



HISTORY

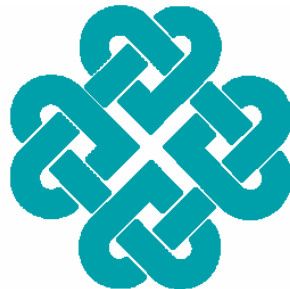
in the Heartland

EXPLORE HISTORY

Summary Evaluation Report for May 12, 2008 Seminar: “Ancient Ohio and the Newark Earthworks”

Prepared by

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Introduction

Thirty four teachers participated in the May 12 Explore History Seminar. Seminar activities included:

- A presentation by Dr. Brad Lepper, Curator of Archaeology, of Ohio Historical Society, on the Newark Earthworks.
- A primary source activity presented and led by Betsy Hedler. The activity focused on analyzing a set of army receipts for provisions provided to Native Americans.

1. Perceived Success of Seminar in Meeting Learning Objectives

Participants were asked to rate how successful the May seminar, “Ancient Ohio and the Newark Earthworks”, was in meeting the following three learning objectives. 34 participants responded to this item. The percentage and number of responses for each response category are bulleted below each objective:

How successful was the seminar in covering the Newark Earthworks State Memorial?

- 85% said mostly successful
- 15% said somewhat successful

How successful was the seminar in covering the Native American Histories?

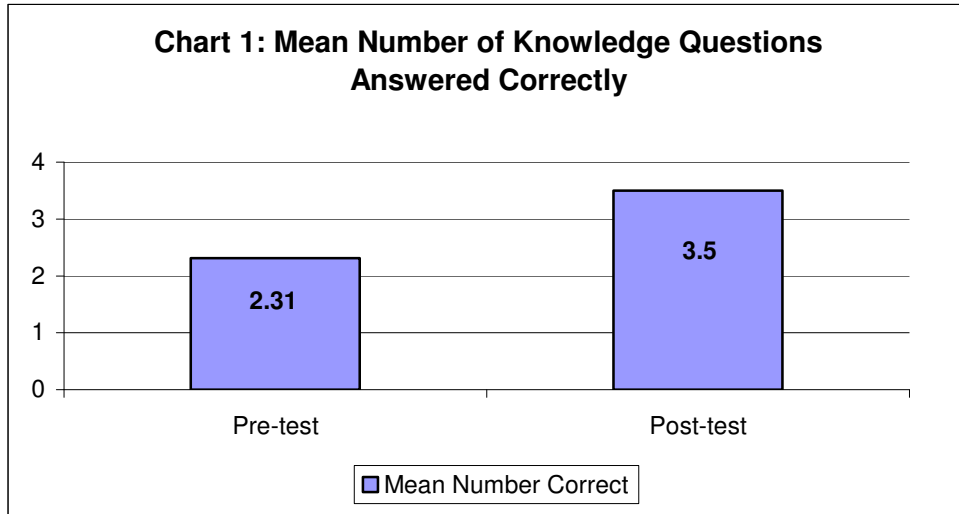
- 49% said mostly successful
- 39% said somewhat successful
- 12% said not very successful

How successful was the seminar in covering the process of settling the North American continent?

- 20% said mostly successful
- 50% said somewhat successful
- 27% said not very successful
- 3% said not at all successful

2. Knowledge of Ancient Ohio and the Newark Earthworks

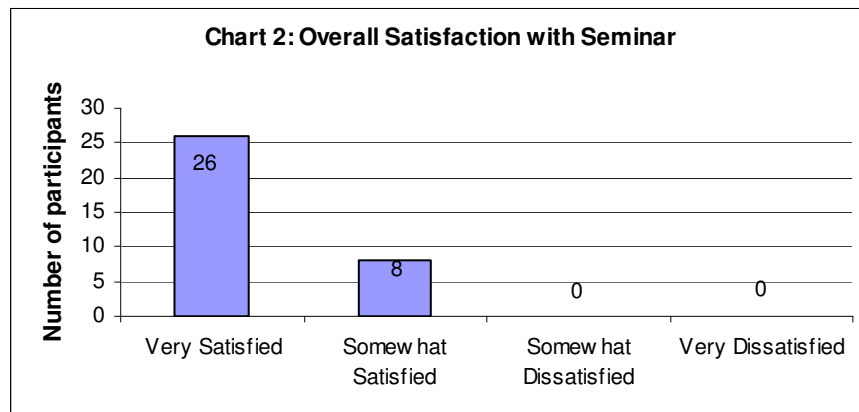
Participants were asked eight knowledge questions at pre- and post-test that were developed for the seminar content area by Explore History staff. These questions were designed to measure short-term changes in participants' content knowledge due to the seminar presentation and readings. Chart 1 presents these data in graphical format.



