

## Recreating Florida Civil War Battle Sites with CoSpaces

**Written By:** Nathan Hagaman

**County:** Leon

**Subject:** Social Studies, Computer Science, Visual Arts

**Grade(s):** 4-8

**Instructional Time:** 6-8 Class Periods (60 minutes each)

**Suggested or Required Technology:** Laptops or desktop computers, Touchscreen Tablets, Smartboard and/or Projector, VR Headsets for student use, CoSpaces Pro Account, Cameras capable of 360 degree photography (suggested)

### BRIEF DESCRIPTION

Students will create digital models of Florida Civil War battle sites using CoSpaces that can be interacted with through AR/VR/MR technologies.

### STANDARDS

SS.4.A.5.1 Describe Florida's involvement (secession, blockades of ports, the battles of Ft. Pickens, Olustee, Ft. Brooke, Natural Bridge, food supply) in the Civil War.

SS.5.A.1.1 Use primary and secondary sources to understand history.

VA.5.S.3.2 Use craftsmanship and technical ability in personal works to show refinement of skills over time.

VA.5.S.3.3 Use tools, media, techniques, and processes in a safe and responsible manner.

VA.5.F.1.1 Examine and experiment with traditional or non-traditional uses of media to apply imaginative techniques in two- and/or three-dimensional artworks.

VA.5.O.1.1 Use structural elements of art and organizational principles of design to develop content in artwork.

### LEARNING OBJECTIVES

Students will:

- Demonstrate an understanding of events leading up to, during, and/or after various Civil War battles in the state of Florida.
- Develop an understanding of the various options and tools available to demonstrate

learning in CoSpaces.

### **GUIDING QUESTIONS**

- What role did Florida play in the Civil War?
- What major battles took place in Florida?
- How did the location of those battles impact the outcomes?
- How can we use primary and secondary sources to inform our digital models of battle sites?

### **PRIOR KNOWLEDGE NEEDED**

- Students should have some background on the American Civil War, its cause, and the various people involved.
- Students should research the various battles that took place in Florida should take place and/or coincide with the completion of this unit.

### **FORMATIVE ASSESSMENT**

- Regular teacher-student check-ins and/or conferences
- Checklists for daily student tasks

### **SUMMATIVE ASSESSMENT**

- End-of-unit Rubric

# LESSONS

## **SESSION 1** Introduction to CoSpaces with Practice Project

### **MATERIALS AND SUPPLIES**

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Digital camera for student pictures
- Smartboard or projector
- AR/VR headsets

### **ACTIVITIES AND INSTRUCTIONS**

#### Prior to lesson:

- Set-up your CoSpaces Pro account.
  - Learn more about setting up your account at <https://www.youtube.com/watch?v=dr79R1675DM>
- Create a class in CoSpaces.
  - Either add students to your class manually or have them join on their own using the class code. You can use the flyer at the end of the lessons to help students set up their own accounts.
- Create the assignment for session 1 in your class space in CoSpaces.
  - Learn how to make an existing CoSpace into an assignment at <https://www.youtube.com/watch?v=b9ys-mG6-Xs>
  - Assignment 1- Presentation template: <https://edu.CoSpaces.io/Universe/Space/elNyjLDDoIMdt7nxiqyJG4>
- Create your own example project to demonstrate expectations of quality and/or depth.

#### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Introduce the assignment by showing the students your created introduction space.
- Explain that the project is designed to be an opportunity for students to introduce themselves to their classmates (or to someone they do not know.)
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Demonstrate on a smartboard or using projector how to edit, change, add, and/or remove objects from your created space. Include demonstrations of how to edit text, animate, and any other necessary tasks during this time.
- Guide the students to the appropriate link to begin their own space to introduce themselves.

- Give the students time to create their space. Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allow time for students to explore the spaces created by their peers at the end of class is recommended.
- Assess student projects via your preferred method.

## **RESOURCES**

Assignment 1- Presentation template:

<https://edu.CoSpaces.io/Universe/Space/eInYjLDDoIMdt7nxiqyJG4>

CoSpaces YouTube channel <https://www.youtube.com/channel/UC6VsnmaKQ9MNRpJbFslhoGw>

Sample assessment rubric- included at the end of the lessons

## **ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.

## **SESSION 2** Creating with Building Blocks in CoSpaces

### **MATERIALS AND SUPPLIES**

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Digital camera for student pictures
- Smartboard or projector
- AR/VR headsets

### **ACTIVITIES AND INSTRUCTIONS**

#### Prior to lesson:

- Create the assignment for session 2 in your class space in CoSpaces.
- Create your own example project to demonstrate expectations of quality and/or depth.

#### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Introduce the assignment by showing the students your created space.
- Explain that the project is designed to be an opportunity for students to learn how to use 3D creation tools within CoSpaces to create objects and enhance the design of environments.
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Demonstrate on a smartboard or using projector how to edit, change, add, and/or remove objects from your created space.
- Guide the students to the appropriate link to begin their own spaces.
- Give the students time to create their objects. Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allowing time for students to explore the creations of their peers at the end of the class period is recommended.
- Assess student projects via your preferred method.

