Digital Commons @ Assumption University

2015

Expanding Local to Global through ESRI Story Maps

Ann Marie Gleeson
Primary Source

Lisa Andries D'Souza
Assumption College, ldsouza@assumption.edu

Follow this and additional works at: https://digitalcommons.assumption.edu/education-faculty

Part of the Elementary Education Commons, and the Elementary Education and Teaching Commons

Recommended Citation

Expanding Local to Global through ESRI Story Maps

Ann Marie Gleeson and Lisa Andries D'Souza

For decades, the "expanding communities" model has dominated the elementary classroom, sustained by notions that young children need to first understand their local communities before they can understand the broader world.[1] As proponents of this approach value how it supports young learners developmentally, critics fault its narrow scope. How will children become global thinkers if they fail to explore the world beyond their home?

Instead of separating local and global perspectives and topics, we set out to integrate them, to teach children about the world through their local communities. We created Community Story Maps as an inquiry-driven project where students learn about local history through the lenses of history, civics, economics, and geography and compare their surroundings to geographically different places and regions. The Community Story Maps project illustrates how an online resource—Esri Story Maps—can be used to deepen historical and geospatial thinking and make connections between the local and global.[2] (sidebar, p. 16)

Story Maps

A story map combines maps, text, and other visuals to tell a story about people, places, and events. Using geography as the main organizing principle, story maps pair maps and other visuals with descriptive text to present information.[3] For example, a child might create a story map about a vacation by combining images from the trip, a written narrative describing what she did on the trip, and a map of the places visited on the trip. The integration of text, maps, and visuals allows story map creators to illustrate connections between story and place, and, when multiple entries are sequenced together, explore patterns and trends over time and across space. Story maps are interdisciplinary and address various topics and content. They could be used to identify historical events on a map such as significant stops on the Underground Railroad, explore migration patterns like early settlers in the U.S., or illustrate a character's journey throughout a piece of literature.

The format of a story map may vary in complexity, depending upon classroom resources and students' skill levels. In its basic form, a story map can be as simple as pairing text, maps, and visuals on a piece of paper. Young students might draw or paste a map onto a graphic organizer and write text to accompany the visual. For example, students could draw a map of their school, neighborhood, or community and write descriptive sentences or phrases next to the map. Students could create multiple "entries" for their story map, with a separate map and text for different places in their community such as their school and home. Similarly, students could create a story map about their favorite piece of literature where they identify the places in which the story occurs on a map and match quotes from the text with the map locations.

For young children, teachers can also create a more complex story map to use with their students using the Environmental Systems Research Institute's (Esri) online interactive tool Story Maps (storymaps.arcgis.com). Esri Story Maps allows users to create and integrate interactive, multimedia maps with other images and text. Students can select different types of maps such as political or physical maps of any place in the world, zoom in on specific locations, and add elements such as place markers or images to their maps. They can add descriptive text to their story maps and publish their narratives online.

The use of geospatial tools like Esri Story Maps or Google Earth/Maps, can add a powerful component to the social studies classroom.[4] These geographic information system (GIS) tools introduce location-specific data that students can use to analyze, synthesize, and evaluate geographic information. GIS can help elementary students dig deeper and recognize relationships among places, people, and events, but complex GIS tools are not typically easy to use in the elementary classroom because they involve advanced technical skills.[5] Esri Story Maps, however, is one tool that can help bridge that gap with young learners.

