



Fun With Weaving

Grade: 4

An integrated lesson plan covering 3-4 sessions of approximately 45 minutes each.

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Lesson-Planning Approach

Some learners perceive their “world” as a whole, where all things are interconnected and dependent upon each other. These “integrated” students face major challenges in coping with our dominant educational, social, and economic systems, which tend to present information in a linear fashion without the necessity of integration into meaningful context. Integrated students are at-risk of failing as they attempt to grasp information in ways that do not match their experience. Among large populations of at-risk students are many from Native American and similar cultures who do not regard their world as a sum of parts but as a blend of all that they experience.

This lesson plan does include some traditional, linear approaches to delivering information (checklists, rules, analysis, problem solving and organization). In addition to the traditional, linear delivery of information, this lesson plan also includes some of the following strategies, designed to appeal to at-risk students as they learn academic/life skills:

- ❖ Integration of technology
- ❖ Story telling/anecdotal information
- ❖ Non-competitive group and team work
- ❖ Performance-based assessment and rubrics
- ❖ Visual presentations and practice through technology and other means
- ❖ Project-based assignments that integrate family and community
- ❖ Activities appealing to multiple intelligences (Gardner)

Lesson Overview

The lesson is designed to provide an extended Art Activity to correlate with the students Colorado History Curriculum. Begin this lesson by reading the students, *Goat in the Rug*. This particular story introduces the students to the art of weaving thru goat’s eyes. It’s a good way to start the students thinking of the weaving process. This lesson will enable the students to have hands on approach and understanding of the process a Weaver follows, in order to accomplish an end result. The students will use a template to design their weaving patterns, and then weave their projects.

Lesson Objectives

- **Lesson Project:** Fun With Weaving

Project Objectives: When students complete this project, they will be able to...

- Design and print a pattern for their weaving project using a template.
- Apply the process that goes into weaving.
- Explain what they did, to reinforce the process skills.

Integration of Other Functional/Academic Skills: (Critical thinking is required throughout the lesson.) Students will be able to...

- Math The students will be able to count their rows in their weaving to create a pattern.
- Reading The students will read and apply the directions of Weaving with Drinking Straws.
- Art Students create bookmarks through weaving with their own designs.
- Technology The students will use the computer as a source of learning.

State/National Standards (Complete as Appropriate)

Colorado State Standards

- Language Standard 1 Students will read and understand a variety of materials.
- Art Standard 2 Students know and apply elements of art, principles of design, and sensory and expressive features of visual arts.
- Art Standard 4 Students relate the visual arts to various historical and cultural traditions.
- Math Standard 5 – Students use a variety of tools and techniques to measure, apply the results in problem-solving situations and communicate the reasoning used in solving these problems.
- Math Standard 6 – Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper and pencil, calculators and computers, in problem solving situations and communicate the reasoning used in solving these problems.
- Technology Standard 6 - Students will use technology to enhance all areas of the fine arts.

Websites

Support: Microsoft Word Program (template)

Pre-requisites

- The students will be familiar with the story, A Goat in the Rug, by Charles L. Blood and Martin Link. (Any book about weaving would be appropriate)
- In my class, the students have been discussing weavers in Colorado History.
- Fourth Grade and up.

Required Materials

- Drinking straws
- Warp strings
- Weft threads (yarns of all kinds)
- Clipboards
- Microsoft Word Program

Required Equipment/Technology

- Computer Lab
 - Printer
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LESSON I Fun With Weaving

Note: Students do not learn from what you do but from what you have them do.

Preparation

Activity	Time Estimate	Instructor Notes
Show the students various types of Navajo Rugs.	10 minutes	Bring in actual rugs if available, or show the students pictures of various rugs.
Explain to the students that many cultures have their own methods of weaving.	10-15 minutes	We will be using an African method to weave our projects.

Presentation

Activity	Time Estimate	Instructor Notes
Demonstrate to the students the steps to create their own table, (Handout 1) to create their bookmarks.	15-20 minutes	Pass out the Handout for the students to follow.
As a class we will go through the procedures together to create a table.	15-20 minutes	Observe the students for an understanding of the given instructions.
As a class we will create the first 2-3 bands of their weaving together.	15 minutes	Elaborate on how they shouldn't change colors very often, because it will be difficult to change yarns.

Practice and Performance

(Students help you perform the project steps. You help them perform project steps. They perform steps with little or no instructor help.)

Activity	Time Estimate	Instructor Notes
Let the students continue at their own pace to complete their table.	15 minutes	Assess and provide students with help as needed.
Print their completed table when finished.	10 minutes	

LESSON II Fun With Weaving

Note: Students do not learn from what you do but from what you have them do.

Preparation

Activity	Time Estimate	Instructor Notes
Have all the yarn warps and straws cut: Yarn Length- 15' Straws cut in half.	20 minutes	It would be helpful to have some Parent Volunteers for this activity or ask the Art Teacher to maybe include some time in their class for extra time with this project.
Review the following vocabulary words: Warp and Weft.	10 minutes	Warp- the set of yarns placed lengthwise in a loom. Weft- the yarn one uses to weave with.

