Engaged Learning Project
Sterling Hope
Kennesaw State University
21st Century Teaching & Learning
ITEC 7400
Dr. Jo Williamson
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Engaged Learning Project

**Title of Project:** Habitats of Georgia by Sterling Hope

**Subject(s):** Science, Reading, Language Arts, Engineering

**Grade Level(s):** 3rd

**Abstract:**
The students will be learning about the five regions of Georgia. This project will be multi-faceted. The classroom teacher will be using a WebQuest to teach the regions of Georgia. Then the students will take the information learned and in groups they will develop a “park ranger” video giving us a “tour” of their region, one plant, and one animal found there. Then the students will design and build an animal with one movement with Legos that could survive in their region. This is an authentic task because these videos will be shown to other third grade students and the park rangers.

**Learner Description/Context:**
We have a growing population of diverse learners at Clark Creek STEM Academy. We are a school of choice and we are a Title 1 school. As a Title 1 school and our many students who speak Spanish, we have a translator on staff. This unit will take place in a third grade classroom and the STEM lab.
The unit will start with teacher created videos showing the students the five regions of Georgia. This should help the learner “see” what Georgia has to offer as well as what they can produce with their own video. The videos will give them some prior knowledge and set up the learning goals for the unit.
The WebQuest will allow students to then explore Georgia through websites, research, books, etc. The groups will then collaborate to create a “park ranger” video giving the other groups a tour of the region and describe a plant and animal that lives there. During this time in specials they will be learning robotics with Lego WeDo’s. Then with their knowledge learned in the unit they will create their own, new animal with a movement to build that could survive in the region they have chosen.
The project will allow students to broaden their thinking about Georgia and gain a better understanding of where they live. They will be able to share this information with their peers, their families, and the community.

**Time Frame:** This unit will take 4-6 weeks. The class will work on the project 45-60 minutes a day, for the length of the unit. The robotics piece of the unit will be completed during lab time with the specials teacher working in tandem with the classroom teacher.

**Standards Assessed:**
See the end of the document since there are many standards being incorporated into the project.
**Learner Objectives:**
The students will be creating a video with Windows Movie Maker that gives a “park ranger” tour of their region. It must include one plant and an animal that are adapted to live in the region. The students will also create a Lego figure that has one movement that could also survive in their region. This part of the project will be completed in specials with the STEM teacher. We will be collaborating about the project. The videos will then be published to the school’s YouTube channel for community viewing.

**Individual Learning Objectives**
The student will be able to describe the five regions of Georgia including a plant and an animal that are adapted to live in the region.
The student will be able to write an informational piece writing describing a region of Georgia.
The student will work collaboratively with other students in the development of all aspects of the video. (brainstorming, script production, timeline of video, narration, pictures, basic citations, peer feedback, story board)
The student will use correct grammar in their speaking and writing of the final products.

All areas will be assessed with a rubric. There will be self assessment, peer assessment, and teacher assessment.

**The “hook” or Introduction:**
The project will be introduced with a teacher made video from each region of Georgia like a virtual tour for the class. It will tell them students about the project and what they will be doing. The teacher will dress like a park ranger guide that day if possible.

**Process:** The teacher is floating in the room offering assistance to pairs and/or groups during all phases of the project.

**Part 1 –**
1. The students will begin by completing a WebQuest about the regions of Georgia. This will be done in pairs. *See attached file.* The WebQuest will have the students prepare and overview video with narration of the five regions of Georgia. The students will have about a week to complete the research and a week to build and publish the photo story. This is done in pairs so all students will have a chance to interact with the research, learning, and technology.

**Part 2 –**
2. Once the introduction videos have been made, the students will then be divided into five groups. Each group will pick a specific region of Georgia from a hat to develop a video tour of that region. (The five groups will be heterogeneously made and they will pull a region from a hat for equity.)
3. Once their region has been determined the students will continue with deeper research picking one plant and animal to focus on for their video tour.
4. The students will decide on the roles – cameraman, park ranger (up to 2 students) for in front of the camera, head writer, head researcher, and director. But the group will assist each other. No one will be allowed to sit. Mediation about roles will happen with the teacher.
5. The students will brainstorm how the video should be laid out. Graphic organizer will be provided as scaffolding.
6. The students will use a storyboard graphic organizer to decide on the final sequence of the video. Graphic organizer to be provided.
7. The students will complete the specific research for the region, plant and animal. Graphic organizer.
8. The students will draft the script. Final approval by the teacher.
9. A master production schedule will be kept by the executive producer (teacher). All aspects of each group’s production must be signed off by the executive producer.
10. Once videos have been taped the students will have the chance to use Windows Movie Maker to add their introduction piece from the WebQuest, a title page and credits. They may include captions if they used any pictures but it is not required for this project.
11. Music from Soundzabound will be used (county has subscription).
12. A viewing will be scheduled; parents and administration will be invited to the viewing party.
13. Once they have been viewed they will be published to the school’s YouTube channel.
14. We will also video conference with one of the other STEM academies in the county showing them our final projects.

