



VR Quest[®]
Bringing Children & Education Into the Future

Social Studies



VR Quest STEAM Curriculum Guide

VR Quest is pleased to introduce its STEAM virtual reality platform using the best digital content to create a transdisciplinary education product. Designing games strengthens academic concepts by reinforcing content knowledge and expands skill sets with reliance on logic, probability, geometry and other mathematical principles.

VR Quest's STEAM curriculum challenges students to create, innovate, and problem solve all while connecting them to history, science and real-world events and issues that affect their lives. It includes extensive support for teachers such as embedded professional development and instructional resources to support a differentiated learning experience for each student.

The **Science** component can be best seen through scholars being able to create various physical environments and natural resources that will influence their characters and the game. There are landforms, geographic and climate factors that scholars account for during the game's design.

Technology is evident as VR Quest provides a full virtual reality experience for the user, but also fosters problem solving while building mindset and skills. Additionally, the game creator has the option of focusing on the game design, presentation and story, there are also elements of the programming language, LUA that can differentiate the experience for scholars.

The **Engineering** process is facilitated through the design implementation. Scholars are consistently planning, designing and building their creations. When the design process is completed the game must be piloted or tested out. By determining if there are glitches or does not run as anticipated, scholars are able to fail, regroup and correct the approach.

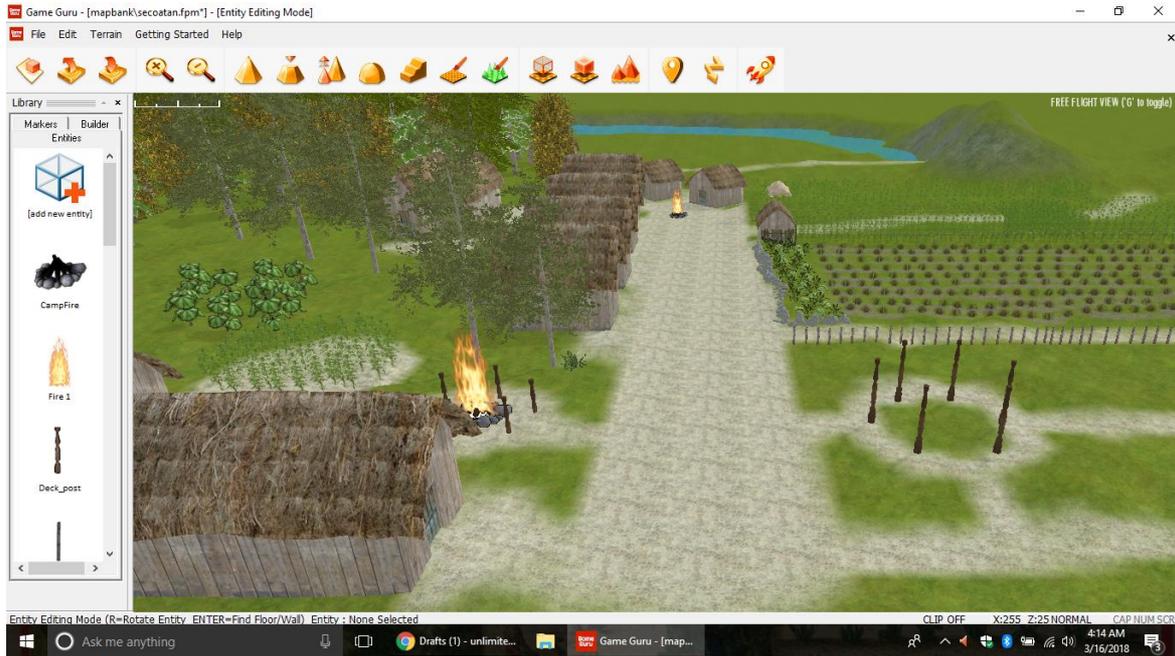
Art is the actual creation process and the aesthetics of the game or how one artistically perceives what is being created. The design concepts are facilitated and placement colors and variety are consistently addressed.

