of GLOBE increasing, decreasing, or staying the same? Why?

Student Focus Group Guide

Spring 2001

Ask students individually for grade levels and to tell you what their favorite and least favorite thing about this school is. (Probe when more than one student suggests some element of the academic program is their favorite or least favorite aspect of school)

When you look back on your year so far, what do you think you'll remember from this year that you'll still be talking about in 2-3 years? (It could be anything, academic or social, that happened to students this year; probe when academic answers are given: Why will that be memorable)

How much time do you spend studying science each week now, both in class and outside of class?

Tell me about some of the kinds of things you've studied in science this year. Which were the most interesting subjects in science to study? Which were the least interesting subjects to study?

Did you do any interesting projects or investigations in science this year? Tell me about them.

When did you first start doing GLOBE?

Is GLOBE different from or similar to of other things you do in science? How so?

What sorts of things do you do in GLOBE?

What have you learned from GLOBE so far? Does your teacher test you ever on what you've learned in GLOBE?

Why do you think your teacher has you participate in GLOBE? Do you think that participating in GLOBE is a good way to meet your teacher's goal for you?

If you were a teacher, would you have your students participate in GLOBE? If so, why?

If you were to participate in GLOBE next year, what would you change about the kinds of things you're studying, the data your collecting, or how you examine the data you've collected?