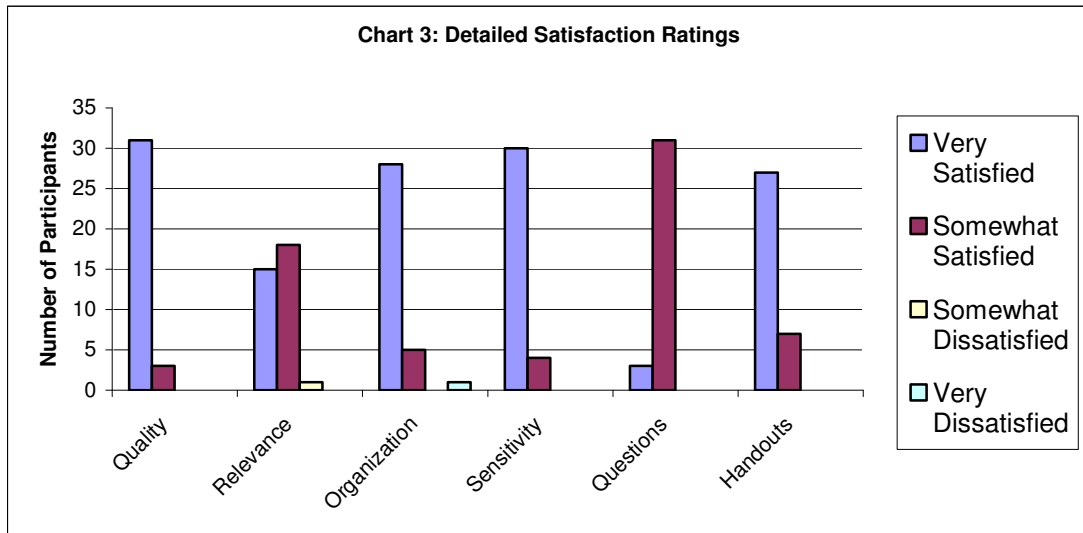
At pre-test, an average of 2.31 of the eight knowledge questions were answered correctly. At post-test, the average number of correct answers in response to the same knowledge questions increased to 3.5. A paired-sample t-test showed that this increase in content knowledge was statistically significant ($t = -4.794$, $sig = .000$ (two-tailed), $df = 21$). From this, one can conclude, the change in knowledge was likely not due to chance. The specific test items and the numbers of each item answered right, wrong, or missing at pre- and post-test are included on pages 9-10.

3. Participant Satisfaction Ratings

Participating teachers were asked to rate their overall satisfaction with the seminar. Of the 34 teachers who responded to this item, 76.5% indicated that they were "very satisfied" with the seminar, while 23.5% indicated that they were "somewhat satisfied." Chart 2 (below) presents this data in graphical format.



The seminar participants also were asked to provide detailed satisfaction ratings for the following aspects of the seminar. Chart 3 presents participants' ratings for each of these aspects of the seminar.



- **Quality of information:** 91% of the participants reported that they were “very satisfied” with the quality of the information presented in the seminar and 9% percent reported that they were “somewhat satisfied” in this area.
- **Relevance of information to participants’ work:** 44% of the participants reported that they were “very satisfied” with the relevance of the information to their work and 53% percent reported that they were “somewhat satisfied” in this area. One participant reported being “somewhat dissatisfied” with the relevance of the information presented in the seminar.
- **Organization of the seminar:** 82% of the participants reported that they were “very satisfied” with the organization of the seminar and 15% percent reported that they were “somewhat satisfied” in this area. One participants reported that s/he was “very dissatisfied” with the organization of the seminar.
- **Sensitivity of instructor to participants:** 88% of the participants reported that they were “very satisfied” with the sensitivity of the instructor to them and their needs and 12% reported that they were “somewhat satisfied” in this area.
- **Opportunity to ask questions:** 91% of the participants reported that they were “very satisfied” with the opportunity they had to ask questions and three participants reported that they were “somewhat satisfied” in this area.
- **Seminar materials:** 79% of the participants reported that they were “very satisfied” with the seminar materials and 21% percent reported that they were “somewhat satisfied” in this area. Three participants reported being “somewhat dissatisfied” in this area.

4a. What were the *most helpful* features of the seminar?

The seminar participants were asked to list the most helpful features of the May 12 seminar. Table 1 summarizes the teachers' comments for this question. The actual comments of participants are listed under each of the categories below. It should be noted that some of the comments by participants included more than one key idea. Some comments were repeated more than once; those comments are listed once in the table below with the number of occurrences in parentheses following the comment.