The **Math** component is seen through sizing, scales, ratios, proportions and rotational axis. In the creation process, creators utilize logic, probability, geometry and various other mathematical principles. Scholars will need to visualize and generate geometric shapes. Using visual examples and models, they will demonstrate how formulas work.

Additionally, the VR Quest STEAM curriculum supports ENL programs as it creates equitable opportunities for scholars to develop social and academic language while improving their performance and constructing meaning. To accomplish this goal, scholars engage in all domains of language acquisition (listening, speaking, reading, and writing) while being active participatory learners through inquiry within meaningful contexts and authentic experiences. Through its multi-ethnic characters, settings and variables, VR Quest showcases different cultures and heritages as valued assets to learning and offer an opportunity for the learning community to expand its understandings of global awareness international mindedness. Regardless of whatever communication level an ENL student is at, he or she can display knowledge and create something special unique while reinforcing written and spoken English.

As a classroom or content teacher:

- Collaborate with other teachers in different disciplines and grades about the most important concepts and skills to be taught and transferred into the game.
- Seek out the school librarian to support the research and to design instructional curriculum maps.
- Implement assessment rubrics with information fluency skills to guide the design process.
- Incorporate students' knowledge and use of multi-media resources.



The VR Quest game design screen.

Curricular Alignment

| DOK Tags | Common Core | IFC Standards | AASL | ISTE |
|----------------------------|--|--|--------|------|
| Argument | <p>W.7.1. Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim, acknowledge alternate or opposing claims, and organize the reasons & evidence logically.</p> <p>b. Support claim with logical reasoning & relevant evidence, using accurate, credible sources & demonstrating understanding of the topic or text.</p> <p>c. Use words, phrases & clauses to create cohesion & clarify the relationships among claim(s), reasons & evidence.</p> <p>d. Establish and maintain a formal style.</p> <p>e. Provide a concluding statement or section that follows from & supports the argument presented.</p> <p>W.7.2. Write informative & explanatory texts to examine a topic and convey ideas, concepts, information through selection, organization, & analysis of relevant content.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification,</p> | States and verifies what is known about the problem or question and makes connections to prior knowledge. Writes questions | 1.A1 | 6c |
| Cause/ Effect | | question and makes connections to prior knowledge. Writes questions | 1.A2 | 4c |
| Claims | | independently based on key ideas or areas of focus. | IV.A1 | 6a |
| Classification | | Analyzes and evaluates what is known, observed or experienced to form tentative thesis or hypothesis. | II.A2 | 3a |
| Comparing | | Determines what resources will most likely offer quality information. | IV.A1 | 3b |
| Contrasting | | Considers culturally divergent and opposing viewpoints on topics. | IV.A2 | 5c |
| Counterclaims | | Uses the categorization of materials within Dewey areas to locate resources and browse for additional materials. | IV.A1 | 5c |
| Dialogue | | Uses technology resources such as online encyclopedias, online databases, and Web subject directories to locate information on assigned curriculum topics. | II.A2 | 1a |
| Domain Specific Vocabulary | | Uses organizational systems and electronic search strategies - key words, subject headings) to locate appropriate resources. | V.A1 | 1b |
| Evidence | | Uses multiple sources to acquire | I.D1 | 3c |
| Explanatory Text | | | III.B1 | 6d |
| Facts | | | IV.B1 | 3a |
| Graphics | | | IV.B4 | 4b |
| Informational Text | | | III.B2 | 5b |
| Key Details Main Topic | | | II.B3 | 1b |

| | | | | |
|--------------------|---|--|--------|----|
| Multimedia | comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. | background information & brainstorms ideas for further inquiry. Questions the differences between sources and seeks additional sources to resolve. | IV.C1 | 4c |
| Narrative | | Evaluates and paraphrases information that answers research questions. | I.C1 | 3d |
| Organization | b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. | Evaluates quality of electronic and print information for usefulness, currency, authority, and accuracy. | VI.B2 | 4a |
| Pacing | | Uses both facts and opinions responsibly by identifying & verifying them. | VI.B3 | 4d |
| Point of View | c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. | Takes notes by paraphrasing or using quotation marks when using someone else's words. | II.B2 | 6d |
| Relationships | d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. | Evaluates quality of electronic & print information for usefulness, currency, authority, and accuracy. | III.B2 | 3b |
| Sequencing | f. Provide a concluding statement or section that follows from and supports the information or explanation presented. | Uses both facts and opinions responsibly by identifying and verifying them. | I.B3 | 3a |
| Visual information | W.7.3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, | Interprets information and ideas by defining, classifying, and inferring. Uses common organizational patterns to organize information in order to draw conclusions. Forms opinions and judgments backed up by supporting evidence. | VI.C1 | 4a |

