

APPENDIX

**INTERVIEW PROTOCOL FOR LSC
PROJECT DIRECTORS**

**COMPARISON OF LSCs BASED ON
INTERVIEW TRANSCRIPTS**

INTERVIEW PROTOCOL FOR LSC PROJECT DIRECTORS

MAY, 1999

I. VISION OF SCIENCE TEACHING AND LEARNING

- 1) Can you talk about the key elements of the vision of elementary science teaching and learning that guides the work you are doing in your LSC project? In other words, what is your LSC working toward in terms of instruction and student science experiences?
- 2) Would you say that the vision of science teaching and learning that shapes your project is reflective of the national standards? If so, how?
- 3) What role does science inquiry have in your vision?
- 4) What are the key sources of your vision?
- 5) How has your project's vision of science teaching and learning evolved over the past several years? What has influenced the growth and evolution of your vision?

II. LEADERSHIP FOR SCIENCE REFORM

- 1) In our experience every elementary science reform effort needs strong and knowledgeable leadership, but we have also learned that often elementary science leadership is not always strong at the start of reform projects. Spend a few minutes talking about your project's (and district's) current leadership capacity. Consider all levels of leadership, from teachers, to your project staff, including your professional development staff, to the central administration of the district(s) with which your project work(s).
- 2) In your estimation what kinds of leadership knowledge and skills were lacking as your project began? (e.g., knowledge about science? knowledge about inquiry? knowledge about elementary students and child development? knowledge about good professional development design? vision of high quality, standards-based science teaching? other capacities?)
- 3) What kinds of strategies has your LSC used to develop your leadership's knowledge and skills at all levels? How successful have those strategies been?
- 4) In particular what sources of leadership development and training have been useful and most supportive to your project? Why, or why not?

III. PROFESSIONAL DEVELOPMENT APPROACH AND DESIGN

- 1) What are the key elements in your professional development design?
- 2) Over the last several years of your LSC project how has your approach to, or your thinking about the professional development program you offer changed and evolved?
- 3) In particular what were some of the challenges and issues that you have faced in recent years regarding the design of professional development in your project? How have you resolved them?
- 4) What is new in your professional development program? And why have you incorporated these new elements?
- 5) In particular how has your professional development design addressed issues of implementing standards-based curricula?
- 6) What resources (e.g., people programs, materials, approaches, etc.) have you used to support the improvement of your professional development program and its design? How have these resources been useful to you?

IV. CHALLENGES AND STRATEGIES

- 1) In summary what challenges do you still face in your project and what strategies are you employing to address them? In particular in the area of leadership development? In particular in the area of professional development design?

V. RECENT ACCOMPLISHMENTS

- 1) In summary, what recent accomplishments or achievements of your project stand out for you?
- 2) What are the most exciting and interesting shifts or developments that have occurred since your project began?
- 3) What outside sources of expertise, knowledge or support contributed to both the shifts and the accomplishments?

COMPARISON OF LSCs BASED ON INTERVIEW TRANSCRIPTS

Instructions: Please use this form and type in all comments and ratings directly into this file. Then save the document (in Word) and e-mail it back to us. (For safety sake, print out a copy of your completed form and save a copy on disk as well.)

For items that ask you to make a rating between 1 and 5, type your rating for each LSC project in the box provided. For each rating, use whatever you have learned or inferred to make your best judgment; please do write in "can't judge" or a similar comment. (If you absolutely have to, you may leave a rating blank but please try to make judgments for each question.) Also, please use only whole numbers (e.g., if it is difficult to decide between ratings of 2 or 3, choose one or the other; do not give a rating of 2.5). Finally, we would very much appreciate getting any comments from you that can help explain what you see as essential differences between the two interviews.

COMPARISON #: **INTERVIEW #s:**

REVIEWER'S NAME:

(For Inverness use)

I. THE LSC's VISION OF SCIENCE TEACHING AND LEARNING

- 1) In a few sentences please describe what you see as the major ways in which the two projects differ in their visions of science teaching and learning of the two projects.

2) In your opinion, how **thoughtful** is each project's vision of science teaching and learning?

1	2	3	4	5
Perfunctory or simplistic			Carefully thought through, coherent and cohesive	

Rating for
Project 1:

Rating for
Project 2:

Comments (optional):

3) In your opinion how **sophisticated** is each project's vision of science teaching and learning?