Table 1: Most Helpful Features of the "Ancient Ohio and the Newark Earthworks" seminar

<i>Materials (9)</i>
• Really enjoyed materials (3)
• I appreciated the picture books (2)
• Resource CD's and student level picture books are the most helpful resources (2)
• All reading materials and book. CD's with website
• Books received today looked good
<i>Presenter (12)</i>
• I enjoyed the speaker (3)
• Lecture
• Opportunity to question Dr. Lepper
• Presenter was very organized and had a great deal of knowledge and excitement
• Speaker did a great job explaining the reasons for the mounds and their significance to us. Best so far!
<i>Tour (15)</i>
• Being able to visit the mounds (4)
• Visiting the earthworks (4)
• Interesting information about the earthworks that I didn't know
• Field trip was great as were the slideshows/computer generated designs
• Enjoyed the tour and actually seeing the sites
• Seeing the site in person with a local authority
<i>Discussion (2)</i>
• The pre-tour discussion, followed by the tour (2)
• Enjoyed the discussion before and after the field trip to tie the info together
<i>Miscellaneous (2)</i>
• Good seminar! Enjoyed the walking and exploring
• Primary source activities

4b. What were the *least* helpful features of the seminar?

Participants were asked to rate the least helpful features of the May 12 seminar. Table 2 (below) summarizes teachers' comments for this question.

Table 2: Least Helpful Features of the "Ancient Ohio and the Newark Earthworks" seminar

<i>Primary source activity (3)</i>
<ul style="list-style-type: none"> • Primary source activity would be too difficult to use with my grade level
<i>Miscellaneous (7)</i>
<ul style="list-style-type: none"> • Weather (2) • Seminar was good, but I don't teach about these Indian groups directly • Hands on activity was interesting, but harder to adapt to K-3 • Too much to read, could only get through the Ohio Archaeology book • Group time at the end • Ice breaker

5. How could this seminar be improved?

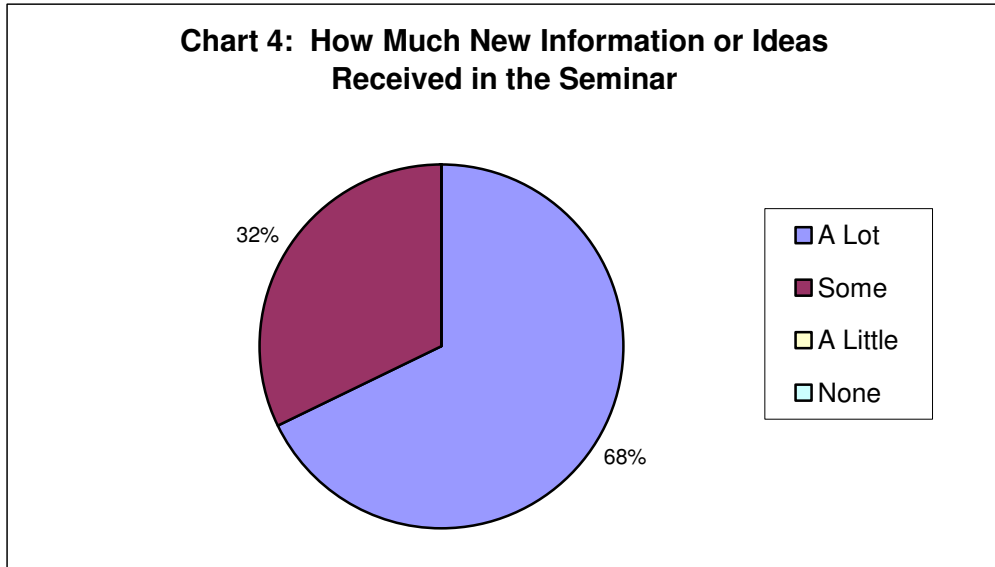
Seminar participants were asked to identify ways that the seminar could be improved. Table 3 (below) summarizes participants' comments for this question.