| | | | | |
|--------------|---|--|--------|----|
| Audience | <p> pacing, and description, to develop experiences, events, and/or characters.</p> <p> c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.</p> <p> d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.</p> | <p> Publishes final product for a particular audience and purpose.</p> <p> Interprets information and ideas by defining, classifying, and inferring.</p> <p> Considers culturally divergent and opposing viewpoints on topics.</p> <p> Uses common organizational patterns to organize information in order to draw conclusions.</p> <p> Cites all sources used according to local style formats.</p> | VI.C2 | 6d |
| Organization | <p> W.7.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p> | <p> Publishes final product for a particular audience and purpose.</p> <p> Uses interactive multimedia tools to exchange data collected and to learn curricular concepts by communicating with peers, experts & other audiences.</p> | III.B1 | 6b |
| Purpose | <p> a. Produce text (print or non-print) that explores a variety of cultures and perspectives.</p> <p> W.7.5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p> W.7.6. Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others,</p> | <p> Publishes final product for a particular audience and purpose.</p> <p> Uses interactive multimedia tools to exchange data collected and to learn curricular concepts by communicating with peers, experts & other audiences.</p> <p> Determines what resources will most likely offer quality information</p> <p> Evaluates quality of electronic and print information for usefulness, currency, authority, and accuracy.</p> <p> Uses technology resources such as online encyclopedias, online databases, Web subject directories to locate information on assigned topics in the curriculum.</p> | II.B3 | 6a |
| Analyzing | <p> W.7.6. Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others,</p> | <p> Evaluates quality of electronic and print information for usefulness, currency, authority, and accuracy.</p> <p> Uses technology resources such as online encyclopedias, online databases, Web subject directories to locate information on assigned topics in the curriculum.</p> | I.C3 | 2c |
| Claims | | | | |

| | | | | |
|---------------------|--|---|--------|----|
| Comparing | including linking to and citing sources. | Forms opinions and judgments backed up by supporting evidence. | I.D1 | 3b |
| Contrasting | <i>Research to Build & Present Knowledge</i> W.7.7. Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. | States and verifies what is known about the problem or question & makes connections to prior knowledge , | IV.D1 | 3b |
| Evaluating | W.7.8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. | Writes questions independently based on key ideas or areas of focus. | II.D1 | 3b |
| Evidence | W.7.9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”). | Analyzes and evaluates what is known, observed, experienced to form tentative thesis or hypothesis. | IV.D1 | 3d |
| Informational Texts | b. Apply grade 7 Reading standards to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether | Uses organizational systems and electronic search strategies (key words, subject headings) to locate appropriate resources | I.D1 | 5c |
| Questioning | | Uses table of contents, index, chapter and section headings, topic sentences & summary sentences to locate information & select main ideas. | I.D4 | 1b |
| Reasoning | | Uses the structure and navigation tools of a Website to find the most relevant information. | VI.D1 | 1d |
| Quotation | | Uses both facts & opinions responsibly by identifying and verifying them. | V.B1 | 2b |
| | | Takes notes by paraphrasing or using quotation marks when using someone else’s words. | III.A1 | 2c |
| | | Evaluates and paraphrases information that | | |
| Audience | | | V.D3 | 7 |
| Purpose | | | IV.D2 | 6d |

