



Science Half-Day Workshop Agenda

About Your Facilitator:

Vicki Anderson is an active learner and leader. After teaching high school English for many years, Vicki moved to a district position as a K-12 Instructional Technology Coach. She earned her Master of Education degree in Educational Technology from Arizona State University where she now teaches EdTech courses to pre-service teachers as a part-time Academic Associate. Additionally, Vicki acts as the remote Technical Training Manager for STEALTHbits Technologies, Inc. Among other certifications, Vicki is proud to be a Google for Education Certified Trainer and G Suite Administrator. She specializes in digital literacy, technology integration, and innovation in teaching and learning.



Short URL for Resources: bit.ly/ReconAZ

Lesson 1: Introductions/Pedagogy/SAMR	
Getting Started	What are we doing today? Parking Lot - What do you want to learn? Introductions
Chromebooks & SAMR	Chromebook Functionality The Marvels of Chrome and Extensions: <ul style="list-style-type: none"> • Screencastify • Share to Classroom • OneTab Discussion of SAMR in schools
Lesson 2: Content Tools	
Digital Science	Designing Lessons and Units (NGSS 5E model) Drawings for sending a copy of template to every student (Slides background) Immersive Technology : VR and AR Tools <ul style="list-style-type: none"> • Expeditions • YouTube 360 Videos • Merge Cube AR

	<ul style="list-style-type: none"> • Tour Creator, Nearpod, and Discovery VR • NASA, Google Earth, Arts & Culture, Star Walk, and more! <p>Some of my district VR resources are linked HERE</p> <p>Collaborative Exploration:</p> <ul style="list-style-type: none"> • Option 1: Digital Breakouts - BreakoutEDU • Option 2: Google Science Journal • Option 3: StemScopes (NGSS) - Resources → Free Resources • Option 4: PhET Interactive Simulations
Voting	Vote on your favorite tool!
Extras	<p>Additional Options:</p> <ul style="list-style-type: none"> • Everfi (free for teachers and students) • CK-12 • Parlay Universe • Check out the Geo Tools I used with the Social Studies group <p>K-5 Science Resources (which might also be useful in secondary):</p> <ul style="list-style-type: none"> • Generation Genius • Mystery Science • Explorify
Data Made Easy	<p>Data Collection & Analysis:</p> <ul style="list-style-type: none"> • Google Forms for data collection, quizzes, and surveys • Sheets for data collection and analysis <p>Create: A Google Form quiz or survey</p>
Please complete the EVALUATION!	
If Time Allows: Projects & Publishing	
Portfolios	<p>Digital Portfolios and Group Projects:</p> <ul style="list-style-type: none"> • Google Sites • Google Slides • Apps for Portfolios & Presentations <p>Create: Your own Digital Portfolio Template or a Class Website</p>
More to Explore	
Research	

ELA & Collaboration	<p>Collaboration and Feedback for Student Research & Writing:</p> <ul style="list-style-type: none"> • The writing process in Google Classroom • Explore tool for research • Google Keep & "Print to Drive" for saving sources • Google Docs - Suggesting mode, comments, version history • Other: voice typing & comment banks • Apps for Writing and Research <p>Collaborative Exploration:</p> <ul style="list-style-type: none"> • Option 1: Google Keep • Option 2: Kaizena • Option 3: Mentimeter • Option 4: Kami
Social Studies/ History	<p>Immersive Technology</p> <ul style="list-style-type: none"> • Augmented Reality (AR) • Virtual Reality (VR) & 360 Video • Visit locations, experience cultural events, and more! <p>Collaborative Exploration: Geo Tools - (more resources)</p> <ul style="list-style-type: none"> • Option 1: Google Earth & Google Earth Engine • Option 2: Google Maps & MyMaps • Option 3: Tour Builder & National Geographic • Option 4: True Size Of, Antipodes, & Global Surface Water
Digital Math Tools	<p>Math on Chromebooks: Google Keep for Math</p> <p>Mobile Device Apps</p> <ul style="list-style-type: none"> • MathNinjaAR • GeoGebra AR (3D Calculator) • VR Calculus • MedievalMath • Math VR • Google Expeditions <p>Collaborative Exploration:</p> <ul style="list-style-type: none"> • Option 1: Knowledgehook • Option 2: GeoGebra • Option 3: EquatIO • Option 4: Edulastic <p>Additional Options (unvetted):</p> <ul style="list-style-type: none"> • Desmos • IMathAS • My Open Math • XtraMath <p>Getting Artsy with Math and Technology - Article</p>

Screencasting is NOT Scary

Screencasting

Screencasts:

- [Screencastify](#)
- YouTube

Create: Your own screencast!

Hyperdocs

Try Hyperdocs

[Hyperdocs?](#)

- Docs: Table, Hyperdoc, Insert Image, Change color in table
- Explore, Explain, Apply
- Exploration

Create: For a first unit introduction

Try It Later!

Later or when you're ready for something new, try these out!

Voice & Choice:

- [Flipgrid](#)
- [Adobe Spark](#)
- [Canva](#)
- [Padlet](#)

Create: A back to school flyer or Flipgrid prompt

Student Response Ideas:

- [Flippity](#) -- SERIOUSLY, try this!
- [Socrative](#)
- [Edpuzzle](#)
- [Kahoot!](#)
- [Classroomscreen](#)

Create: Choose one and create a project for one of your first units

Resources

- [Google for Education YouTube channel](#) - EDU in 90
- [HistoryTeachers YouTube channel](#)
- [Horrible Histories YouTube channel](#)
- [Slides Carnival](#)
- [ClassTools.net](#) - Fakebook page
- [Google Arts & Culture](#)
- Don't forget [Google Drawings](#)

Lesson Planning & Freebies

Search for Lessons

Free Lesson Plans & Tools

- [Grow with Google](#)



- [Applied Digital Skills](#)
 - [CS First](#)
- [CK-12](#)
- [Workbench](#)
- [Amazon Inspire \(Education\)](#)
- [Classflow](#)
- [BetterLesson](#)
- [Bunce](#)

Link to **Evaluation**:

https://docs.google.com/forms/d/e/1FAIpQLSf_eiVsMuJakZAe_ylGAju7PW6FZO4wyh2YgE1xiAEY7EGkpw/viewform