

# Bacteriophages Bringing Research into the Classroom – Brandl, et al.

## Appendix F. Teacher Research Plan Evaluation Rubric



### Rubric for Reviewing Teachers' Research Plans

Teacher's Name \_\_\_\_\_ Grade (s) \_\_\_\_\_

Content area (s)/Topic \_\_\_\_\_

Project Components	Indicate presence or absence of components
<p><b>Research question</b></p> <p>Includes a testable research question</p> <ul style="list-style-type: none"> <li>○ Has variables</li> <li>○ identifies subjects</li> <li>○ Identifies assumptions</li> </ul>	
<p><b>Hypothesis</b></p> <p>States the research and null/alternative hypotheses</p>	
<p><b>Research Methods</b></p> <p>Describes the research method(s)</p>	
<p>Describes research subject</p> <ul style="list-style-type: none"> <li>○ Common and scientific name</li> <li>○ Brief description of subject</li> </ul> <p>OR, Describes research system/concept</p> <ul style="list-style-type: none"> <li>○ Describes why it is of interest</li> </ul>	
<p>States sampling method</p> <ul style="list-style-type: none"> <li>○ Type, number, location, time of data collection</li> <li>○ Randomization technique</li> <li>○ Controls</li> </ul>	
States recording method	
Includes a plan for summarizing data	
<p>Includes a plan for analysis</p> <ul style="list-style-type: none"> <li>○ Describes (conceptually) comparisons/relationships/ characteristics</li> </ul>	

<b>Timeline</b> Creates a timeline for project completion	
<b>References</b> Includes references, bibliography suggested resources	
<b>Demonstrates connections to science content learned in BRIC training e.g.:</b> <ul style="list-style-type: none"><li>○ Bacteriophages/phage biology</li><li>○ Microbiology/mycobacteria</li><li>○ Microbes</li><li>○ Viruses</li><li>○ Bacteria/bacterial evolution</li><li>○ Antibiotic resistance</li><li>○ Genetic characterization</li></ul>	

**Additional Notes:**