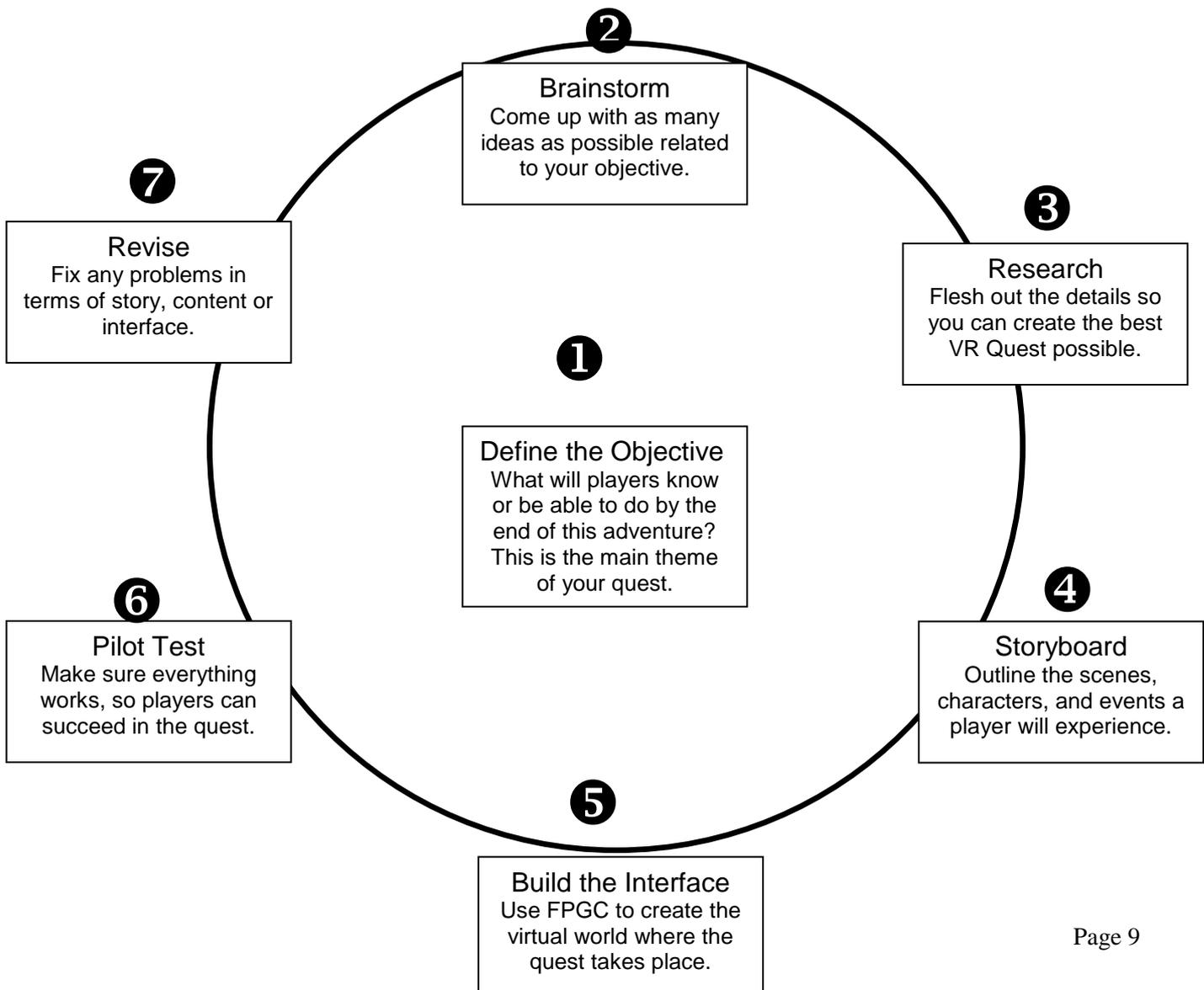
| | | | | |
|--|---|--|--|--|
| | <p>the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</p> <p>W.7.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline specific tasks, purposes, and audiences.</p> | <p>answers research questions.</p> <p>Cites all sources used according to local style formats.</p> | | |
|--|---|--|--|--|

The Journey Begins

Now put on your seatbelts and get ready for a fun filled ride. You are the creator of this journey into history. As the adage eloquently states: “in order to guide your future you must understand your past.” As you make this game richly unique with content knowledge, the player participants will be focused on accomplishing the games’ objective or guided through an experience while being stimulated by audio, images, videos and text. Prepare to travel through Native American landscapes and gain insight into the responsibilities people have during periods of growth and globalization. Many have been fascinated by Native Americans for centuries. As you recreate an authentic village and community, think about ways to insert your thoughts, opinions and ideas on how many situations were handled. How could interactions have been more fair or compassionate?

