Space Invaders Lesson Plan

Teacher Candidate: Stefani Sumption
Cooperating Teacher: Liz Kaan
Grade Level: 3rd
Subject: Art
Date: 4/8/16

Common Core/State Standard(s):
National Art Standard: 1- Understanding and applying media, techniques, and processes.
National Art Standard: 2- Using knowledge of structures and functions.
National Art Standard: 5- Making connections between visual arts and other disciplines.

Learning Objective(s): Students will be able to…(SWBAT)

- **Apply math to calculate area and perimeter of space invader**
- **Create symmetry when assembling space invader**
- **Demonstrate knowledge of using complimentary color scheme when framing space invader**

Planning

Rationale: Describe how this lesson is developmentally appropriate:

- What skills and content are needed to master the lesson objective(s)?
  - Basic skills of cutting, gluing and counting are needed to master the lesson since they will be doing things to create their space invader.
- How is this objective relevant to students, their lives, and/or the real world?
  - All students need to learn math so incorporating math in this lesson allows the students to explore how different subjects can be implemented in art. Showing the video game video at the beginning connects the students who love to play video games to art.
- What types of instructional strategies will you use to deliver the content?
  - The video projected on the board at the beginning will aid in introducing pixels.
  - Demonstration is used when discussing how to do the project.
- How does your lesson reflect educational theories/theorists?
  - According to Elliot Eisner, art provides children with opportunities to solve problems using their imaginations. This assignment presents the students with the opportunity to choose a design they want to use for each project and how to construct it.

Pre-Assessment

- How will you measure students' readiness/level of understanding prior to teaching this lesson? (e.g., KWL chart, SMARTboard responder quiz, whole-class Q&A with response cards, individual student pre-test, etc.).
  - The teacher will walk around the room holding a Q&A for the students to make sure they are caught up on what is expected of them and what they will learn today.

Assessment

- How will the students demonstrate that they have attained the goals of the lesson?
  - ✓ Explain how the assessment aligns to the objective.
  - ✓ Include a copy of the lesson assessment.
  - ✓ Provide exemplar student responses/products (model outcome).
    - The final project of the space invaders will be the assessment for the students. If the space invader shows symmetry and a complimentary color scheme the students have reached the objected.

Post-Assessment

- How will you evaluate the students' work/performance? (e.g., rubric, weighted responses, checklist)
  - ✓ Report results in qualitative and/or quantitative format.
    - The teacher will use a checklist to see if they used symmetry, complimentary color scheme, one inch squares, and calculated the area and perimeter of the space invader.

Key Vocabulary:
List words that you will either introduce or review which build background/schema relevant to the content area.

- ✓ **Pixels**
- ✓ **Area**
- ✓ **Perimeter**
- ✓ **Grid**

Technology needed: Projector

- How will you use technology to engage students in authentic learning experiences?
  - ✓ Today students are playing games a lot in their spare time, so this lesson will engage their interest since it shows a real life portrayal of a video game.
- How will you address diverse learning needs through technology?
  - ✓ By using the projector to show the students the video I can address the students who have a hard time paying attention to a plain lecture.

Other required materials:

- ✓ **Black paper**
- ✓ **Neon colored paper**
- ✓ **Glue**
- ✓ **Pencils**

Accommodations:

- What accommodations/modifications will you include for students with special needs? (use contextual information) How will you make accommodations for the identified students during each phase of the lesson?
  - ✓ Input
  - ✓ Guided Practice
  - ✓ Independent Practice
  - ✓ Assessment
    - For the students with special needs I will come by and help them cut out 1 inch tiles needed for their space invader.
    - For any students who need additional help or instructions I can help them individually when walking by their seat.

Lesson Plan Implementation

Lesson Opening:

- How will you…
  - ✓ activate student interest?
  - ✓ present the learning objective(s) in an engaging and student-friendly way?
  - ✓ make connections to past learning?
  - ✓ convey the importance of the learning objective and make it relevant to your students' lives?
  - ✓ explain to students the sequence of instruction? (preview the activities for the period)
  - ✓ communicate what knowledge or skills students will be expected to produce by the close of the lesson?
    - The teacher will activate the student's interest by presenting a video on pixelated games on the projector.
    - The teacher will review with the students basic math of finding perimeter and area.
    - The teacher will explain that the students will be making their own pixelated space invader just like the one in the video.

I Do

Instructional Input

- How will you model/explain/demonstrate all knowledge and skills required of the objective?
  - ✓ Restate the objective
  - ✓ Introduce new material (describe what types of instructional supports you will use: visuals, manipulatives, artifacts, etc.)
  - ✓ Model and demonstrate procedural and behavioral expectations required to meet the objective?
    - The teacher will explain that the students will make their own space invader.
    - The teacher will demonstrate that the students will choose a bright neon color for the body and another bright color for the eyes.
    - The teacher will demonstrate how the students will make a symmetrical space invader, marking the body tiles with X's and the eyes with 0's.
    - The teacher will show the students how to lay out the strip of paper on the grid, mark it with their pencil, then cut the one inch tiles for the body.
    - The teacher will explain that each table will get the strips of color.
    - A complimentary color will be used for the background after cutting the excess paper off the grid paper.

- How will you check for understanding before moving on to guided practice?
  - The teacher will ask the students what they will be figuring out at the end of the lesson.
  - The teacher will also ask the students what kind of balance is needed when making the space invader. This will ensure that they understand the basic concept needed to be followed.

We Do

Guided Practice

- How will students practice, with your support, all content and skills required to continue to internalize the objective? (How will students be engaged?)
- How will you ensure that all students have *multiple opportunities* to practice new skills/content?
- How are students practicing in ways that align to independent practice?
- How will you provide guidance to all students as they practice?
- How will you check for understanding before moving on to independent practice?
  - The students will begin marking off their gridded paper that will be handed out with X's and 0's.
  - The teacher will walk around to make sure each student understands that the space invader is to be a symmetrical design.

You Do

Independent Practice

- How will you clearly state and model academic and behavioral expectations?
- How will students independently practice the knowledge and skills required by the objective?
- How will you support student learning during this practice?
  - Once the space invaders are gridded out, the tables of students can get their strips of paper and begin cutting and gluing them on the grid paper.
  - The teacher will again explain that they should keep in mind the pixilation affect that the space invader will have.
  - The teacher will also explain how to find area and perimeter once the students are completely done.
  - Once they have glued their space invader on a sheet that is a complimentary color to the invader, the students can write their name, and fractions of the area and perimeter on the back. The students will write this in fractions (35/70 green, 32/70 black, etc.)
  - The teacher will walk around the room after demonstrating this, helping the students count.

Lesson Closing

- How will you…

	✓ Review the skills/content taught in an interactive manner (whole/small group, individually) ✓ Reemphasize and clarify the objective ✓ Reassess students' mastery of, or progress toward the objective? (if not already assessed) o The teacher will ask some of the students what kind of balance was used in this assignment. o The teacher will ask for volunteers to share what their area and perimeter were.
Analyze	After you have administered your assessments (formal or informal) for this lesson, analyze the results. ✓ How did the students perform on this assessment? To what degree did they achieve mastery toward the lesson objective(s)? ✓ How will you provide opportunities for remediation and extension?
Reflect	Reflect on your effectiveness as a teacher based on the analysis of students' performance. ✓ List two things you feel you did well to plan, implement, or assess instruction. ✓ Describe the changes you would make if you were to teach this lesson again.