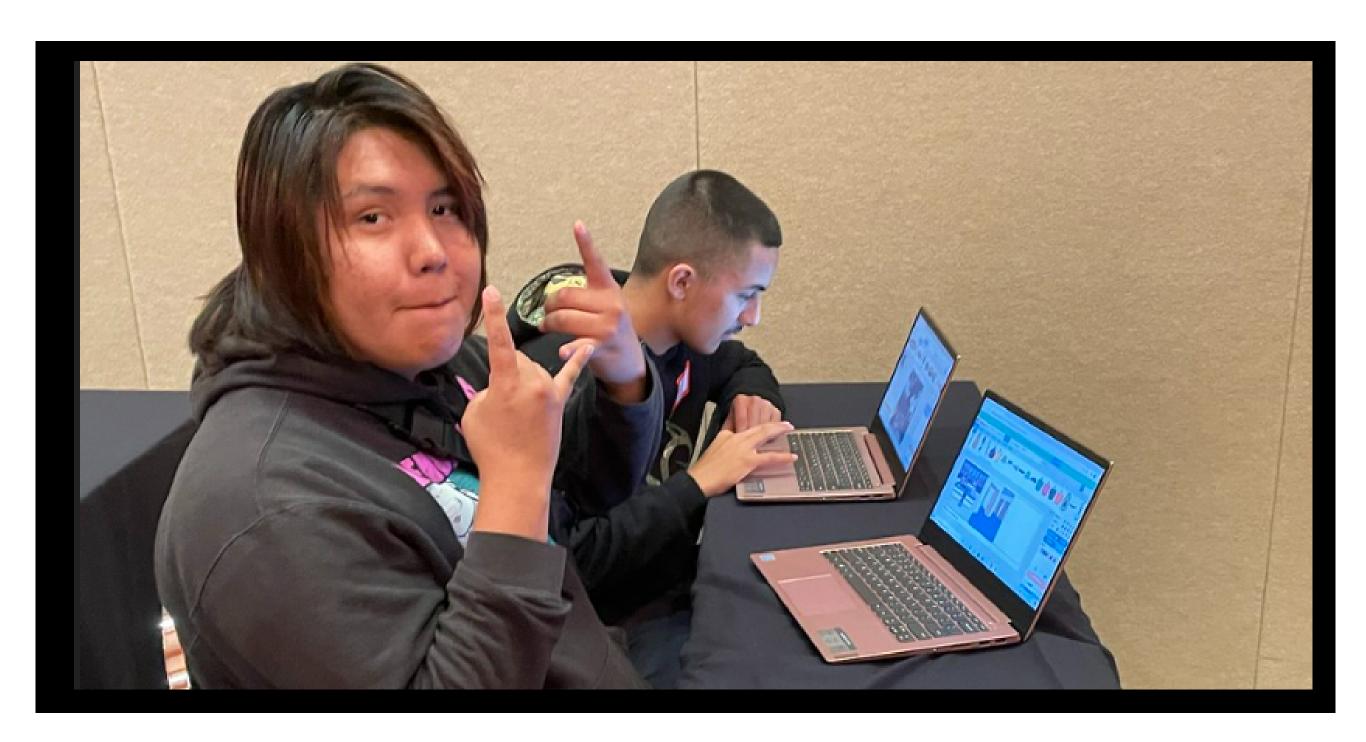


# MATH AND SCIENCE OF INDIGENOUS PEOPLES

HELPS OUR KIDS LEARN TOGETHER

#### **SPACE JOURNEYS**

Calculus Roundtable's Math & Science of Indigenous Peoples course was designed to give students the tools and knowledge to succeed in the digital world with skills of ancient Native American tribal traditions.



## WHY STORYTELLING?

How did we record history before we understood writing? In most cultures, we can only remember the past by passing word-of-mouth stories from one generation to another. These stories teach us lessons, give us history, and help us remember where our traditions from 1000s of years of culture into symbols, figures, and stories.

Today we see the same expressions of meaning in things like emojis and logos and professions like iconography and cryptography.



## WHY CALCULUS ROUNDTABLE?

Calculus Roundtable is a proven expert in student-friendly, accessible culturally inclusive programs. Our award-winning programs give students the skills they need to be successful. In our nine years, we have served tens of thousands of students in 6 states.

## Lesson at a Glance

Native Story Telling Grades 3-7

#### **Objectives**

Students use technical and critical thinking skills to express themselves. This also builds awareness of a hypothesis with a beginning, middle, and end.