In this quest, you create an adventure in the unique environment of New York Native Americans. The graphic below outlines the basic steps involved in creating your learning quest. Be aware that you may not go in order. While brainstorming, you may start doing the storyboard, then do research. While building the interface, you may have to go back and do more brainstorming. Just like a paper that you edit and revise, you will be revisiting your storyboard and your game several times to fine tune and perfect it.

On the following pages, you can read how these steps apply to designing a sample quest. Though you can design a quest by yourself, you can often generate more ideas and create more in less time if you collaborate and work as a team.



Establishing an Objective

An objective guides the player in your game and helps them focus on the task at hand. A good objective is clear, concise and SMART.

Specific

Measurable

Attainable

Realistic

Time based

By the end of this quest, players will be able to _____.

Here is a sample SMART objective: players will be able to:

- Investigate how European explorations of the New World resulted in various interactions with Native Americans within a five year period.
- Compare and contrast how issues of power, wealth & morality influenced exploration & colonization in the 1600s.
- Explain the similarities and differences between a New York Native American tribe and one from the south.

Your objectives will vary depending on the type of quest you design. Your quest may have an objective that requires player participants to acquire artifacts. Or your quest could have an objective that is based on an educational gallery walk. Regardless of which one you select an objective is necessary to guide the game designing process just as a thesis guides a major research paper. A good objective has no more than five main points.

Collaboration & Brainstorming

The thinking and conceptualization process is intended to be a free-flowing period to generate as many ideas as possible. Brainstorming is the collection of all ideas. No idea is a bad idea in this stage.

Collect all ideas. Often an idea will lead to a bigger and better idea. Once you get your creative juices flowing, you start to think of other things.

Write ideas on big chart paper. If everyone takes ownership and can easily read the group work, it will generate more ideas.

Utilize pictures, colors and music. Have you ever heard the expression you are the company you keep? Writing in color will help you color code your ideas and adding drawings, photos and sketches will ignite greater creativity. This is a great organizational tool as well.

Play background music. Play some relaxing wordless music. If you have Amazon's Alexa available she can play beach sounds, pink noise, healing or mediation sounds. You name it, she has it. Studies show that music can make you more productive.

Set a timer. A solid half hour for brainstorming is usually sufficient time. When you work on a timer, you are focused, clear and productive. Do not allow anything to distract you

during this time. Cell phones should be put away and the only task at hand will be brainstorming.

Be comfortable. Make sure you have water to drink, ample room to write and draw and the atmosphere is a pleasant temperature. When you are comfortable, you will get more done.

Now that you have completed formulating and generating ideas, you have officially completed the brainstorming process. Go through all the ideas and separate the great ideas from the rest of them. Using teamwork, read through the list and discuss what you like and dislike about each. As a group, vote on what works and what doesn't then cross off the not so good ideas. Finally, think about what you can realistically create in a given time period.

Research

Use the objectives you wrote in step ❶ to guide your research, answering any questions. Here's some of the research associated with the objectives in our example:

- Assess the influence Native Americans had on western culture: Native Americans were a very diverse and culturally rich people. They had many different tribes throughout the US and New York State. In daily life they constantly drew upon art, music and dance as well as a strong sense of oral history or storytelling to pass down their ancestors' lives and accomplishments.

The houses and communal dwellings illustrate an astounding level of engineering. Wood saplings were harvested while green and bent into the desired shape woven between vertical staves of wood. These were left to dry out and would maintain their shape creating a sturdy wall structure. Oak trees would be cut down in late summer and left over till spring when the bark would be separated from the pulpwood in long sheets. These sheets would then cover the dwelling in layers creating a waterproof barrier from the elements. A cooking and heating fire would normally be in the center of the building keeping everything warm in the winter months.

