

Digital Storytelling and Authentic Assessment: Using ArcGIS StoryMaps in the Classroom

Dr David Hope, LTDS

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Life and Destruction: The Monsoon Rains of Kerala

The 2018 Kerala Floods in Perspective



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Chomolungma to Everest

How Western Imperialism Took On The World's Highest Mountain


Ben Whitford-Battle
January 21, 2022



Imperilled Ecology

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Hydrological Chronicles

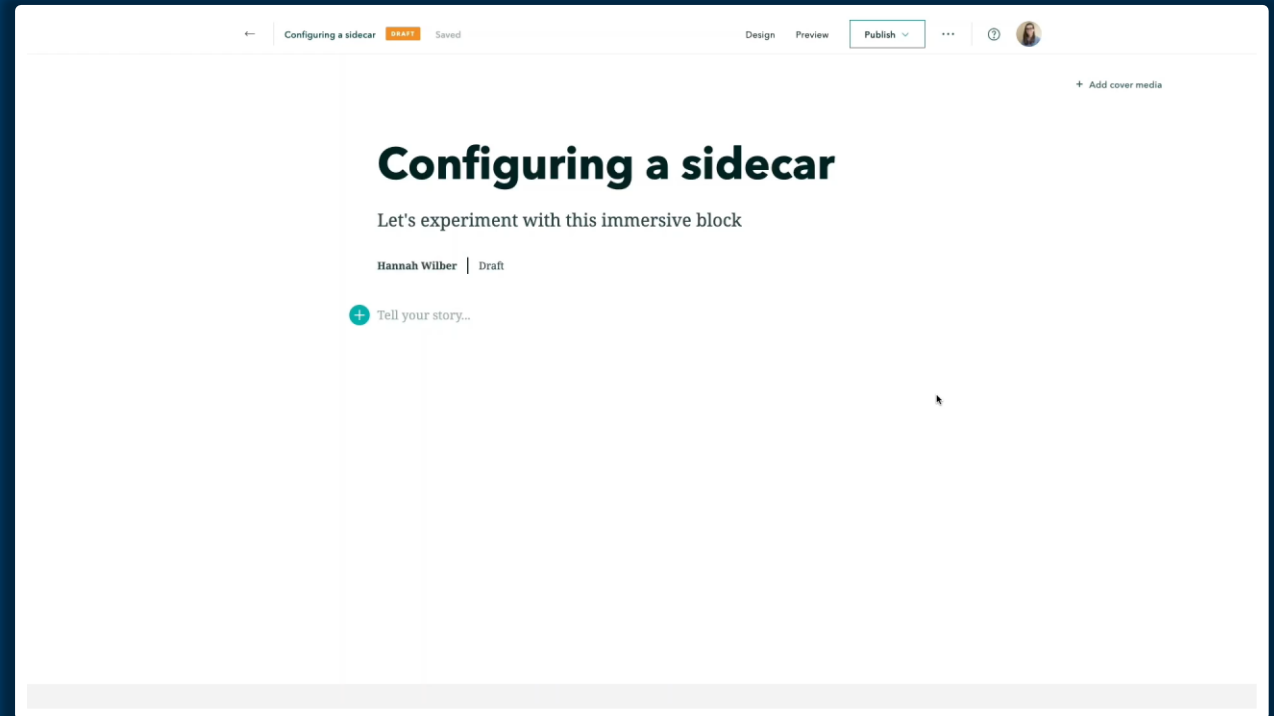
Environmental Histories of Rivers, Moorlands and Flooding in North Yorkshire

Toby W.C. Stanage
May 29, 2020

From Newcastle. For the world.

What is ArcGIS StoryMaps?

- Online content builder
- Intuitive, professional, easy to share
- Requires ArcGIS account (institution has access)



ArcGIS StoryMaps as Assessment

- Final summative assessment (60%)
- Task was to create a StoryMap that reflected on **the historical roots** of a **present-day environment issue** and/or a **key theme in environmental history**
- Students were expected to formulate their own project (with guidance provided).
- 2,000 words (equivalent)

Supporting students to create StoryMaps

Specifically supported with **four 60-minute workshops**:

- StoryMaps and Storytelling
- How to create a StoryMap
- Planning and designing a StoryMap
- StoryMap Exchange (shared plans, formative feedback from peers)

Formative creative project plan (200 words)

- Structure outline and intended focus
- Idea of argument that links it all together
- Intended primary sources and data visualisations

Marking

- Key elements marked on:
 - **Argument** (knowledge and understanding of selected topic; critical analysis; independent thought; and creative thinking)
 - **Evidence** (primary sources; secondary sources; referencing)
 - **Presentation and Design** (writing style; structure; use of images, maps, and data visualisations)
- Best to have dedicated marking criteria
- Bullet points over 'grade blurb'?

