Title
Exploring Math, Science, History and Language Arts through Lakota Art.

Grade Level
Adult learner. K-12 professional development.

Theme
Lakota art.

Duration
6 hours.

Goal
Participants will increase their understanding of Lakota art by exploring its relationship to math, science, history, and language arts.

Objectives
Participants will be able to
1. Identify the forms and uses of parfleche containers.
2. Identify the geometry in traditional designs.
3. Identify traditional materials and paints.
4. Demonstrate a basic understanding of the history of parfleche containers.

South Dakota Standards
N/A.

Cultural Concept
Lakota art.

Cultural Background
Wolakota is simply defined as peace. However, its meaning is far more extensive. It establishes a protocol that creates a safe and respectful place that allows equal participation and an equal voice.

Contemporary education compartmentalizes and modularizes curriculum. Lesson plans are specific and typically exclusive to a particular subject area such as math, science, history, or language arts. This workshop will explore the artistic aspect of Lakota culture and its relationship to a variety of subject areas. By researching and creating a parfleche box, participants will utilize math, science, history, and language arts skills. Each skill will have equal participation and an equal voice—wolakota.

Student Activities
Introductions—15 minutes
Workshop overview—15 minutes
Breaks and lunch—45 minutes
Student activity—4 hour, 30 minutes
Evaluation—15 minutes

1. Presenter led presentation and discussion on the history of Lakota art based on the following resources:


2. Presenter led presentation and discussion on the history of American Indian parfleche based on the following resources:

3. Participants will trace, cut, and punch rawhide.

4. Presenter led discussion on the history of Lakota geometric designs.

5. Presenter led discussion on the geometry of design including mathematics of the properties, measurement, and relationships of points, lines, and angles.

6. Participants will create a design based on Lakota traditional colors and geometric patterns.

7. Presenter led discussion on the science of traditional paints.

8. Participants will paint and assemble parfleche container.

9. Participants will present their work and explain the design and colors.

10. Participant led discussion of how this activity increased their knowledge of Lakota art and how they can use this activity in their classroom.

11. Wrap-up and evaluation (see attached evaluations form)—15 minutes.

Resources
Participant activity aids:
14” X 14” rawhide, pencil, parfleche pattern, ruler, scissors, hole punch, dry paints, water, leather for string, felt, protractor, and a flow chart template.

Assessment

References


Developer
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brinda.kuhn@gmail.com

Date
26 June 2008

Additional Information

Workshop Evaluation Form
For each of the following areas, please indicate your reaction:

<table>
<thead>
<tr>
<th>Content</th>
<th>Excellent</th>
<th>Good</th>
<th>Needs Improvement</th>
<th>Not Applicable</th>
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</thead>
<tbody>
<tr>
<td>Covered useful material.</td>
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<td>Practical to my needs and interests.</td>
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<td>Well organized.</td>
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<td>Presented at the right level.</td>
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<td>Effective activities.</td>
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<td>Useful visual aids and handouts.</td>
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<td>Instructor’s knowledge.</td>
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<td>Instructor’s presentation style.</td>
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<tr>
<td>Instructor covered material clearly.</td>
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<tr>
<td>Instructor responded well to questions.</td>
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<tr>
<td>Instructor gave equal attention to math, science, history, and language arts.</td>
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<tr>
<td>Instructor responded well to questions.</td>
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How could this workshop be improved?

Any other comments or suggestions?