Collaborative Lesson Plan

3rd Grade Oklahoma Maps Lesson

Cooperative Planning Steps

1. During their monthly planning meeting, the 3rd Grade team and the school librarian informally brainstormed a list of upcoming topics and chose Oklahoma maps and landmarks as the focus of the unit.
2. The 3rd Grade team and the school librarian determined that adding technology and coding to this unit would provide an authentic experience and learner buy-in. The learning team assigned roles for teaching the unit including classroom and library centers that supported the unit. The group members also established a timeline of events detailing when specific concepts were introduced, when classes were led by the school librarian, and when assignments were due.
3. Because of the large number of learners that received special education services or who were on IEPs, the school librarian asked the special education educator to join in the unit. There were also two learners that were English learners. The school librarian asked the EL teacher for strategies to help those learners be successful.
4. After the unit, the collaborative learning team met to discuss the effectiveness of the unit. Strengths and areas of improvement were discussed.

Cooperative Teaching Efforts

The Classroom Educator:
1. Led whole group discussion about what it means to be a metropolitan city, landmarks, and bodies of water.
2. Paired learners according to which ones could successfully work together.
3. Implemented independent stations in the classroom to practice finding cities using grid lines and research landmarks.
4. Facilitated, discussed, and helped with groups as they discovered how to use maps.
5. Developed a rubric that was used for assessment.
6. Assessed learner understanding using the rubric.

The Special Education Educator:
1. Pre-taught map skills with her learners in her classroom. These skills included directionality, key map symbols, and using grid lines and landmarks.
2. Familiarized learners with coding using Ozobots before the unit.
3. Partnered with her learners or other struggling learners to provide support that they needed to be successful.
4. Assessed learner understanding using the rubric.
The School Librarian:

1. Led whole group instruction on using grid lines, charts, and scale. Led whole group instruction on dictionaries, glossaries, and databases.
2. Led whole group instruction on coding with Ozobots. Had Ozobots as an open makerspace activity so students could practice using them and experiment with coding.
3. Curated resources including an Oklahoma map for each learner and an Ozobot for each pair of learners. Supplies included red, green, blue, and black markers, highlighters, small star stickers, rulers, and calculators.
4. Facilitated, discussed, and helped with learner groups as they discovered maps.
5. Developed a graphic organizer for learners to use.
6. Assessed learner understanding using the rubric.

Learning Standards

Social Studies Content Standards

The student will examine Oklahoma’s political and physical features using text features and search tools. (CCRIT 5)

A. Distinguish among map symbols and identify relative location, direction, scale, size and shape using physical and political maps of Oklahoma including the use of latitude and longitude.

B. Interpret thematic maps of Oklahoma with the essential map elements of title, legend, scale, and directional indicators.

C. Identify Oklahoma’s major landforms and bodies of water on a physical map including Arbuckle Mountains, Ozark Plateau, Wichita Mountains, Kiamichi Mountains, Black Mesa, Red River, Canadian River, Arkansas River, Lake Texoma, Lake Eufaula, and Lake Tenkiller, Grand Lake of the Cherokees, and the Great Salt Plains.

D. Identify Oklahoma’s major metropolitan centers and cities on a political map including Oklahoma City, Tulsa, Lawton, Stillwater, Norman, Muskogee, Woodward, McAlester, and Ponca City.

English Language Arts Standards

3.1.R.2 Students will ask and answer questions to seek help, get information, or clarify about information presented orally through text or other media to confirm understanding.

3.1.W.2 Students will work respectfully within diverse groups, share responsibility for collaborative work, and value individual contributions made by each group member.
3.2.W.4 Students will use resources to find correct spellings of words (e.g., word wall, vocabulary notebook, print and electronic dictionaries).

Mathematics Standards:

3.N.2.1 Represent multiplication facts by using a variety of approaches, such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line and skip counting.

3.N.2.2 Demonstrate fluency of multiplication facts with factors up to 10.

3.GM.2.4 Choose an appropriate measurement instrument and measure the length of objects to the nearest whole yard, whole foot, or half inch.

American Association of School Librarians Standards

A.III.2. Learner identify collaborative opportunity by developing new understandings through engagement in a learning group.

A.III.3. Learner identify collaborative opportunity by deciding to solve problems informed by group interaction.

B.V.1. Learners construct new knowledge by problem solving through cycles of design, implementation, and reflection.

C.V.3. Learners engage with the learning community by collaboratively identifying innovative solutions to a challenge or problem.
Activities

Day 1:
School librarian whole-class instruction:
School librarian used overhead map of Oklahoma to help learners find and explore the parts of a map (key, compass rose, scale, etc.). School librarian pointed out the list of cities with map coordinates at the bottom of the map and the grid letters and numbers on the edges of the map. School librarian demonstrated how to use coordinates and grid lines to find cities. Two methods were demonstrated: one person method and two person method with the classroom educator.

Each learner received his own Oklahoma map. Learners were able to spread out on tables, floors, etc. so each person had her own space to work. School librarian wrote the name of a metropolitan Oklahoma city on the board. (Special education educator provided pre-made cards to her learners that said the city’s name. EL learners also had a set of cards at their area to assist in finding the city name). Learners found the coordinates of the city and placed their finger on it. School librarian, classroom educator, and special education educator walked through the learners, gave a small star sticker to learners who placed on the city, and provided assistance to learners who needed it.

Day 2:
School librarian and classroom educator whole-class instruction:
Classroom educator led whole class discussion on what it means to be a metropolitan city. School librarian led whole class discussion on dictionaries and glossaries, demonstrating how to use each. Vocabulary wall was started to include map coordinates, grid lines, metropolitan city, compass rose, key, and scale using definitions in learners’ own words. School librarian called on students as classroom educator wrote words and definitions. Learners started a glossary in their social studies journals.