MARKING CRITERIA — ArcGIS StoryMap

Since the independent creative project is likely a new type of assessment to many of you, below are descriptors of what a Story Map for each classification will look like. This is the marking criteria that will be used to assess your Story Map, and one which adheres to the standard marking criteria as featured in the degree programme handbook.

Outstanding First (Mark 80-100)

An outstanding Story Map that demonstrates a superb level of independent thought and creative thinking. An expansive range of primary and scholarly secondary sources are used and critically analysed in support of a nuanced, highly impactful, and original argument. An impressive amount of detailed evidence is used, and advanced knowledge and understanding is shown throughout. The Story Map is extremely well designed and visually appealing, making astute use of images, maps, and data visualisations to communicate many complex ideas in an innovative and coherent way. The writing style is highly lucid and there is excellent use of contrast and immersive features. The structure is excellent, and the content is accurate and highly focused on the selected topic. All sources are appropriately and correctly referenced.

First (70-79)

An excellent Story Map that shows some highly effective independent thought and creativity. An excellent range of primary and scholarly secondary sources are used and critically analysed in support of a clear, compelling, and nuanced argument. An excellent amount of detailed evidence is used, and sophisticated knowledge and understanding is shown throughout. The Story Map is very well designed and visually appealing, making skilful use of images, maps, and data visualisations to communicate complex ideas in an effective and coherent way. The writing style is lucid and there is very good use of contrast and immersive features. The structure is excellent, and the content is accurate and very well focused on the selected topic. All sources are appropriately and correctly referenced, although there may be the very occasional referencing error.

Upper Second (60-69)

A good or very good Story Map that may display some elements of independent thought and creative thinking. A very good range of primary and scholarly secondary sources are used and analysed in support of a clear and somewhat convincing argument. A very good or good amount of detailed evidence is used, and good knowledge and understanding is shown throughout. The Story Map is well designed and visually appealing, making good use of images, maps, and data visualisations to communicate some complex ideas in a somewhat effective and coherent way. The writing style is very good although there may be some lapses in the prose and grammatical errors. There is evidence that some attention has been given to the use of contrast and immersive features. The Story Map is clearly structured, and the content is mostly accurate and well-focused on the selected topic. Most sources are appropriately and correctly referenced, although there may be the occasional error in referencing style.

