Supporting CSMP Inquiry: Webinar #1

SRI International
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Cycle of Investigation

- Conduct
- Rigorous Research
- Develop Logic Model
- Formulate Research Questions
- Conduct Exploratory Research
- Reflect
Supporting the Inquiry Process: Specify Logic Model and Research Questions

- Logic model – a visual representation of program which identifies:
  - Nature of particular program
  - Mechanisms by which the program is thought to work,
  - Desired outcomes
  - Mediating factors
Sample Logic Model

Develop parented curriculum
Deliver series of 8 interactive sessions
Facilitate support groups

Parents of 3-10 year olds

Parents increase knowledge of child dev
Parents better understand their own parenting style
Parents gain skills in new ways to parent
Parents gain confidence in their abilities

Parents identify appropriate actions to take
Parents use effective parenting practices

Reduced stress
Improved child-parent relations
Strong families

EVALUATION QUESTIONS

What amount of $ and time were invested?
How many sessions were held? How effectively? #, quality of support groups?
Who/how many attended/did not attend? Did they attend all sessions? Supports groups? Were they satisfied – why/why not?
To what extent did knowledge and skills increase? For whom? Why? What else happened?
To what extent did behaviors change? For whom? Why? What else happened?
To what extent is stress reduced? To what extent are relations improved?

INDICATORS

# Staff
$ used
# partners
# Sessions held
Certificate of completion
#,% attending per session
#,% demonstrating increased knowledge/skills
Additional outcomes
#,% demonstrating changes
Types of changes
#,% demonstrating improvements
Types of improvements
Exploratory Research

- Variety of methodologies
  - Interview, observation, survey

- Variety of types of data
  - Quantitative vs. qualitative
  - Breadth of coverage vs. depth

- Various topics
  - Basic descriptives (database/survey/interview)
  - What is the treatment (survey/interview/observation)
  - Participants perception (interview/survey)
## Supporting the Inquiry Process: Pairing research questions and corresponding approaches

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<tr>
<th>Research Questions</th>
<th>Research Approach/Design</th>
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| • Who participates in the CSMP?  
  • Who do participants serve?                                                      | • Database                                                                 |
| • What do participants receive (i.e., what is the treatment)?  
  • What is theory of change (i.e., how would the treatment effect student learning)? | • Annual or biennial survey                                                            |
| • What is the quality of the treatment?                                            | • Specification by site directors                                                   |
|                                                                                  | • Analysis of research findings                                                      |
|                                                                                  | • Exploratory cases                                                                   |
| • What is the impact of the treatment (on teacher knowledge, teacher practice, and student achievement)? | • Survey                                                                               |
|                                                                                  | • Exploratory cases                                                                   |
|                                                                                  | • Exploratory joint research for instrument development                              |
|                                                                                  | • Studies of program effects                                                          |
| • How can the CSMP improve its practice?                                          | • Studies of program effects: RCT, RD, ITS, Pre-test—Post-test                         |
|                                                                                  | • Iterative reflection on research findings                                           |
What is the difference between research and evaluation?
Why do I need to evaluate my project?
What is a control group, and do I need to have one?
What is a logic model?
How can a logic model help me?
How do I write good, researchable questions?
What is Human Subjects Approval?
Do I need to use consent forms?
How do I recruit participants?
How do we collect participant data?
What types of data should I be collecting?
How do I manage the data once I get it?
Why do I need to evaluate my project?

- **Internal**
  - Inform your decisions
  - Improve your program
- **External**
  - Inform key stakeholders
  - Make a case for outside funding
  - Contribute to general knowledge
What is the difference between research and evaluation?

- **Research**
  - Systematic investigation
  - Intent to generalize from sample to larger population

- **Evaluation**
  - Systematic investigation
  - Focus on internal situation
What is a control group and do I need one?

- A control group?
  - Participants that do not receive the treatment

- Do I need a control group?
  - Yes – if you want to be able to make causal statements (e.g., to be able to look at impact).
  - No – if you want to be able to describe the work or see if things are associated with one another (e.g., describing events or participants, looking at quality of program, even associations with outcomes)
What is a logic model?
- A visual representation of how an activity is intended to produce particular results.

How can a logic model help me?
- Clarify thinking
- Help communicate to stakeholders
- Identify appropriate measures
Writing good research questions

- Does the question interest you?
- Will it be of interest to others?
- Is it researchable?
- What type of information will I need to answer it?
- Can I access that information?
- Is the scope of this work reasonable?
What is Human Subjects Approval?
- Process through which researcher insures ethical treatment of human subjects
  - Process varies by institution
  - Most require processes for:
    - Informed consent
    - Maintaining confidentiality
    - Minimizing risks

Do I need to use consent forms?
- It depends but in general, yes.
How do I recruit participants.
  ◦ Establish a good network
  ◦ Inform them of expectation for participating in research
  ◦ Share benefits of participation
  ◦ Provide data for reflection

Make research a part of the work.
How do we collect participant data?
  ◦ Timing of data collection
  ◦ Track participants
  ◦ Use of a database
  ◦ District and school approval
What types of data should I be collecting?

- General data – collected by CSMP InfoSys
  - Demographic, teaching experience, credential information

- Data specific to your questions
  - Pre/post assessments
  - Student work samples
  - Videos
  - Classroom observation notes
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How do I manage the data once I get it?
- Simple spreadsheets
- Complex databases
- Data analysis systems
  - SPSS, SAS
  - Video analysis