

Principal Investigator/Co-PI Interview Protocol

Personal Background

- 1) Please tell me about yourself.
 - a. What is your current role? How long have you had this position?
 - b. How long have you been involved with this ITEST project?

Project Background

- 2) Tell me a little bit about how the ITEST project came to be?
 - a. What was the motivation to apply for the award?
 - b. Was the project based on a previously funded ITEST project?
- 3) Tell me a little bit about the planning process?
 - a. Who was involved in the planning process? Probe for:
 - i. Key staff from your institution
 - ii. Key external partners
 - iii. Key stakeholders
 - b. If your project works with schools, was there a process for selecting schools to participate?
- 4) Is there additional funding for the project beyond the NSF ITEST funding?
 - a. What are those specific funding sources?
 - b. How have they been used?
- 5) What were the project's key goals as conceived at the beginning of the project?
 - a. Have those goals changed since the beginning of the project?
- 6) Were there any other external/contextual factors that had a large influence on the design of the project? Probe for:
 - a. Resources (or lack thereof) in the local community or schools
 - b. Local school district initiatives
 - c. Priorities of your institution
 - d. Priorities of other local institutions

Project Participants

- 7) Who participates in the program? Probe for:
 - a. Special characteristics of participants
 - b. Numbers of participants
- 8) How are participants recruited to the program?
 - a. Which methods are most successful (and how do you know)?
 - b. What do you think motivates participants to become involved?
- 9) Do most participants persist through the entire program?

Project Activities

- 10) Briefly describe what your project does.
 - a. Include activities and number of contact hours.
 - b. Is there any variation in the experience of the participants?
 - c. What technologies are used (or learned) by participants or by the project at large?
 - d. How are technologies used (e.g., as a learning tool, for data collection, for data sharing, to disseminate findings)
- 11) Which strategies have been implemented well and what has facilitated implementation?
- 12) Which strategies have been the most difficult to implement?
 - a. What is being/has been done to address these challenges?
- 13) How has the project evolved over time?
 - a. What changes were made? Why?
 - b. Have these changes been effective?
 - c. What changes do you see (if any) going forward?

Evaluation and Outcomes

- 14) Do you have any data on the effectiveness of your project?
- 15) Describe your external evaluation.
- 16) How are the evaluation results used?
- 17) What have been the key short-term and long-term outcomes for the teachers involved in your project?
 - a. How do you know?
 - b. Do outcomes vary based on group (e.g., cohort, grade level, school)
- 18) What have been the key outcomes for the students involved in your project?
 - a. How do you know?
 - b. Do outcomes vary based on group (e.g., cohort, grade level, school)?
- 19) What have been the key contributions and benefits to project staff (e.g., knowledge, relationships, connections and networks, etc.)
- 20) What have been the key contributions and benefits to the host institution (e.g., increased capacity, shifts in mission, etc.)?
 - a. What about for external partners involved in the project?

Sustainability and Scale-up

- 21) What are the current plans for the project when the grant period ends?
 - a. What resources are needed to continue the project?
 - b. If you plan to continue in some way, what is the plan for providing the resources to support the project?
- 22) Has the project model been implemented at other institutions or in other communities?
 - a. If yes: What part(s) of the model was implemented? Were there any challenges in scaling-up the model?
 - b. If no: What would it take to scale up and reach multiple institutions or communities? What do you see as the barriers to scaling up this type of work?

The ITEST Community

- 23) To what extent does your project interact with the LRC?
 - a. What do you see the most important role or roles of the LRC?
 - b. How would you describe your interactions with the LRC?
 - c. What have you gained, if anything, from the LRC?
- 24) To what extent do you work with, share advice, or otherwise interact with other ITEST projects?
 - a. What do you interact about? How often? Where?
 - b. What have you gained, if anything, from these interactions?
 - c. Do you know of any examples where insights you've shared about your project have helped to improve other projects?
- 25) To what extent are project staff contributing to the larger ITEST or STEM education community. Probe on:
 - a. Attending ITEST PI meetings
 - b. Participating in LRC working groups
 - c. Uploading instruments to the LRC
 - d. Publishing journal articles or presenting papers at conferences.
 - e. Creating products that can be of use to STEM educators

Closing Questions

- 26) What have been the major successes of your project? What about major challenges?
- 27) What are the key features and lessons learned from this project that might be of interest to others engaged in similar work with teachers or youth?
- 28) What is the likelihood that participating in this project will influence the STEM academic and career outcomes for youth participants, or students of teacher participants?