Historical Thinking with ChronoZoom

Introduction, Background, & Resource Overview

Hello, and welcome to the first edition of the historical thinking with ChronoZoom lesson plans! The resources herein have been designed and curated by a team of curriculum developers and subject matter experts in partnership with the National Council for Social Studies and the American Historical Association. The primary goal is:

To provide you with simple and powerful pedagogical tools for standards-aligned education of historical thinking.

That being said, we have a few other goals as well. These secondary goals are optional and we encourage you to consider them and use them as you see fit. The secondary goals are:

To introduce you to exciting technologies and demonstrate how you can use them with your students even if your school has very limited digital infrastructure

To empower you with non-digital tools and techniques to encourage your students to collaborate and practice higher-order communication

To introduce you to the latest scholarship on hot topics such as WWI and Atlantic Encounters and demonstrate how these topics can be integrated into your courses

Now that we have established why we are here, let’s provide a little background as to how we got here. Appropriately enough, we will do this by sharing a little history with you.

# The History of the ChronoZoom Project

(This section is just background. If you want to jump right into the curriculum, feel free to skip ahead to the next section!)

The ChronoZoom project started in 2009 when Walter Alvarez, a Professor of Geology at University of California Berkeley, asked his students for ideas about how to explain the profound differences in scale between human and geologic history. Roland Saekow, then a student of Alvarez, proposed that they create a giant canvas to scale of all history from the Big Bang to the present, and zoom into it. Walter and Roland began creating this canvas but soon ran into problems, as the canvas took up more memory than the human genome and required a tool that could zoom to 500,000,000,000 percent! To put that into perspective, Adobe Photoshop, one of the best image manipulation tools on the market, can only zoom to 6,250 percent.

Microsoft Research and Microsoft Live Labs heard about the project and saw that new deep zooming technologies could help to solve this problem. Together with UC Berkeley that created the first prototype of ChronoZoom in 2010. The prototype allowed viewers to efficiently browse through the massive canvas but the tool wasn’t interactive, didn’t allow authoring, and required users to install software on their computer. There was significant interest from schools to use ChronoZoom but these limitations made it difficult to use ChronoZoom effectively in schools. The ChronoZoom team decided to start from scratch with a new tool that would address these issues.

The development of the new version of ChronoZoom began in October of 2011 as a joint project between UC Berkeley, Microsoft Research, and Moscow State University. Ownership of the project was given to the Outercurve Foundation, an independent non-profit that manages open-source projects. In February of 2012 the ChronoZoom beta was released. It worked on any modern browser (even on iPhones and iPads!), required no download, and allowed users to browser and watch interactive tours that told stories across vast scales of time. The entire source code of ChronoZoom was released open source, freely available to anyone who wanted to use it for any purpose.

The ChronoZoom beta still needed more features to be an effective tool. In particular it needed the ability for students and educators to author their own timelines and tours. The third wave of ChronoZoom development happened in late 2012 and early 2013 with additional partners at the University of Washington. The authoring tools were released in July of 2013.

Now ChronoZoom had the basic features requested by educators but that was only the beginning. The easiest thing about building an educational technology is building the technology. The hard part is creating the pedagogical supports needed to empower teachers to learn how to use the technology and integrate it into their classroom practice. In mid-2013 the ChronoZoom team began to reach out to nationally recognized education organizations in the U.S. This resulted in a summit in New York with executive directors attending from a list of groups that included the National Council for Social Studies, the American Historical Association, National History Day, and the National Council for History Educators. Also in attendance were a group of curriculum developers and subject matter experts brought together by UNC-based NC Learn to create the core curriculum. From that meeting the plan was established to create three lesson plans that covered different approaches to teaching historical thinking. You are now reading the results of this plan.

# Overview of the Lesson Plans

The lesson plans are designed to be used in U.S. classrooms at the middle and high school levels. The materials are aligned to both the Common Core and to C3 Social Studies standards. The intended length of each lesson plan is one to two weeks and the plans are designed to easily fit into an existing history course. All of the materials in the plans are released under creative commons attribution-only license and can be freely modified, extended, and shared as long as the attributions are included in the resulting product. There are three core units, each of which embraces a different approach to teaching historical thinking:

# Unit 1: The Causes of World War One

This unit focuses on the events of 1874-1914 that led up to the onset of World War One. This choice was made due to both the richness of the time period and the 100th year commemoration of WWI, which begins in 2014. The focus of this unit is causality and multiple perspectives. The material is taught using non-digital techniques in the classroom. Students can subsequently use ChronoZoom to create timelines based on what they have learned and present these learnings to their classmates and teacher.

# Lesson 2: Atlantic Encounters

Atlantic Encounters presents a more abstract introduction to historical thinking by studying moments when cultures met across the Atlantic and how both cultures were changed through this meeting. Primary and secondary sources are considered, as well as multiple perspectives. Students perform research and collaboratively build timelines to present their perspective into the effects of such encounters

# Lesson 3: The ChronoZoomer’s Guild

The third unit is a foundation to support historical thinking and is truly content-agnostic. The material from the WWI unit is used to demonstrate the principles but it is intended to be ‘plug and play’ and allow you to populate the templates with whatever historical information you are focused on teaching. This unit provides lesson templates and associated materials to immerse your students in an epic narrative that revolves around the class being contacted by a secretive organization from the future that uses time travel to alter pivotal events in world history. Students must demonstrate mastery of all fundamental historical thinking concepts and meet Common Core historical literacy standards. They are then invited to create a timeline in ChronoZoom and present it as a proposal to change past events in order to create a better future.

# Structure of this Content

The folder structure of this package is organized as follows:

* Introduction to ChronoZoom
* Introduction to the Curriculum
* Atlantic Encounters
* Introduction to Atlantic Encounters
  + Resources
* ChronoZoomers Guild
* Introduction to the Chronozoomers Guild
* Resources
* World War One
* Introduction to World War One
* Resources
* Shared Resources