The Community Story Maps Project

In the Community Story Maps project, students can use the Esri Story Map online platform to create instructional activities about their school's local community. Drawing upon the College, Career, and Civic Life (C3) Framework for Social Studies Standards, we used a broad compelling question to frame this inquiry: "How has our community changed over time?"[6] Students can be paired, assigned a topic, and asked to devise a supporting question (based on the topic) to address the overall compelling question. Groups could focus on the local community's schools, transportation systems, businesses, and demographics, as well as a few neighborhood-specific topics
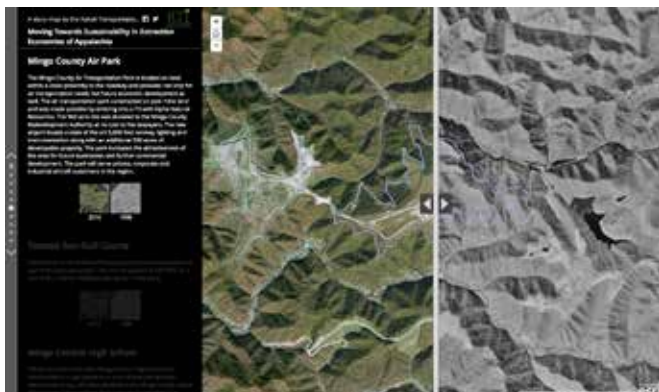
such as a local reservoir or public park (see chart). Depending on the topic, each group explores the supporting question through one of the social studies disciplines—history, civics, geography, or economics – and can choose which people, places, and events to include in their final product.

Each group conducts research on their topic with resources provided by the teacher. We used Pearltrees (www.pearltrees.com), an internet-based curator's tool, and included links to digital historic map and photo collections, information on how to conduct research at the local historical society and public library, and instructions on how to create an Esri Story Map. In the **Pullout** in the center of this journal, suggested topics for research appear on page 2. These topics could also be used with a more traditional map of your town or city.

After analyzing primary and secondary sources, students can communicate their new understandings by creating a story map. Each group could create three sequenced entries to tell a story about their inquiry topic, integrating text, maps, primary source documents, and images. Some groups might focus on one particular element, such as a place in the community, and create a separate story map entry for three different time periods to explore change and continuity over time. Other groups could focus on three different examples of their topic in the community, such as comparing various school buildings. For example, a story map entry could incorporate multiple photos of the local reservoir and observations about changes over time. Students could compare a historic map with a present-day map and describe changes in roads to accommodate new development and the growth of (or decay of) public transportation systems.

Multiple scaffolds can be integrated into the Community Story Maps project as student groups create their final product. The third page of the **Pullout** includes a graphic organizer for key story map elements (title, text, maps, and visuals) based on one of the Esri Story Maps online templates. Groups could use it to plan their story map entries. To develop the final product, the teacher can create a class account for the Esri platform, and demonstrate how to transfer the materials from the graphic organizer to the online program. The teacher can compile story maps from each group into one document. The final product provides multifaceted information to answer compelling inquiry questions on changes in the students' community over time. It serves as an example of how supporting questions on specific topics can be used to answer the broader question.

Variation and Extension Activities

One extension of these activities is for the teacher to create a Community Story Map, as described above, highlighting significant local places, people, themes, and events. Here, the story map format could be used to help students investigate information about their community. Students could explore the story map collaboratively as a whole class, in small groups, or individually to acquire new knowledge about their community. They could analyze text, visuals, and maps to make connections such as why buildings might be located in specific places within their town; they could examine historic maps and photos to consider how their town may have changed over time.

A second option is to involve young learners in the creation of the Community Story Map itself. Here, story maps would be used as a tool for students to communicate their own understandings. Students could determine which places to focus on in their community and gather resources to include in the story map. They could create the text, which the teacher could input into the Esri Story Map platform. Both options engage students in the process of analyzing and synthesizing information about their communities.

Connecting Local to Global

Community Story Maps create opportunities for young learners to connect local and global content and themes. First, students learn about their local community by either exploring content created by the teacher or gathering materials to create their own story map. Then, as students explore their local communities, they can compare what they've discovered to other places around the world (on the fourth page in the **Pullout**). For example, students who explored transportation in their community could then analyze maps and images of a place in another country to compare how transportation systems in other towns or cities impact people's lives. Similarly, after students have researched the development of a major local industry over time, they could research a different city in the world to find out how an industry in that community may have changed.