Section	Purpose	Est. Time
Discussion & Video	Introduce the activity and watch video  A storyteller makes ancient Native American tales new again  Perry Ground '91 travels around the world performing Haudenosaunee stories, adapting them to the present	5 Min
Gather Artifacts	Go to the web and find graphic items that are symbolic to the Native experience. Items can be uploaded to the Storyboard Library on the <u>Gdrive</u>	20 Min
Open New Storyboard	Click storyboard to begin <u>login.storyboardthat.com</u> <i>Use open licences</i>	10 Min
Create Storyboards	Create 2 or 3 boards with a beginning, a middle, and an end scene. The subjects are: 1. How did I get here? 2. Who is my family? 3. About my tribe	45 Min - 1 Hr

1 hr 10 min - 1 Hr 30 mins. Can be extended to 2 Hrs.



## ACTIVITY BADGES

#### **Student Badges of Completion Awarded**



**Critical Thinking** 



**Managing Outcomes** 



**Self-Expression** 

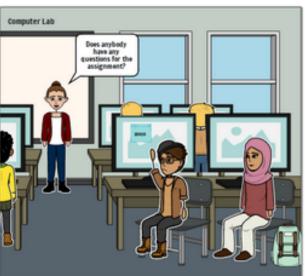


**Collaboration** 

#### **Examples of Student Work**



Create your own at Storyboard That









Updated 8/18/2022

By: HOC10

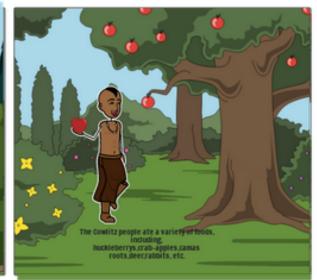
#### **Story of Cowlitz**



Create your own at Storyboard That

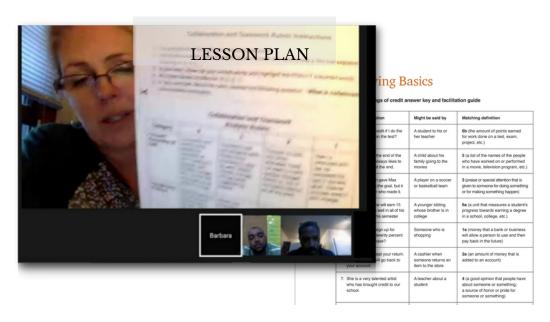








#### **Professional Development Offerings**



#### **CLIENT**

"(CR) brought a great program to our school. I got to attend some of the classes and they were fantastic. I wanted to keep being a student."

**Daniel Dennedy Frank**Principal
McKinley Elementary
Franklin McKinley School
San Jose, CA



### Lesson Materials & Standards

#### **Materials**

- Storyboard Logins for students
- Laptops or Chromebooks with Google Chrome browser capabilities (1 Laptop per 1 or 2 students)

#### **Background:**

How did we record history before we understood writing? In most cultures, the only way we remember the past is by passing on word-of-mouth stories from one generation to another. These stories teach us lessons, give us history, and help us remember where our traditions from 1000s of years of culture into symbols, figures, and stories. Today we see the same expressions of meaning in things like emojis, and logos, and in professions like iconography and cryptography.

#### Standards:

#### Reading, Literature:

Key Ideas and Details

RL.6.1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**RL.6.2.** Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. As a class determine the themes of the text.

• Divide students into small critical groups. Have each group take one of the themes and orally develop the narrative using that theme and the way it is supported. Present the narratives to the class.

**RL.6.3**. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

#### **Craft and Structure**

Rl.6.4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative

meanings; analyze the impact of a specific word choice on meaning and tone.

**RI.6.5**. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. In pulling out a piece of the story for analysis, ask how this piece fits or does not fit into the story. Ask, "If removed, what would happen to the story

## Lesson Prompts

What to do	Why to do	When to do
Make a new storyboard with 3 frames	set students up to creatively tell a complete story	After student has properly logged in
Make a character and make them look like you	cultural and identification with the storyteller	After student selects
Add your character to each of the 3 frames	authentic storytelling from a first-person perspective	
Tell your story with a beginning, middle and end	practicing the scientific method and critical thinking	
Add dialogue to each frame so your audience can understand what's going on.	Self expression (ELD Standards??)	





