**Appendix**

Developed by researchers at the University of Colorado at Boulder and funded by the National Science Foundation, the URSSA (2009) is a validated online survey instrument used to assess undergraduate research student outcomes. The following modified version of the URSSA was used to collect data for the current study.

**The following statements were presented with a 5-point Likert scale of *no gain*, *a little gain*, *moderate gain*, *good gain*, *great gain*, or *not applicable*.**

1. How much did you GAIN in the following areas as a result of your near-peer research experience? [Construct: Thinking and working like a scientist]
   1. Analyzing data for patterns.
   2. Figuring out the next step in a research project.
   3. Problem-solving in general.
   4. Formulating a research question that could be answered with data.
   5. Identifying limitations of research methods and designs.
   6. *Understanding the connections among scientific disciplines.*
2. How much did you GAIN in the following areas as a result of the near-peer research experience? [Construct: Personal gains]
   1. Confidence in my ability to contribute to science.
   2. *Comfort in discussing scientific concepts with others.*
   3. Comfort in working collaboratively with others.
   4. Confidence in my ability to do well in future science courses.
   5. Ability to work independently.
   6. Developing patience with the slow pace of research.
3. How much did you GAIN in the following areas as a result of the near-peer research experience? [Construct: Skill gains]
   1. Writing scientific reports or papers.
   2. Making oral presentations.
   3. Keeping a detailed lab notebook.
   4. Conducting observations in the lab or field.
   5. Using statistics to analyze data.
   6. *Understanding journal articles.*
   7. Conducting database or internet searches.
   8. Managing my time.

**The following statements were presented with a 5-point Likert scale of *none*, *a little*, *some*, *a fair amount*, or *a great deal*.**

1. During your near-peer research experience HOW MUCH did you? [Construct: Feelings of inclusion]
   1. Engage in real-world science research.
   2. Feel like a scientist.
   3. Feel responsible for the project.
   4. *Feel part of the scientific community.*

**The following statements were presented with a 4-point Likert scale of *poor*, *fair*, *good*, *excellent*, or *not applicable*.** [Construct: Research experience quality]

1. My working relationship with my research group members.
2. The amount of time I spent doing meaningful research.
3. The amount of time I spent with teaching assistants and faculty.
4. *The near-peer research experience, overall.*

*Please comment on any of these aspects*. [open-ended Question 1 of 5]

**The following statements were presented with a 5-point Likert scale of *not more likely*, *a little more likely*, *somewhat more likely*, *much more likely*, *extremely more likely*, or *not applicable.***

1. Compared to your intentions BEFORE doing research, HOW LIKELY ARE YOU NOW to: [Construct: Interests]
   1. *Enroll in a graduate program in science?*
   2. *Pursue certification as a teacher?*
2. *How did your near-peer research experience influence your thinking about future career and graduate school plans? Please explain.* [open-ended Question 2 of 5]
3. *Did you make other gains from doing research that we didn’t mention? If so, please briefly describe these.* [open-ended Question 3 of 5]

**The following statements were presented with a 4-point Likert scale *of very dissatisfied*, *somewhat dissatisfied*, *somewhat satisfied*, *very satisfied*, or *not applicable*.**

1. How satisfied were you with the following aspects of the near-peer research experience? [Construct: Peer support]
   1. The process of choosing a research project.
   2. Lab or field equipment.
   3. Support and guidance from instructor and teaching assistants.
   4. *Support and guidance from other research group members.*
   5. Research group meetings.
2. What *would have made your near-peer research experience better?* [open-ended Question 4 of 5]
3. *What would improve the near-peer program, overall?* [open-ended Question 5 of 5]
4. *In what semester were you enrolled? [demographic Question 1 of 2]*
5. *In which class were you enrolled? [demographic Question 2 of 2]*