What different indigenous cultures were there?

Critique the affect Native American housing has on modern housing today.

Describe the geography.

Explain their religion / spirituality.

Compare and contrast their governments & economics (food, housing and trade).

Investigate Native American traditions, oral history and culture.

- Know the significance of math throughout everyday life: *Mathematics was part of everyday life for most Native Americans - the village was encircled by a precisely made palisade of vertical poles set in a caracol or spiral form which kept the main part of the village hidden yet one entrance to defend in case of attack. The crops were also laid out in rows with a calculation to provide sufficient food for the village for the coming year.*

- Explain how past practices are current and still used today: *Native Americans were very advanced in science and technology with agriculture and cultivation a central aspect of daily life. Corn was planted with dead fish and beans. The dead fish supplied the nutrients for the plants while the beans grew close to the ground and kept much-needed moisture in the soil. The beans also acted as a natural deterrent to maize pests. These individual plantings were built on little mounds with indentions on top to collect rainwater.*

- Taking it to the next level with critical thinking: European explorations of the New World resulted in numerous interactions with Native Americans and in colonization. American colonies were established for a variety of reasons and developed differently based on economic, social and geographic factors. Colonial American had a variety of social structures under which not all people were treated equally.

- European encounters w/ Native Americans
- Doctrine of Discovery
- Reasons for Native American population decline and loss of land
- British interactions w/ Wampanoag
- Dutch interactions w/ Mohawk, Mohican and Munsee
- French interactions w/ Algonquin
- Spanish interactions w/ Muscogee
- Interactions between Native Americans, Africans and Europeans
- Native American influence on western culture
- Role of Native Americans
- Conflicts between indigenous peoples and European settlers

VR Quest encourages scholars to practice while they are learning game creation, but do not copy. Be creative, try new things and bring new ideas and aspects into the VR experience with your fresh take and stimulating outlook.

Native Americans in New York give you a wealth of opportunities and challenges to design a quest where players discover more about this amazing state as they face and overcome obstacles and problem solve. Here are a few ideas:

- Tell players that America has been discovered and they need to know different geography terrains and location to avoid encounters with unknown entities.
- Challenge players to create a detailed longhouse or setting by changing aspects of the physical environment.
- Explore the exterior of village to find actual evidence that there may be life apart from the village and the immediate vicinity.

Websites for Student Use

Here are a few vetted websites to help you conduct research:

<http://www.native-languages.org/york.htm>

<https://paththroughhistory.iloveny.com/themes/native-americans/#.WqU4Z62ZP3A>

<https://www.nytimes.com/topic/subject/native-americans>

https://steinhardt.nyu.edu/scmsAdmin/media/users/xr1/Language_n_Cultural_Awareness/NativeAmericanCultureLanguageNY2-27-13.pdf

<https://www.accessgenealogy.com/native/new-york-indian-tribes.htm>

<http://www.nysm.nysed.gov/exhibitions/ongoing/native-peoples-new-york>

<http://www.nysl.nysed.gov/scandocs/nativeamerican.htm>

<http://www.indians.org/articles/corn.html>

Student Voice and Empowerment

Educators often feel as if they must know it all before they can teach it. The beauty of game design and integrating technology to support the curriculum is scholars can become the experts. There is nothing scholars love more than to be able to teach their cohorts or even adults how to do something. Studies show that scaffolding learning helps to not only reinforce new knowledge but to also foster and promote a growth mindset.