### **RESOURCES**

Assignment 2- Roman Aqueduct (example project page)

<https://edu.CoSpaces.io/Universe/Space/2DY5fKLRHUqNoXFsmNloC9>

Sample assessment rubric- included at the end of the lessons

## **ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.

### **SESSION 3** Creating Your Favorite Place (Importing Objects)

#### **MATERIALS AND SUPPLIES**

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Digital camera for student pictures
- Smartboard or projector
- AR/VR headsets

#### **ACTIVITIES AND INSTRUCTIONS**

##### Prior to lesson:

- Create the assignment for session 3 in your class space in CoSpaces.
- Create your own example project to demonstrate expectations of quality and/or depth.

##### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Introduce the assignment by showing the students your created space.
- Explain that the project is designed to be an opportunity for students to create a model of their favorite place and to learn how to import 3D objects from various platforms (Tinkercad, Sketchup, Google Poly, etc.)
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Demonstrate on a smartboard or using a projector how to import objects from different sources.
- Guide the students to the appropriate link to begin their own spaces.
- Give the students time to create their spaces. Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allowing time for students to explore the creations of their peers at the end of the class period is recommended.
- Assess student projects via your preferred method.

#### **RESOURCES**

Students would be served well to have some prior knowledge of Tinkercad and Google Poly. Some prior demonstrations might reduce the amount of time necessary to complete the projects and reduce troubleshooting.

Assignment 3- Uploaded 3D Canoe (example project page)

<https://edu.CoSpaces.io/Universe/Space/kK8Ozocvu33wotF6DG8MYc>

Sample assessment rubric- included at the end of the lessons

**ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.



## **SESSION 4** Creating a Virtual Tour of School

### **MATERIALS AND SUPPLIES**

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Camera with 360 photo capabilities
- Smartboard or projector
- Google Street view app or Cardboard Camera app
- AR/VR headsets

### **ACTIVITIES AND INSTRUCTIONS**

#### Prior to lesson:

- Create the assignment for session 4 in your class space in CoSpaces.
- Create your own example project to demonstrate expectations of quality and/or depth.
- Take any 360 photos necessary if your students will be unable to do so with technology available.

#### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Introduce the assignment by showing the students your created space.
- Explain that the project is designed to be an opportunity for students to create a digital tour of our school that could be used for introduction and/or marketing purposes.
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Demonstrate for students how to take a 360 photo using Google Street View or Cardboard Camera apps. Include a demonstration on how to download the photos to import in the next step.
- Demonstrate on a smartboard or using projector how to import 360 photos from the Google Street View app or the Cardboard Camera app.
- Guide the students to the appropriate link to begin their own space to create their part of the tour.
- Provide students with the necessary devices to take their photos of their assigned space at school (or provide them with the previously created photos.)
- Give the students time to create their environments for the school tour. Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allowing time for students to explore the environments of their peers at the end of the class period is recommended.
- Assess student projects via your preferred method.

## **RESOURCES**

Students would be served well to have some prior knowledge of the necessary Photo technology. Some prior demonstrations might reduce the amount of time necessary to complete the projects and reduce troubleshooting.

Assignment 4- City Tour (example project page)

<https://edu.CoSpaces.io/Universe/Space/ECWetSjehiqM8wQ6451AqB>

Sample assessment rubric- included at the end of the lessons

## **ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.

## SESSION 5 Introduction of Movement

### MATERIALS AND SUPPLIES

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Smartboard or projector
- Digital camera for student pictures
- AR/VR Headsets

### ACTIVITIES AND INSTRUCTIONS

#### Prior to lesson:

- Create the assignment for session 5 in your class space in CoSpaces.
- Experiment with movement and coding on your own to familiarize yourself with how and why things work.
  - Learn more about coding and using the path item with the following videos:
    - [https://www.youtube.com/watch?v=15Vlqe22\\_x0](https://www.youtube.com/watch?v=15Vlqe22_x0)
    - <https://www.youtube.com/watch?v=uv-epnAnuBg>
    - <https://www.youtube.com/watch?v=RM-jDrfOGkU>

#### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Explain that the lesson is an opportunity for the students to demonstrate everything they have learned throughout the unit and connect it to their Social Studies work.
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Spend some time discussing what they know about the specific battles covered and how that can impact their work.
- Demonstrate on a smartboard or using projector how to place objects in landscapes created using photography.
- Guide the students to the appropriate link to begin their own space.
- Give the students time to create their environments that demonstrate movement and basic (or complex) coding for objects and use 360 photos of battle sites (or premade landscapes.) Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allowing time for students to explore the environments of their peers at the end of the class period is recommended.
- Assess student projects via your preferred method.