Table 3: Participant Suggestions to Improve Future Explore History Seminars

<i>Time (4)</i>
<ul style="list-style-type: none"> • More time for discussion and viewing the earthworks • More time for Modern-Indian tribes (at time of settlement and conquest) • More ideas for the classroom. Activities that relate to the earthworks • More time to work with group for summer project
<i>Grade Specific (2)</i>
<ul style="list-style-type: none"> • Thought it was very good just not relevant to what I actually am required to teach • Include activities geared toward primary as well as intermediate/middle/high school
<i>Miscellaneous (5)</i>
<ul style="list-style-type: none"> • More items available for purchase at store and MasterCard/Visa • Giving driving time estimates would be helpful • Maybe not the seminar, but it would have been much more impressive to have seen the octagon from a tall observation tower like they have for the Civil War battlefields in Gettysburg, PA • More focus on reading (too much) • More local artifacts and hands on experience

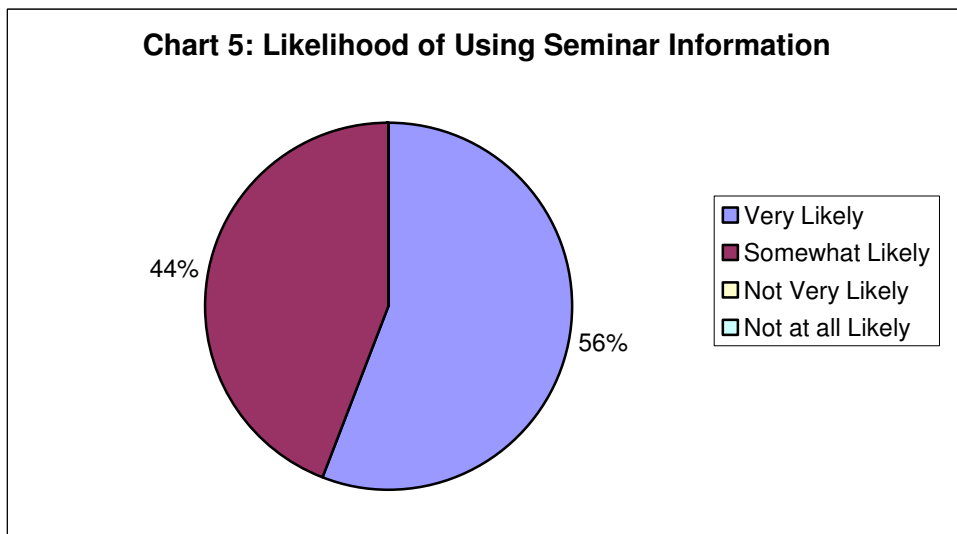
6. How much new information or ideas did you receive in the workshop?

The seminar participants were asked to rate the amount of new information or ideas that they received in the seminar. The results are presented in Chart 4.



7. How likely are you to use the information or ideas that you received in the workshop?

Seminar participants also were asked to rate the likelihood that they would use the information or ideas that they received in the seminar. The results are presented in Chart 5.



8. Additional comments and suggestions.

Finally, participants were asked to list any additional comments or suggestions they had related to the “Ancient Ohio and the Newark Earthworks” seminar. 16 of the 34 participants provided general comments and those comments follow below in Table 4.

Table 4: Additional comments and suggestions

<i>Positive (5)</i>
<ul style="list-style-type: none"> Newark OSU is a very beautiful campus
<ul style="list-style-type: none"> Thank you for the great books and resources
<ul style="list-style-type: none"> I was truly pleased with this seminar
<ul style="list-style-type: none"> Participants might have benefited from viewing the virtual exploration of the Newark Earthworks CD-ROM for use in their classroom (this was shown at the great circle of mound Center)
<ul style="list-style-type: none"> This seminar was very useful and will benefit students in my class. It will provide materials essential to planning instruction on the topic
<i>Miscellaneous (4)</i>
<ul style="list-style-type: none"> I'm still concerned about the assignment for the summer institute. I still don't have a clear picture of what is expected
<ul style="list-style-type: none"> Might mention lots of travel (gas prices) and walking
<ul style="list-style-type: none"> Appears to be much local primary sources we did not see
<ul style="list-style-type: none"> Visiting the serpent mound or fort ancient would also be interesting
<i>Presenter (3)</i>
<ul style="list-style-type: none"> Very informative seminar. I enjoyed the quality info given by the presenter
<ul style="list-style-type: none"> Professor was great. He made the info easy to understand and he was very friendly
<ul style="list-style-type: none"> Dr. Lepper was an excellent speaker. He summarized a vast amount of information and made it usable to teachers
<i>Tour (2)</i>
<ul style="list-style-type: none"> Loved the tour! I've never been to the sites before. Very interesting info
<ul style="list-style-type: none"> The idea that there could've been written records for prehistoric people that didn't survive was a new and “novel” concept
<i>Grade Specific (2)</i>
<ul style="list-style-type: none"> Thanks for all of your efforts! Things are really well organized. My only suggestion is to include an elementary person as one of your master teachers
<ul style="list-style-type: none"> Great seminar. My third graders are very interested in Native American culture