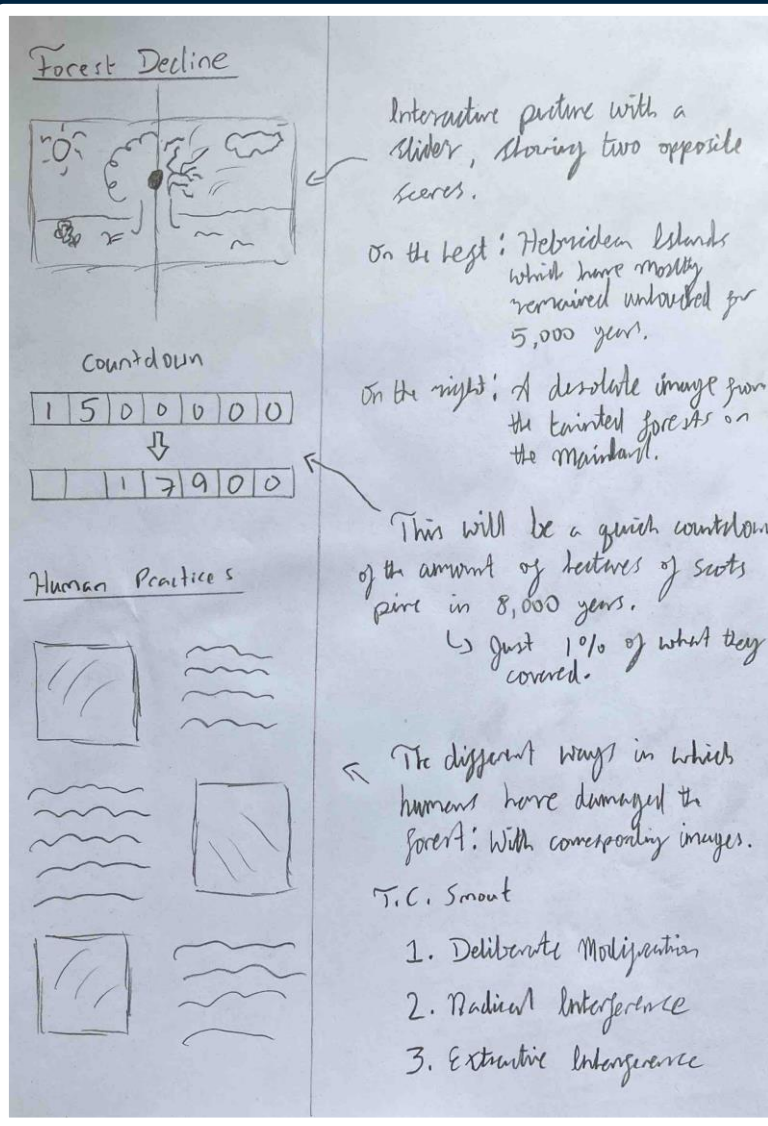
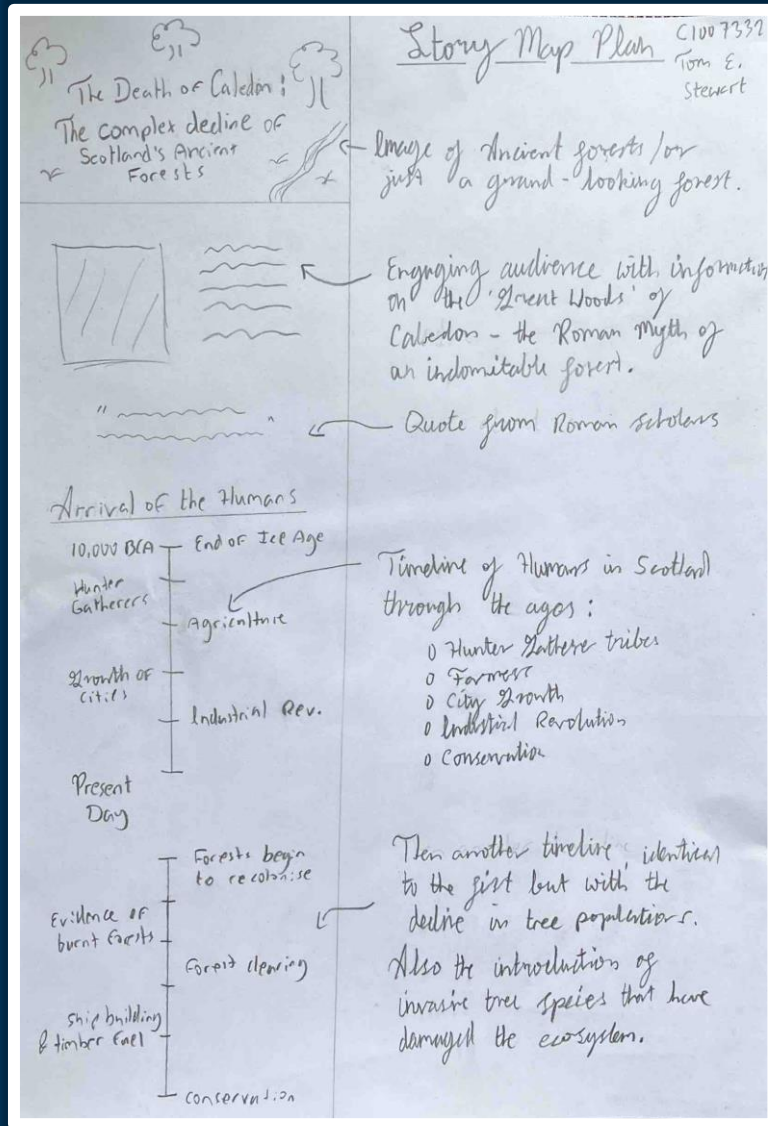
Lower Second (50-59)

A reasonable or fair attempt at a Story Map that may show some basic evidence of independent thought or creativity. An acceptable range of primary and scholarly secondary sources are used with some effective analysis of them in support of an

Why did we use ArcGIS StoryMaps?

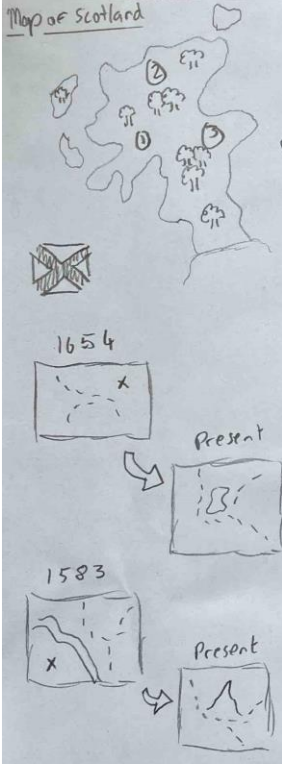
- A good match. Environmental history often about space and place. Storytelling lends itself to pressing issues?
- Digital skills development. **StoryMaps archived** for students to add to their CV and share with others
- Public history/engagement (relevance of history)
- **Good fun.** Interesting to mark
- **Positive feedback** from students
- **Authentic assessment.** Suitable in an era of AI...