The new understandings that students gain through inves-

tigating their local community, such as the work described in the Community Story Maps project, provide a starting point to compare, connect, and analyze patterns and trends when examining similar topics around the world. Students can use the same inquiry questions and process to explore communities beyond their local context and use narratives and visuals from a story map to evaluate and synthesize information from other places.

Final Thoughts

The Community Story Maps project illustrates how teachers can create a story map for their students to make local and global connections. By using pre-existing maps or creating their own, teachers can use story maps with students to explore and analyze data on a variety of global topics and themes (See **Sidebar**). They can do such things as walk students through a story map as a read aloud or have students explore a map in small groups. The Esri Story Map platform is a powerful tool to facilitate this inquiry, even if younger students lack the technical skills to create their own digital maps independently. Young learners can still participate in the creation of story maps in various ways. Students can gather and examine sources to incorporate within a story map. They can create text and select visuals for story map entries and input those materials onto a graphic organizer. Teachers can then create a class story map using the Esri platform for students to examine.

All of these activities support young learners' sequencing, spatial thinking, and data analysis skills. The collective development of story maps in small groups or as a class also exposes young learners to GIS tools they can use in the future and helps support essential geographical thinking skills. 🌐

Notes

1. Anne-Lise Halvorsen, "Back to the Future: The Expanding Communities Curriculum in Geography Education," *The Social Studies* 100, no. 3 (2009): 115–119.
2. The Community Story Maps project was first created as part of an elementary social studies methods course, with a focus on creating a resource useable in a typical K-6 classroom with Internet access.
3. Christian Harder, ed., *The ArcGIS Book: 10 Big Ideas about Applying Geography to Your World* (Redlands, CA: Esri Press, 2015).
4. Thomas Hammond, "Transforming the History Curriculum with Geospatial Tools," *Contemporary Issues in Technology and Teacher Education* 14, no. 3 (2014): 266–287.
5. Eui-kyung Shin, "Using Geographic Information System (GIS) Technology to Enhance Elementary Students' Geographic Understanding," *Theory & Research in Social Education* 35, no. 2 (2007): 231–255.
6. NCSS, *The College, Career, and Civic Life (C3) Framework for Social Studies State Standards: Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History* (Silver Spring, MD: NCSS, 2013).

Ann Marie Gleeson *is Program Director, Primary Source, Watertown, Massachusetts. She can be reached at* annmariegleeson@gmail.com
Lisa Andries D'Souza *is Associate Professor in the Education Department, Assumption College, Worcester, Massachusetts. She can be reached at* ldsouza@assumption.edu

Getting Started with Esri

K-12 schools in the United States are eligible for free access to Esri Story Maps. Read about it at esri.com/ConnectED. The Esri Story Maps gallery (**storymaps.arcgis.com/en/gallery**) provides an excellent starting point to engage young learners with local and global issues. The gallery contains story maps created by Esri staff and other developers on a variety of historical and contemporary topics across all disciplines that students can explore to acquire new knowledge and evaluate information.

Maps featured in the gallery are open access (free for anyone to view).

For example, one story map in the gallery enables users to see a superimposed map from 1812 over a 2013 map from National Geographic (**arcg.is/1Q3jtfk**). Young learners can manipulate the maps to see how political boundaries have changed over time.

Story maps in the gallery can also help students explore the movement of peoples and goods such as the map created by the National Park Service on Lewis and Clark's Expedition from 1804–1806 (**arcg.is/232t47y**). In this story, children can locate significant places from the expedition on a map and examine images of physical features and material culture from the expedition.

The gallery features content spanning all disciplines. Students can explore such things as the physical characteristics of volcanoes through 3-D imagery (**arcg.is/1QWG3SO**), learn more about baby zoo animals at the National Zoo (**arcg.is/QXWs1m**), or virtually visit monuments on the National Mall in Washington, D.C. (**arcg.is/1jhbN3W**). See links to other story maps on the first page of the **Pullout**.