Appendix A: Pre and Post Test Knowledge Questions, Right, Wrong, and Missing

Table 5. Pre- and Post-test Knowledge

<i>Question</i>	<i>Pre-Test</i>			<i>Post-Test</i>			<i>Change Score</i>
	<i>Right</i>	<i>Wrong</i>	<i>Missing</i>	<i>Right</i>	<i>Wrong</i>	<i>Missing</i>	
1. The Cahokia site featured several Woodhenges, which were?	22	11	2	30	4	1	+8
2. The Hopewell interaction sphere refers to?	21	12	2	19	15	1	-2
3. In the Late Woodland period Native Americans adopted the bow and arrow, a new technology that had numerous advantages over the older spear-throwing tool, the atlatl, including which of the following, except?	8	25	2	14	20	1	+6
4. Late prehistoric Indian communities such as SunWatch Village developed social hierarchy and more inequality than existed in Hopewell times for all of the following reasons except?	8	25	2	20	14	1	+12
5. By this observation, Cutler proved which of the following?	6	27	2	10	24	1	+4
6. Place the following in chronological order	2	31	2	6	28	1	+4
7. As a ritual site, the Newark Earthworks likely integrated the Hopewell spiritual world in all of the following except?	10	23	2	20	14	1	+10

Pre/Post Test Items

1. The Cahokia site featured several Woodhenges, which were:

- Wooden walls in the form of an “L” that symbolized a turning point in ceremonial activity.
- A ceremonial circle formed by poles, aligned with the moon, to which the Cahokia people attached war trophies.
- Wooden ceremonial structures in which water was poured on hot stones to produce steam for purification rituals.
- Wooden poles arranged in a circle that defined ceremonial space and contained solar alignments.

2. The Hopewell interaction sphere refers to . . .

- The transition from Hopewell to Fort Ancient cultures.
- The connections between Hopewell sites in what is now Newark and sites in what is now Chillicothe, as illustrated by the Great Hopewell Road.
- The geographical area in which Hopewell cultural reach can be measured in terms of material remains, such as copper from the Upper Great Lakes and mica from the Carolinas. It may or may not have been a trading network.
- The interior of the Great Circle.

3. In the Late Woodland period Native Americans adopted the bow and arrow, a new technology that had numerous advantages over the older spear-throwing tool, the atlatl, including which of the following, except:

- Bows shot arrows faster than atlatls.
- An arrow can be shot while kneeling, standing, or lying down.
- An arrow shot from a bow was powerful enough to kill a game animal almost immediately.
- A hunter could fire more arrows more quickly than he could throw atlatl darts.

4. Late Prehistoric Indian communities such as SunWatch Village developed social hierarchy and more inequality than existed in Hopewell times for all of the following reasons except:

- Building large geometric earthworks with complex lunar alignments required a strong leader to plan the projects and mobilize the labor needed for construction.
- Increasing competition between groups for farmland and hunting grounds led to violent confrontations, requiring a leader to organize defensive actions.
- The need to produce a crop surplus to sustain a large, sedentary village through the winter required a leader to organize the necessary labor and to distribute the food.
- The sedentary way of life led to increasing social friction between people forced to live together for long periods of time, requiring a respected authority to resolve disputes.

5. In 1778, Manasseh Cutler counted the growth rings of a felled tree that had grown on a mound in Marietta and reported: “Attributing the age of the present growth [of trees] to be about 450 years, and that it has been preceded by one of equal size and age, which [was] probably not the first, the [earth]works have been deserted more than 900 years.”

By this observation, Cutler proved which of the following:

- The mounds were built by Toltec Indians.
- The mounds were not built as a fort by Spanish explorer Hernando De Soto
- The mounds were constructed by Scythian immigrants from northern Asia as defensive works.
- The mounds were constructed in AD 800.

6. Place the following in chronological order

1. European diseases infect the American Indians in the Ohio country
2. European trade goods reach the Ohio Valley.
3. European explorers enter the Ohio Valley.
4. Iroquois warriors defeat the Fire Nation Confederacy and drive them from the shores of Lake Erie.

- 4, 3, 1, 2
- 1, 2, 4, 3
- 2, 4, 1, 3
- 2, 1, 4, 3

7. As a ritual site, the Newark Earthworks likely integrated the Hopewell spiritual world in all of the following except:

- The World of the Sky through the complex lunar alignments.
- The World of the Animals through effigy mounds and Bear-Human figurines.
- The World of the Soil through the construction method used on the earthworks and the physical presence of the works themselves.
- The World of Water through the entrances located at surrounding waterways and the interior moat of the Great Circle.