Learners continued finding metropolitan cities on the map using map coordinates and grid lines.

Days 2 - 8:
Independent Map Center in Classroom: Classroom educator had an independent center in the classroom where students could continue exploring the Oklahoma map. Students had city cards that they could use to find various cities on the map using map coordinates and grid lines.

Ozobots in the Makerspace: School librarian had Ozobots available in the makerspace. (Ozobots are small bots that follow patterns on the surfaces that they roll over. Ozobots can identify lines, colors, and codes. Learners code them by combining colors of lines from markers in particular ways.) Learners came in small groups and experimented while familiarizing themselves with coding using Ozobots with help from the school librarian.
Day 3:
School librarian and classroom educator whole-class instruction:
Classroom educator led whole class discussion on landmarks/bodies of water. (What’s a landmark? Why are they important?)
School librarian led whole class instruction on how to find information about landmarks in the databases. Learners picked a landmark from the content standards list and located it in the database. Learners shared something that they found interesting about each landmark/body of water. School librarian led whole class instruction on how to find landmarks and bodies of water on the Oklahoma map. Learners used highlighters to demonstrate that they could find each landmark/body of water. School librarian, classroom educator, and special education educator walked through the learners, informally assessing learner understanding and providing assistance where needed.

Classroom educator and school librarian led class discussion on new words to add to the vocabulary wall and learner glossaries. (Plateau, plains, mesa, etc).

Day 3 - 8:
Independent Research Center in Classroom:
Classroom educator had an independent center in the classroom where students could continue exploring landmarks and bodies of water on a MacBook with access to the databases. Each landmark/body of water had a parking lot (a large piece of chart paper labeled with each landmark or body of water’s name) in the classroom. As learners found interesting things, they recorded them on post-its and put them in the appropriate parking lot. Learners had a list of the landmarks and bodies of water that are on the content standards but could also look up other things found on the Oklahoma map.

Day 4:
Learners continued finding landmarks and bodies of water on the Oklahoma maps.

Day 5:
School librarian whole class instruction:
Led class instruction on using city-to-city distance chart to find the distance between two cities. Showed learners that if they are finding the distance between things on the map that aren’t cities, they can use the scale to approximate the distance.
Classroom educator whole class instruction:
Led class instruction on using this information to approximate the distance between two places on the map.

With rulers and maps, learners found approximate distances between two things on the map. They used calculators to calculate or check their answers. School librarian, classroom educator, and special education educator walked through the learners, informally assessing learner understanding and providing assistance where needed.
**Day 6:**
Learners worked in pairs to create a tour of Oklahoma. Using a graphic organizer, they recorded up to 4 places, told an interesting fact about each place, and calculated the approximate distance between them.

**Day 7:**
Touring and assessment day:
Learners coded Ozobots to go on the tour they created for Oklahoma. School librarian walked among students providing assistance and used rubric to assess for AASL standards. Classroom educator walked among students providing assistance and used rubric to assess for content standards.

**Day 8:**
Touring and assessment day:
Learners traded tours with another group and coded Ozobots to go on a different tour of Oklahoma. School librarian walked among students providing assistance and used rubric to assess for AASL standards. Classroom educator walked among students providing assistance and used rubric to assess for content standards.
Evaluation Methods

Throughout the unit, school librarian, classroom educator, and special education educator formatively assessed students by asking questions and assisting as they performed tasks. Formative assessment was used to evaluate collaboration between groupmates, map skills, math concepts, problem solving, use of resources, and writing. At the end of the unit, summative assessment using the rubric below was used.

Classroom educator assessed learner writing by looking for correct spelling and use of vocabulary words that were covered and recorded in the social studies journal.

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<tr>
<th><strong>Concerns</strong></th>
<th><strong>Criteria</strong></th>
<th><strong>Advanced</strong></th>
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<tbody>
<tr>
<td>Areas that Need Work: Skills need practice as they emerge. There is basic understanding, and support is still needed.</td>
<td>Read various types of maps using text features and essential elements. Identify landmarks, bodies of water, and major cities.</td>
<td>Exceeds Standards: Command of in-depth understanding of standard. Able to assist other learners.</td>
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<td></td>
<td>Ask and answer questions; share responsibility in group work.</td>
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<td>Use scale, chart, ruler, and calculator to approximate distance between places on map.</td>
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<td>Clarify information using resources.</td>
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<td></td>
<td>Collaborate with others to exchange ideas, develop new understanding, make decisions, and solve problems.</td>
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Goals

| Met | Modified | Exceeded |

How met?  This unit met learning expectations. All learners demonstrated mastery of using basic map skills to find cities on the map. Learners demonstrated using basic searches using the databases for research. Learners were able to use dictionaries and their glossary to answer questions and spell words correctly, with a little prompting.

How modified?  We modified this unit a little bit throughout. Every day or two, the classroom educators and I would check-in to see how things were going. We modified by putting more days between lessons so that learners would have more time to explore the centers (map, research, and Ozobot). We also added an extra day to allow learners to calculate approximate distance. This concept was hard for them, and they needed a bit more time than originally allowed.

How exceeded?  This unit exceeded my expectations in the quality of collaboration between learners. Often, one child would help another before one of the other educators or I could get there. I anticipated that learners might race to find places on the maps, but they really didn’t. They found the place, then waited to see if anyone else needed help. Even if learners struggled at first, they ALL stuck with it and kept trying. The learner engagement for this lesson was extremely high, minimizing any behavior problems that might have normally been present.

Changes needed in Unit:

Follow-Up: An extension for future research, inquiry: This unit could easily be extended to give learners more choice and voice in the process and final product, extending their research and inquiry opportunities.