1	2	3	4	5
Naïve, inexperienced; perhaps politically correct, but not based on experience			Sophisticated and knowledgeable; developed from first hand experience	

Rating for
Project 1:

Rating for
Project 2:

Comments (optional):

4) In your opinion how reflective of the National Science Standards is each project's vision of science teaching and learning?

1	2	3	4	5
Not reflective of the National Standards, or pays them only lip service			Very reflective of the National Standards	
Rating for Project 1: <input type="text"/>			Rating for Project 2: <input type="text"/>	

Comments (optional):

5) What are the most important elements of the project's vision for science teaching and learning? For each LSC, list up to three elements ranked in order of their importance to the project's vision. (*For example, a vision of science teaching and learning may focus on equity, or systemic change, or inquiry, or science content., or*)

Project 1

- 1.
- 2.
- 3.

Project 2

- 1.
- 2.
- 3.

Comments (optional):

- 6) Overall, which project do you believe has the strongest vision for science teaching and learning?

Project:

(1 or 2)

II. THE LSC's VISION OF INQUIRY

1) What **priority** does inquiry hold in this project's vision of science education?

1	2	3	4	5
None, or a very low priority		One of several equally important priorities		Highest priority; central to the project's vision

Rating for Project 1:

Rating for Project 2:

Comments (optional):

2) To what degree, in your opinion, does this project have a **sophisticated and deep understanding** of inquiry?

1	2	3	4	5
Weak, naïve, or perfunctory understanding of inquiry		Some understanding of inquiry		Sophisticated, knowledgeable understanding of inquiry

Rating for Project 1:

Rating for Project 2:

Comments (optional):

3) In a few sentences, how would you describe the differences in the way that each project prioritizes and conceptualizes inquiry?

4) To what extent does the project's understanding of science inquiry show **evidence of growth and maturation** over the life of the project?

1	2	3	4	5
Little if any evidence that the project's understanding of inquiry has deepened over the life of the project		Some deepening of understanding		Considerable deepening and growing sophistication in understanding of inquiry over the life of the project

Rating for Project 1:

Rating for Project 2:

Comments (optional):

5) Who or what are the **most important influences on the growth and evolution of the project's vision of inquiry-based elementary science teaching and learning?** For each LSC, list up to three influences ranked in order of their importance for the project.

Project 1

- 1.
- 2.
- 3.

Project 2

- 1.
- 2.
- 3.

Comments (optional):

6) **Overall, which project do you feel has the deepest understanding of and commitment to inquiry?**

Project:

(1 or 2)

Comments:

III. LEADERSHIP FOR SCIENCE REFORM

Elementary science education reform requires leadership at all levels — principals, district administrators, district science specialists, teachers — by people who deeply understand good science teaching.

1) To what extent was the interview respondent **aware of the need for leadership at all levels** as well as **sophisticated in his or her thinking about the development of leadership capacity**?

1	2	3	4	5
Little if at all aware of leadership needs; very naïve in thinking about the development of leadership capacity			Very aware of leadership needs; sophisticated in thinking about the development of leadership capacity	

Rating for Project 1:

Rating for Project 2:

Comments (optional):

2) What are the **most important sources of leadership development and training** for each of the two LSCs? For each LSC, list up to three sources ranked in order of their importance for the project.

Project 1

- 1.
- 2.
- 3.

Project 2

- 1.
- 2.
- 3.

Comments (optional):

3) Overall, how would you rate the **quality of the sources and strategies used by this project to further leadership development?**

1	2	3	4	5
Sources and strategies are non-existent or of low quality		Sources and strategies are of average quality		Sources and strategies are of high quality; nationally recognized

Rating for Project 1:

Rating for Project 2:

Comments (optional):

4) To what extent would you say that **familiarity with and understanding of inquiry play an important role in this project's conceptualization of leadership development?**

1	2	3	4	5
Familiarity with and understanding of inquiry play little if any role in the project's conceptualization of leadership development				Inquiry plays a central role in the project's conceptualization of leadership development

Rating for Project 1:

Rating for Project 2:

Comments (optional):

5) What are the **major sources and resources that the project has used to support their leadership cadre in learning about inquiry?** For each LSC, list up to three resources ranked in order of their importance for the project.

Project 1

- 1.
- 2.
- 3.

Project 2

- 1.
- 2.
- 3.