Tutorial Toolbox

Broadcast #4: Using Character Creator in Game Guru
(<https://www.youtube.com/watch?v=fYDnnMHko0k>)

Broadcast #7: Getting your own 3D Models Into GameGuru
(<https://www.youtube.com/watch?v=g81EfiWibSs>)

Broadcast #8: How to customize the menu screens
(<https://www.youtube.com/watch?v=T8rOhDTQaOI>)

Broadcast #11: AI Scripting walk through
(<https://www.youtube.com/watch?v=U8xMLVq1ADE>)

Broadcast #12: Cut / intro scenes (<https://www.youtube.com/watch?v=fXuoTIOWcV8>)

Broadcast #13: Third Person Controls and Scaling
(<https://www.youtube.com/watch?v=J57atVb5YNg>)

Broadcast #15 : Making A Character Quest
(<https://www.youtube.com/watch?v=FePcAt9NgZE>)

Broadcast #18 : How To Make A Cave Game
(<https://www.youtube.com/watch?v=bYgStQGBIEg>)

Broadcast #20 : An Introduction to HUD Graphics
(https://www.youtube.com/watch?v=bg7RG1sRY_A)

Broadcast #22 : All About Playing Sounds
(<https://www.youtube.com/watch?v=xP0sL4GTxZ0>)

Broadcast #26 : Making Interactive In-game Menus
(<https://www.youtube.com/watch?v=T41vERR29Zw>)

Broadcast #29 : Learn About the Dynamic Music System
(<https://www.youtube.com/watch?v=Yr3ZqN-OpcE>)

Broadcast 33: "lil car" game PART ONE
(<https://www.youtube.com/watch?v=KhHepGg9PL0>)

Broadcast #33: "lil car" game PART TWO
(<https://www.youtube.com/watch?v=CC50B4jaP4Y>)

Broadcast #36 : Player And Entity Health Types
(<https://www.youtube.com/watch?v=jJmjugyY0dY>)

Broadcast #38 : A Closer Look At Editing
(<https://www.youtube.com/watch?v=IQOOhuG51qg>)

Broadcast #42 : Create a quest and quest giver level
(<https://www.youtube.com/watch?v=JS4u5dhs14A>)

④ Storyboard

In order to have your game make sense to the player participants, you must create your storyboard. A storyboard is a physical layout or a sequence of directions, illustrations and dialogue of the order of your story. A good storyboard depicts significant action and changes. Think about the last good book you read. The author sat down to think about exactly what would happen when. One of the best ways to do this is to create a series of panels that almost look like a comic book. Going through the process of planning and creating this will help you to envision both the actions that the player will be experiences, and the environments in which they'll be doing it.

Every story will have the following main components:

Introduction: Here, the player is introduced to the characters, environment and objective of the quest. You will also establish the player as the 'main character' of the story, and let them know what is expected of them.

Body: The body is where all the action takes place! Your player will face challenges, solve puzzles, meet other characters, and build toward the climax.

Climax: A climax is the ultimate challenge, where the main character uses everything they've learned during the course of the quest to achieve their final objective.

Summary: The summary congratulates the player for a successful quest and reminds them of all the amazing things they did to get here.

To create a good story, you will need to define the challenges that the main character will face on their journey. Ideally, all of these will build upon one another getting harder and harder as the player moves forward.

As you devise your story, be sure that the problems the main character needs to solve are not too easy, but also not too hard. If they need knowledge to answer questions, be sure to embed the answers somewhere or explain clearly where they can be found. On the following page is a sample storyboard for a New York State Native American quest.



This illustration highlights the different Native American tribes in New York State.

Sample Storyboard for New York State Native American Quest

| Introduction: Panels 1-2 | | Body: Panels 3-10 |
|---|--|--|
| | | |
| <p>1. Young brave guides the player through a wooded trail that widens with manicured walkways and fences leading into a small village of willow and branch buildings.</p> | <p>2. Player comes <i>to</i> longhouses and mat covered huts. Many of these were two-story structures where the family could sleep on the loft in the evening and have more floor space available for activity during the day.</p> | <p>3. Player has to find cultural artifacts within Native American community to create a journal documenting his/her journey/</p> |
| | | |
| <p>4. Player recognizes how advanced in science and tech Native Americans were with agriculture and cultivation a central aspect of daily life. Corn was planted with dead fish and beans.</p> | <p>5. The dead fish supplied the nutrients for the plants while the beans grew close to the ground and kept much-needed moisture in the soil.</p> | <p>6. Player moves through the beans which also acted as a natural deterrent to maize pests. These individual plantings were built on little mounds with indentions on top to collect rainwater.</p> |
| | | |
| <p>7. Young brave states, “Maize in itself is an amazing product of Indian ingenuity and genetic manipulation. The original maize plant started out looking like a stalk of wheat and through millennia of selective cultivation, emerged as the corn you know today. Even modern science hasn't been able to reproduce this feat. We also invented popcorn.”</p> | <p>8. <i>Voice:</i> “Mathematics was part of everyday life for us – money was not used. While they didn't use physical money, they would trade with wampum, a purple shell cut into beads.</p> | <p>9. <i>Player walks around the perimeter of the tribes’ grounds taking note of all daily activities and nodding in appreciation.</i></p> |