**Part 3 – (Optional)**

1. During Part 1 and Part 2 the students will be working in specials class the engineering design challenge of building a Lego animal that will survive a region of Georgia.
2. The classroom teacher and the specials teacher will be collaborating on the use of Legos and the incorporation of all three projects into one cohesive unit. These will also be available for viewing at the party, either the actual model or a video clip.

**Product:**
The end project will be a video tour of a region of Georgia. The students will also have a chance to video an explanation about their Lego animal that would survive in that region. It will be viewed and used by other third grade students in Cherokee County and well as posted to the school’s YouTube channel for viewing by parents and the local community. Technology is integrated throughout the project starting with internet research, to video production. All aspects of the project will be assessed with rubrics.

**Technology Use:**
The technologies critical are the internet, Windows Movie Maker, and cameras. This will allow student to collaborate and communicate what they have learned about their region of Georgia, one plant and one animal that lives in the region. The use of the technology supports the following indicators of engaged learning: standards-based, challenging, authentic, multi-disciplinary, student explorer, teacher, producer, teacher facilitator, guide, collaborative, performance-based, and ongoing.

**References and Supporting Materials:**
Internet access
Camera(s)
Lego WeDo’s
Windows Movie Maker
Free, Royalty free music
WeDo Project guide (not provided since it is extra- Contact me if interested)
WebQuest - link provided when complete
Role sheet with explanation
Props (student provided)
Graphic organizers
   brainstorming, storyboards, research template, script
Rubrics for: (rubrics created with Rubistar)
   Photo Story (from WebQuest)
   Group work X2 (WebQuest & movie making) peer reflections
   Video (process & product)
   Self-Reflection of entire unit/process
   Lego WeDo robot project (in Lego project not attached)

Extensions
- Website development for other schools to connect and share about their region. Host school would task other schools to develop a product teaching about their region of Georgia.
- Incorporated into the web site blogs about animal and plant identification. Use of plant and animal experts to help students identify pictures they take of the flora and fauna in their region. Then discussion of why the animal and plant thrive in that region.
- Connect to conservation unit. Impact of humans on the region, the plants and animals and how it impacts the plants’ and animals’ ability to survive in a region.
Standards being assessed:

S3CS3. Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities utilizing safe laboratory procedures.
   b. Use computers, cameras and recording devices for capturing information.
   c. Identify and practice accepted safety procedures in manipulating science materials and equipment.

S3CS5. Students will communicate scientific ideas and activities clearly.
   d. Locate scientific information in reference books, back issues of newspapers and magazines, CD-ROMs, and computer databases.

S3CS8. Students will understand important features of the process of scientific inquiry.
Students will apply the following to inquiry learning practices:
   c. Scientists use technology to increase their power to observe things and to measure and compare things accurately.

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.
   a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.
   b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.
   c. Identify features of animals that allow them to live and thrive in different regions of Georgia.

ELACC3W2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
   a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension
   b. Develop the topic with facts, definitions, and details.
   c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.
   d. Provide a concluding statement or section.

ELACC3W4: With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1-3 above.)

ELACC3W6: With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

ELACC3W7: Conduct short research projects that build knowledge about a topic.

ELACC3W8: Recall information from experience or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

ELACC3SL1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.

ELACC3SL6: Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)

ELACC3L1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
ELACC3L4: Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.

**NETS-S**

1. **Creativity and Innovation** - Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
   a. Apply existing knowledge to generate new ideas, products, or processes
   b. Create original works as a means of personal or group expression
   c. Use models and simulations to explore complex systems and issues
   d. Identify trends and forecast possibilities

2. **Communication and Collaboration** - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
   a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
   b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
   c. Develop cultural understanding and global awareness by engaging with learners of other cultures
   d. Contribute to project teams to produce original works or solve problems

3. **Research and Information Fluency** - Students apply digital tools to gather, evaluate, and use information.
   a. Plan strategies to guide inquiry
   b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
   c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
   d. Process data and report results

4. **Critical Thinking, Problem Solving, and Decision Making** - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
   a. Identify and define authentic problems and significant questions for investigation
   b. Plan and manage activities to develop a solution or complete a project
   c. Collect and analyze data to identify solutions and/or make informed decisions
   d. Use multiple processes and diverse perspectives to explore alternative solutions
References