Comments (optional):

6) Overall how would you rate **the quality of the sources and strategies used by this project to help the leaders of this LSC develop a sophisticated and thorough knowledge of inquiry?**

1	2	3	4	5
Sources and strategies used to help develop this LSC's leaders' knowledge of inquiry are of low quality			Sources and strategies used to help develop this LSC's leaders' knowledge of inquiry are of high quality; nationally recognized	

Rating for Project 1:

Rating for Project 2:

Comments (optional):

7) **Overall, which project do you feel has the deepest understanding of and commitment to leadership development?**

Project:

(1 or 2)

Comments:

IV. PROFESSIONAL DEVELOPMENT APPROACH AND DESIGN

1) To what extent was the interview respondent **thoughtful and sophisticated in his or her thinking about the design** of the LSC's professional development program?

1	2	3	4	5
Little if at all aware of important considerations in design of professional development programs		Somewhat aware and thoughtful in thinking about professional development design		Very thoughtful and sophisticated in thinking about the design of the LSC's professional development program

Rating for Project 1:

Rating for Project 2:

Comments (optional):

2) To what extent does the project show evidence of **growth and maturation in their thinking about professional development design** over the life of the project?

1	2	3	4	5
Little if any evidence that the project's thinking about professional development design has evolved		Some evidence of maturation in thinking about professional development design		Evidence of considerable deepening and growing sophistication in thinking about professional development design

Rating for Project 1:

Rating for Project 2:

Comments (optional):

3) To what extent has the professional development design of this project evolved to include a **higher priority on providing teachers with an understanding of science inquiry**?

1	2	3	4	5
The priority of inquiry in the project's professional development design has changed little if at all		Some evidence of the higher priority of inquiry		Over the life of the project, providing teachers with an understanding of inquiry has grown much more important

Rating for Project 1:

Rating for Project 2:

Comments (optional):

4) **Which outside sources or resources have contributed the most to the project's thinking about professional development design and strategies for improving their professional development program?** For each LSC, list up to three sources or resources ranked in order of their importance for the project.

Project 1

- 1.
- 2.
- 3.

Project 2

- 1.
- 2.
- 3.

Comments (optional):

5) What is the **overall quality of the sources and strategies that this project has drawn upon to improve and evolve the design of its professional development program?**

1	2	3	4	5
Low quality or non-existent		Average or mixed quality		High quality; nationally recognized

Rating for Project 1:

Rating for Project 2:

Comments (optional):

6) **Overall, which project do you feel has the deepest understanding of and commitment to professional development design?**

Project:

(1 or 2)

V. A SUMMARY OF THE CONTRIBUTIONS TO THE PROJECT BY OUTSIDE SOURCES

Which outside sources of expertise, knowledge or support have contributed most to each LSC's recent changes and accomplishments? For each LSC name the outside resource that most contributed to enhancing the project's overall capacity to provide high quality professional development in elementary science.

Project 1:

Project 2:

- 1) Please think about each of the sources of outside expertise that you listed above. Based on the projects' self-reporting and on inferences you have made from reading the transcripts, to what extent would you say that each resource has actually contributed to each project along each of the dimensions listed below? Please use the following scale to rate each source on each type of contribution (i.e., make one rating for each project in each row).

1	2	3	4	5
No contribution		Some contribution		A major positive contribution

TYPE OF CONTRIBUTION TO THE PROJECT	PROJECT 1	PROJECT 2
	The Major Source of Outside Assistance:	The Major Source of Outside Assistance:
Providing “start up” information on how to begin and implement an elementary science education project		
Providing help in initiating and supporting "mechanical usage" of kits and/or curricular materials		
Providing national connections and networking opportunities		
Assisting project leaders by providing them access to a high level of scientific expertise		
Establishing a long term, ongoing relationship with the project		
Providing the project with strategies and resources for making the case for inquiry-based science to parents, board members, etc.		
Providing flexible and varied opportunities for administrators, principals, science specialists and teachers to engage in appropriate levels and types of workshops		
Responding to project interests and needs		
Helping administrators, principals, science specialists and teachers to gain a deeper and more sophisticated understanding of inquiry		
Helping LSC project leaders to improve the design and quality of their professional development offerings		

Conveying a high quality and practical understanding of assessment issues and strategies in elementary science education		
Providing high quality and practical professional development activities and strategies that "translate" to local schools		
Other (please describe):		
Other (please describe):		

2) Overall, which project would you say has most benefited from sources of outside support?

Project:

(1 or 2)

Comments (optional):

Thank you for your assistance! Please save this file and then email your completed rating form as a Word Document to Barbara Heenan or Mark St. John by Friday August 6.

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