| | Climax | Summary |
|--|--|--|
| <p><i>10. Player returns to the center of the village and greets elders.</i></p> | <p><i>11. Player needs the most important artifacts to present to the elders. 'Oh no! I don't have the most important artifact from my journey? What will I do?'</i></p> | <p><i>12. Teamwork 'Congratulations, my friend. You found it. Great job!!'</i></p> |

5 Build the Interface

Now that you've decided your story line and main scenes, it's time to build it using the VR Quest Game Guru software. Use the tables included with 'Learning the VR Quest System' to help you remember how to use the commands to build your quest.

Depending on what's available and how much time you have, you may need to go back to steps 2 - 4. Maybe you don't have time to fill rooms with all the right equipment, or build a complex series of underground tunnels. Perhaps you're not exactly sure what equipment would be found in a space lab and need to do more research. The story might benefit from a bit more brainstorming.

How could you include different artifacts relevant to the historical period you are basing the game off of? Would it be a series of different artifacts that will help the player participants learn more or would it be one artifact that is continually acquired?



For example, this Native American seed pot was used by tribes to hold seeds needed for planting. Different artifacts can illustrate what daily life was like or even what objects held cultural or spiritual importance in the Native American belief system.

6 Pilot Test

After you've finished building your first draft of the quest, you'll need to give it to people outside your team to solve. It helps to have a fresh set of eyes evaluating and making suggestions on what you need to do to improve it. This will help you to identify any problems that need fixing. Ask the following questions of the people who try it out:

- 1) Did you know what you were supposed to accomplish to win the game?
- 2) Did everything work (switches, videos, doors, etc.)?
- 3) Did we provide everything you needed to succeed in this quest?
- 3) Was this exciting? Were you completely engaged? What do you think could make the quest better?

Professional game designers go through many pilot tests because there are almost always things that don't work the way they intend them to. Just like good writers edit and revise, as a game designer you must also seek ways to improve your game. It often helps to step away from your project and return with a fresh outlook. You may want to do several test runs.

7 Revise

The pilot test will give you lots of information. Maybe players didn't understand what they needed to succeed. Perhaps they weren't able to move items or open doors to move forward. Or critical information that they needed to solve the quest wasn't available.

Following are a few of the things you may need to revise:

Factual Content:

- Did players understand the quest?
- Was all the information needed available to players?
- Did the story make sense?
- Were there things that misled players because they were unclear or inaccurate?

Interface:

- Did all of the interactive features work?
- Could the players navigate the landscape?
- Was the setting attractive, and in line with the theme of the quest?
- Did things like maps or guides properly match the 3-D landscape?

Overall Experience:

- Was the quest at an appropriate level of difficulty?
- Did players stay interested in the quest?
- Were players able to complete the quest in a reasonable amount of time?
- Did players have an overall positive reaction to the quest?

In revising, it is likely that you will repeat some of steps 2 - 6. If you have a chance to pilot test a second time, hopefully you will see how much better your quest is after incorporating feedback.



Take it Home

One of the best things about VR Quest STEAM is you can take your project home! When you've finished, you will be able to save your file in a format that can play on any home computer. Your friends and family will be amazed that you've created your very own computerized VR Quest and will enjoy playing it long after you've gone home.

In the future, we hope you'll be able to join us in designing a wide variety of quests, sparked by your creativity and imagination and share them with scholars across the United States!