Presentation

Activity	Time Estimate	Instructor Notes
Discuss and model the procedures of the weaving from	15-20 minutes	Distribute the materials to the students.

the Handout.		
Have the students begin weaving, and follow along as you get them started.	15 minutes	Model for the students how to change from one color to the next. If this presents difficulties, let the students do larger bands of colors, so they won't have to change colors as often.

Performance and Practice

Activity	Time Estimate	Instructor Notes
Continue to follow the steps together until they have woven 5 rows. Then let them work at their own pace.	20 minutes	Observe and help students when needed. Evaluate student's progress with a rubric.

Lesson Assessment Strategy (Formative – As the lesson progresses)

Preparation, Presentation and Overall Implementation (Instructor)

- Am I addressing the instructions of each activity to meet the needs of the students?
- Were my step-by-step instructions clear?
- Am I allowing enough time for each lesson?

Performance and Practice (Student)

- Was the Table too hard to use for this particular activity?
- Did the lesson provide a high enough interest to the students?
- Could the students relate their experience to a Navajo Weaver?

Technology

- Were the students comfortable using the technology of this lesson?
- What is the "Real World" connection using this type of technology?

Handout I Weaving

Fun with Weaving

Navajo Weavers used special plants from the desert to dye their wool; plants, berries, bark, fruit, roots, and flowers.

When choosing your colors to create your pattern, use only the following colors as the Navajo Weaver would of used: black, red, white, gray, brown, and yellow.

Directions:

1. Go to the top tool bar, and click on to Table.
2. Click in Draw Table.
3. A small tool bar will appear.
4. We will be using the Paint Can Icon.
5. Now place your cursor in the first band.
6. Click onto the Paint Can, and chose one of the above colors and click on it.
7. Move down to each band and repeat the above procedures.
8. When all 10 bands are colored, click onto the Printer Icon, and Print your design.

Each Band = 5 Weaving Rows

Handout 2 Weaving with Drinking Straws

Materials:

- Drinking straws
- Warp strings
- Weft threads: yarns of all kinds
- Scissors
- Clipboards

Directions:

- Cut the warp strings as long as the finished product is to be. Use uneven number of warp strings: 5,7,9, etc... for our purposes cut the warp strings 10 inches long, use 5 warp strings.
- Cut the drinking straws in half.
- Tie all the warp strings (5) together at one end in a knot.
- Thread the other ends of the warp strings through the straws.
- Push the straws up to the knotted ends.
- For easier weaving, secure the knot in a clipboard.
- Tie one end of the weft thread to one outside warp string next to the knot. Weave under and over the straws. As the waving progresses, push the woven section up and off the straws, freeing them for more weaving.
- Add a new color by tying a knot to the previous color and continue the weaving.
- Slip the straw off the warp when the weaving is completed and tie the warp strings together with a knot.

Activity Checklist

Have students look at some books about Navajo Rugs.	
Review Handout 1/Weaving Design	
Review Handout 2/Weaving with Straws	
Rubrics are completed	

Technology Checklist

- Double-check that all the computers have the template showing on the student's screen.
- Make sure that the printers are on.

Lesson Rubric

Multimedia Project: **Fun With Weaving**

Teacher name: Mrs. Geisinger

Student Name _____

CATEGORY	Excellent	Good	Satisfactory	Needs Improvement
Requirements	All requirements are met and exceeded.	All requirements are met.	One requirement was not completely met.	More than one requirement was not completely met.
Attractiveness	Makes excellent use of font, color, graphics, effects, etc. to enhance to presentation.	Makes good use of font, color, graphics, effects, etc. to enhance to presentation.	Makes use of font, color, graphics, effects, etc. but occasionally these detract from the presentation content.	Use of font, color, graphics, effects etc. but these often distract from the presentation content.

The following references were used to develop this curriculum:

References for Lesson

- Colorado Department of Education. (1995). Colorado Model Content Standards for Language Arts. Denver, CO.
- Colorado Department of Education. (1995). Colorado Model Content Standards for Art. Denver, CO.
- Colorado Department of Education. (1995). Colorado Model Content Standards for Computer. (1995)
- Southwestern Indian Arts & Crafts. (1977) Las Vegas, NV: KC Publications.
- Romberg, Jeanean. Let's Discover Weaving. (1975). NY, NY: The Center for Applied Research in Education, Inc.

Bibliography/Internet Resources

- http://www.rubistar4teacher.org/view_rubric.php3?id=194898
- Colorado Department of Education. (1995). Colorado Model Content Standards for Language Arts. Denver, CO.
- Colorado Department of Education. (1995). Colorado Model Content Standards for Art. Denver, CO.
- Colorado Department of Education. (1995). Colorado Model Content Standards for Technology. Denver, CO.