

Mean Likert Responses to the Confidence in the Use of Classroom Technology, Teaching Strategies, Community Resources, and Field-based Investigations as a Function of Pre and Post Participation in the Workshop.

To what extent have you have confidence in using the following types of technology in and/or from classroom instruction?

| | <u>Pre</u> | <u>Post</u> | <u>t-value</u> | <u>p-level</u> |
|--|------------|-------------|----------------|----------------|
| Water quality sampling kits | 3.1 | 4.4 | 4.8 | .000 |
| Water study data probes | 2.8 | 3.2 | 2.5 | .03 |
| Internet websites for research and support materials | 4.1 | 4.4 | 1.6 | .14 |
| Microscopes | 3.6 | 3.5 | .51 | ns |
| Digital camera | 3.7 | 3.9 | 1.0 | ns |
| GPS | 2.1 | 3.6 | 4.4 | .001 |

Rate your confidence in the:

| | <u>Pre</u> | <u>Post</u> | <u>t-value</u> | <u>p-level</u> |
|---|------------|-------------|----------------|----------------|
| Use hands-on instructional strategies | 3.9 | 4.3 | 3.0 | .01 |
| Use inquiry-based teaching strategies | 3.6 | 4.0 | 3.1 | .008 |
| Teaching gender and minority equity | 3.2 | 3.4 | .62 | ns |
| Integrating the sciences in teaching | 3.6 | 3.92 | 1.3 | ns |
| Integrating science as a subject with other subject areas | 3.4 | 3.7 | 1.3 | ns |

Rate your confidence in the use the following community resources in your teaching:

| | <u>Pre</u> | <u>Post</u> | <u>t-value</u> | <u>p-level</u> |
|--|------------|-------------|----------------|----------------|
| Guest speakers | 3.1 | 3.6 | 1.7 | ns |
| Natural environment field sites related to watershed studies | 2.7 | 3.4 | 2.6 | .02 |
| Field trips to watershed related community resources sites | 2.6 | 3.6 | 3.1 | .009 |

Rate your confidence in the use of the following types of field-based investigations in your teaching:

| | <u>Pre</u> | <u>Post</u> | <u>t-value</u> | <u>p-level</u> |
|-------------------------|------------|-------------|----------------|----------------|
| Water chemistry | 2.9 | 4.6 | 6.6 | .000 |
| Macroinvertebrate study | 2.8 | 3.9 | 6.2 | .000 |
| Habitat assessment | 2.8 | 3.7 | 4.0 | .002 |
| Fish Study | 2.4 | 3.0 | 1.9 | .08 |
| Plankton Collection | 2.3 | 3.9 | 6.8 | .000 |
| Stream Flow Rate | 2.6 | 3.8 | 5.2 | .000 |

Rate your confidence in the teaching:

| | <u>Pre</u> | <u>Post</u> | <u>t-value</u> | <u>p-level</u> |
|---|------------|-------------|----------------|----------------|
| About watershed topics | 2.7 | 3.9 | 6.5 | .000 |
| About connections between science and real life | 3.5 | 4.2 | 3.8 | .002 |
| Connections between science and societal issues | 3.3 | 4.0 | 3.3 | .006 |
| Connections between science and science-related careers | 3.3 | 4.1 | 3.3 | .006 |