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Map of Scotland



An interactive Map of Scotland

- This will zoom in on areas of Scotland and how they have been affected by the decline in forests.
- Loch Maree = Scarce of trees
- Hebrideans = Lots of trees etc...

These will depict and compare Maps documented by Rev. Timothy Pont and John Blaeu.

- This will demonstrate the depleted forests in the past few centuries alone.

Pop out information on each aspect.

Affects of Forest Decline

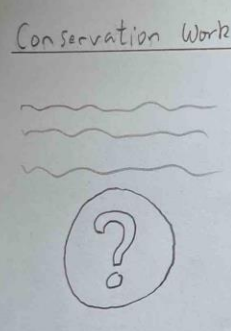
- Loss of Biodiversity
- Soil Erosion
- Carbon Storage

Biodiversity - Wild Boar, Amurh, Lynxes, Wolves, Red Squirrels, Pine martens, Scottish Wildcats (all endangered or extinct)

Soil erosion - Damaged ground prevents some species of trees growing.

Carbon Storage - Climate Change

Conservation Work



Scottish Government legislation to preserve forests.

Questions whether it is being done properly or the right way.

LOST LAGER

BREWDOG

Talk about other companies such as Brewdog and their work to replant the 'lost forests'.

"Controversy"

"landscape disaster"

Media backlash and problems with such endeavours.

Ideas for how to get involved and protect the environment.

Quote from Christopher Smart to end Story Map.

"We should be planting new pine woods etc..."

Citations

The Death of Caledonia

The Decline of Scotlands Ancient Forests

T. Edwin Stewart

5 June 2023

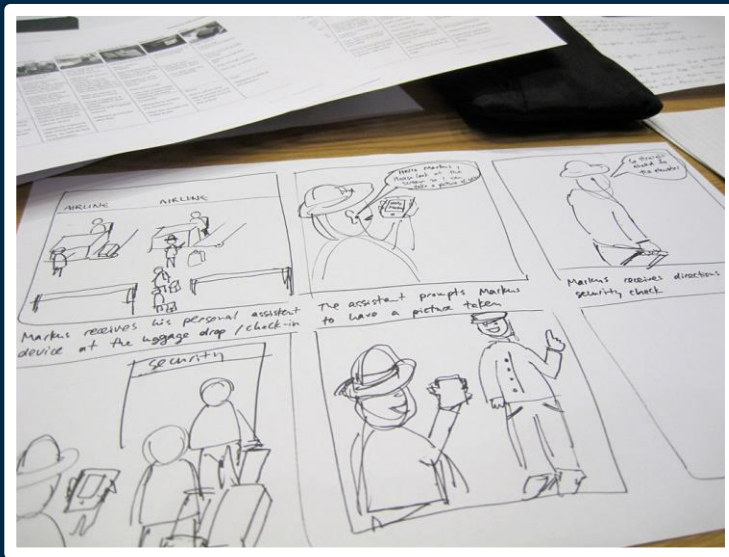
Nuclear Lies and Denial

How government and industry denial of risks and misinformation of the use of nuclear energy and weapons devastates people and environments.