## RESOURCES

Assignment 5- Movement (example project page)

<https://edu.CoSpaces.io/Universe/Space/DtpaE8QIRCb5PgpyhqQmt9>

Learn more about coding and using the path item with the following videos:

- [https://www.youtube.com/watch?v=15Vlqe22\\_x0](https://www.youtube.com/watch?v=15Vlqe22_x0)
- <https://www.youtube.com/watch?v=uv-epnAnuBg>
- <https://www.youtube.com/watch?v=RM-jDrfOGkU>

Sample assessment rubric- included at the end of the lessons

## ACCOMMODATIONS FOR INCLUDING ALL CHILDREN

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.

## **SESSION 6** Creation of Battle Landscape and Re-Creation!

### **MATERIALS AND SUPPLIES**

- Student computers/iPads/handheld devices
- CoSpaces Pro account
- Camera with 360 photo capabilities
- Smartboard or projector
- Google Street View app or Cardboard Camera app
- AR/VR headsets

### **ACTIVITIES AND INSTRUCTIONS**

#### Prior to lesson:

- Create the assignment for session 5 in your class space in CoSpaces.
- Create your own example project to demonstrate expectations of quality and/or depth.
- (OPTIONAL) Take students to a nearby Battlefield to take their own 360 photos of the location(s) for their projects.

#### Lesson Activity:

- Have students log-in to your class on CoSpaces.io.
- Explain that the lesson is an opportunity for the students to demonstrate everything they have learned throughout the unit and connect it to their Social Studies work.
- Explain the expectations of student projects and go over any rubrics used for assessment purposes.
- Spend some time discussing what they know about the specific battles covered and how that can impact their work.
- Demonstrate on a smartboard or using projector how to place objects in landscapes created using photography.
- Guide the students to the appropriate link to begin their own space.
- Give the students time to create their environments that demonstrate movement and basic (or complex) coding for objects and use 360 photos of battle sites (or premade landscapes.) Move around the classroom to assist students with any questions, concerns, or curiosities they may have.
- Allowing time for students to explore the environments of their peers at the end of the class period is recommended.
- Assess student projects via your preferred method.

**RESOURCES**

Students should have prior knowledge of the various battles and strategies employed in Florida during the Civil War. If a battle took place locally it is suggested that students take a field trip to the location prior to completing this lesson.

Sample assessment rubric- included at the end of the lessons

**ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Students with difficulty typing can dictate what they would like to have typed into their project.
- Students with fine motor difficulties can use a touch-screen device to create their projects.
- Students with attention difficulties can be given extended time to provide semi-frequent breaks.

**COMMENTS OR GENERAL NOTES**

This unit coincides with a Social Studies unit focusing on the Civil War and Reconstruction in the United States.

### Getting Started with CoSpaces.io

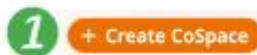
Adaptable to any subject and grade, CoSpaces Edu lets students build their own 3D creations, animate them with code and explore them in Virtual or Augmented Reality. Designed for schools that want to empower their students to become creators and prepare them for their future, CoSpaces Edu develops 21st Century learning skills and digital literacy, enhances creativity and fosters collaboration in the classroom. [Download the brochure \(PDF\)](#), easy-to-use app for 3D design, electronics, and coding.

#### Let's Begin!

- Register with your school email.
- Create a student account.
- If this is your first time, use class code **ENTER YOUR CODE HERE**
- Use trial code **COSCreate3Dtrial** to access the Pro Version for 30 days.



- Once you have your account go to **FREE PLAY** in the left menu.
- Navigate through the 'Welcome to CoSpaces EDU' tutorial.
- This will explain how the tools within the program work.
- After you have completed the Welcome tutorial, Create CoSpace.
- Choose AR/VR and 3D Environment.



Now you are ready to begin learning how to Create 3D Models using CoSpaces. Our simple, easy to follow lessons will give you the confidence to MAKE ANYTHING for a 3D Printer, Virtual Reality or Coding for games. Let us know how you do by signing up on our website at [Create3DModels.com](#). Thanks and have fun creating!

## Cospaces Project Rubric

<b>Category</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Visual</b>	The project is very visually appealing and designed very well.	The project is visually appealing and designed well.	The project is somewhat visually appealing and somewhat well designed.	The project is not visually appealing and is not designed well.
<b>Environment</b>	The environment enhances the project and connects well with the topic covered.	The environment somewhat enhances the project and connects with the topic covered.	The environment used in the project may connect with the topic.	The environment used in the project does not connect with the topic.
<b>Coding</b>	3 or 4 objects are coded and the created code enhances the project.	1 or 2 objects are coded and the created code enhances the project.	1 or 2 items are coded but the coding does not enhance the project.	No coding is evident.
<b>Audio</b>	Audio is used in a way that is not distracting and connects to the topic well.	Audio is used and connects to the topic covered.	Audio is used but it does not connect to the topic and/or is distracting.	No audio is used.
<b>Topic</b>	The project utilizes multiple items that enhance the user's experience and connect with the topic covered.	The project utilizes a few items that enhance the user's experience and connect with the topic covered.	The project utilizes items that somewhat enhance the user's experience and may connect with the topic covered.	The project utilizes items that do not enhance the user's experience and do not connect with the topic covered.

Total Points Earned: \_\_\_\_\_