Module #5. Tools Appendix

1. GATHER AND MERGE AVAILABLE DATA

Use the worksheet to below to consider whether and how to obtain available data about your group of interest:

Think back to your various considerations of sub-group analysis in previous modules (i.e., What factors or characteristics do you expect to predict variation in responses to questions?).

Are there any sub-groups you expect to affect your analysis for which you may not be able to gather accurate information through student self-reports?

If so, is this data likely available through a school or district data source?

❑ Yes ❑ No ❑ Not sure

If yes, who can you speak to about obtaining this data set?

If you are not sure, who can you talk to who is more familiar with the process of obtaining data in your district?

2. PREPARE SURVEY DATA FOR ANALYSIS

Blank Codebook Template

Variable	Item	0	1	2	3	4	5

3. PREPARE QUALITATIVE DATA FOR ANALYSIS

Protocol for preparing data for quantitative analysis

Step	Description		✓
1	Create a row for each participant.		
	1.1	If data has been anonymized, input the identifying number or other descriptor of the participant, rather than his/her name.	
2	Create columns for relevant sub-group identifiers (assuming you have already identified sub-groups relevant to analysis).		
	2.1	If you have not already considered the sub-groups you expect to be relevant to your example, ask yourself: When you think about the range of responses you expect to receive, what factors or characteristics do you think will predict differences in answers? Create columns for each of these factors or characteristics and include each student's information.	
3	Create columns for each code or sub-code.		
4	Input frequency or proportion of each code or sub-code for each student.		

4. GET TO KNOW YOUR DATA THROUGH DESCRIPTIVE STATISTICS, INCLUDING SUB-GROUP ANALYSIS

APPLICATION TO YOUR SCHOOL: PROTOCOL FOR ANALYZING DATA THROUGH DESCRIPTIVE STATISTICS

Step		Description	✓
1		Check the frequencies of each response to each item.	
	1.1	Questions to consider: • Consider your research question. Do the frequencies provide any insights with respect to your research question and school design? • Are there any items with surprising response distributions (e.g., highly skewed in one direction or the other)? What are they? Why do you think responses are distributed this way?	
2		Examine whether frequencies of each response vary across sub-groups.	
	2.1	Based on your work in previous steps, identify the sub-groups you expect to be relevant to your analysis.	
	2.2	Identify the questions for which you expect responses to vary by sub-group.	
	2.3	Examine responses to these questions by sub-group.	
	2.4	Questions to consider: • How do distributions change from their overall distribution when they are broken out by sub-group? Does this change your interpretation of the data from Step 1 above? • What insights do the distributions broken out by sub-group provide into your research question and school design? • Are there any distributions that surprise you? What are they? Why do you think responses are distributed this way?	
3		Find means of responses for each question or item.	
	3.1	Questions to consider: • Consider your research question. Do the means provide any insights with respect to your research question and school design? • Are there any items with surprising means? What are they? How are responses distributed for these items?	
4		Compare means across sub-groups.	
	4.1	Based on your work in previous steps, identify the sub-groups you expect to be relevant to your analysis.	
	4.2	Identify the questions for which you expect means to vary by sub-group.	
	4.3	Examine means for these questions by sub-group.	
	4.4	Questions to consider: • How do means change from their overall mean when they are broken out by sub-group? Does this change your interpretation of the data? • What insights do the means broken out by sub-group provide into your research question and school design? • Are there any means that surprise you? What are they? How are responses distributed for these items?	
5		Consider creating additional sub-groups from available data, if applicable.	

5. EXAMINE RELATIONSHIPS THROUGH CORRELATIONS

Use this worksheet to reflect on correlations between variables in your data set. Consider the variables you expect to be correlated. List them here, calculate their correlations, and then reflect on your findings:

Variable 1	Variable 2	Correlation	Strength of Correlation	What does this correlation tell you in relation to your research question?
			❑ Weak ❑ Moderate ❑ Strong	
			❑ Weak ❑ Moderate ❑ Strong	
			❑ Weak ❑ Moderate ❑ Strong	
			❑ Weak ❑ Moderate ❑ Strong	
			❑ Weak ❑ Moderate ❑ Strong	
			❑ Weak ❑ Moderate ❑ Strong	
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			❑ Weak ❑ Moderate ❑ Strong	