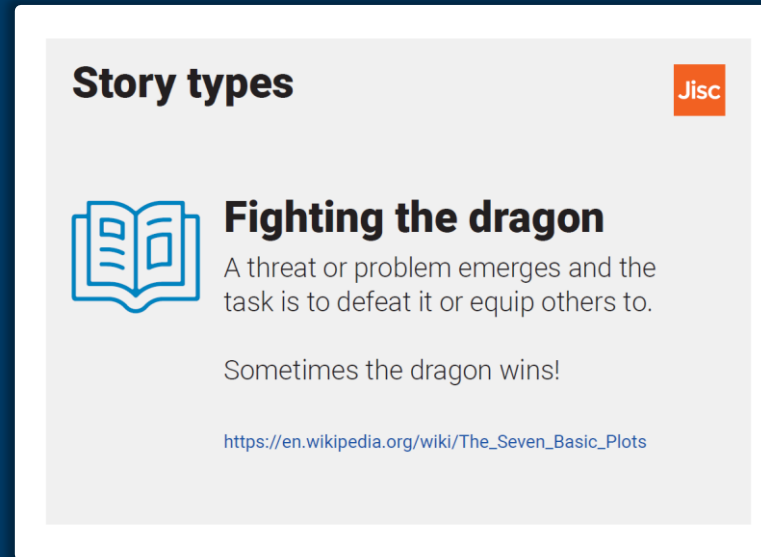
Jarryd Meyer
May 29, 2023



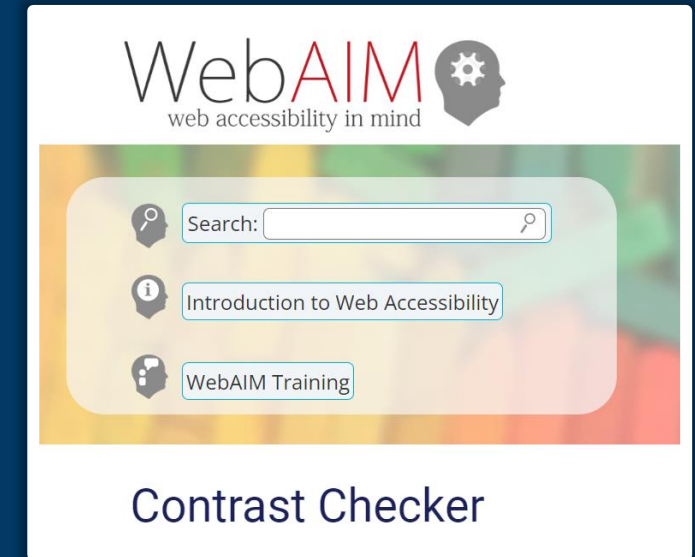
What could we have done better?



Storyboarding

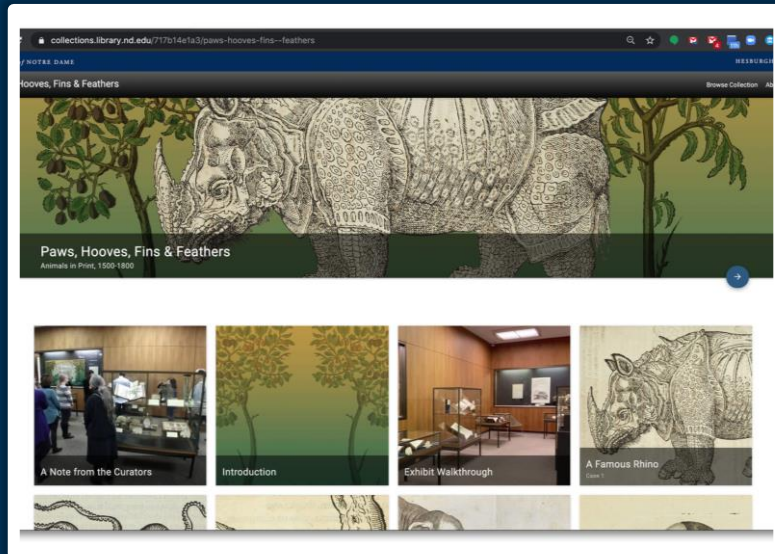


Storytelling



Digital
Accessibility

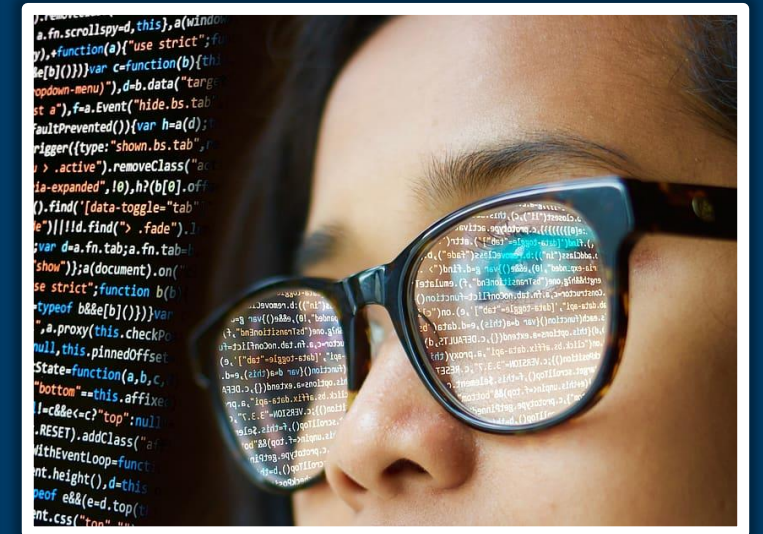
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**Clearer Target
Audience**



**Mini-demos of
StoryMaps features**



**Review Skills
Acquired**

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