

“Tomb It May Concern”

Visit Your Local Cemetery for a Multidisciplinary (and Economical) Field Trip

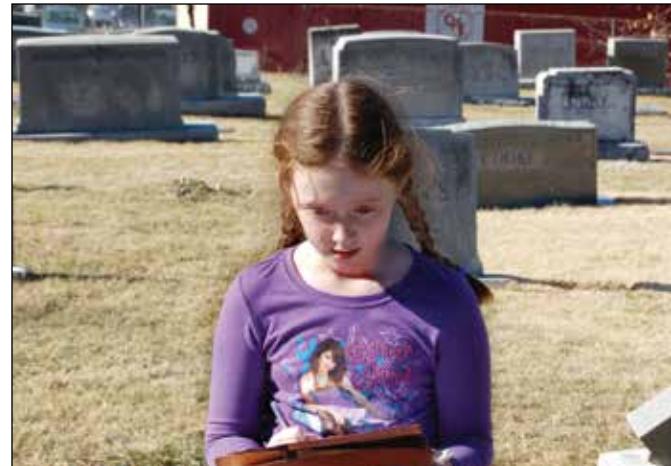
Eric Groce, Rachel E. Wilson, and Lisa Poling

Tom Sawyer: “Hucky, do you believe the dead people like it for us to be here?”

Huckleberry Finn: “I wisht I knowed. It’s awful solemn like, ain’t it?”

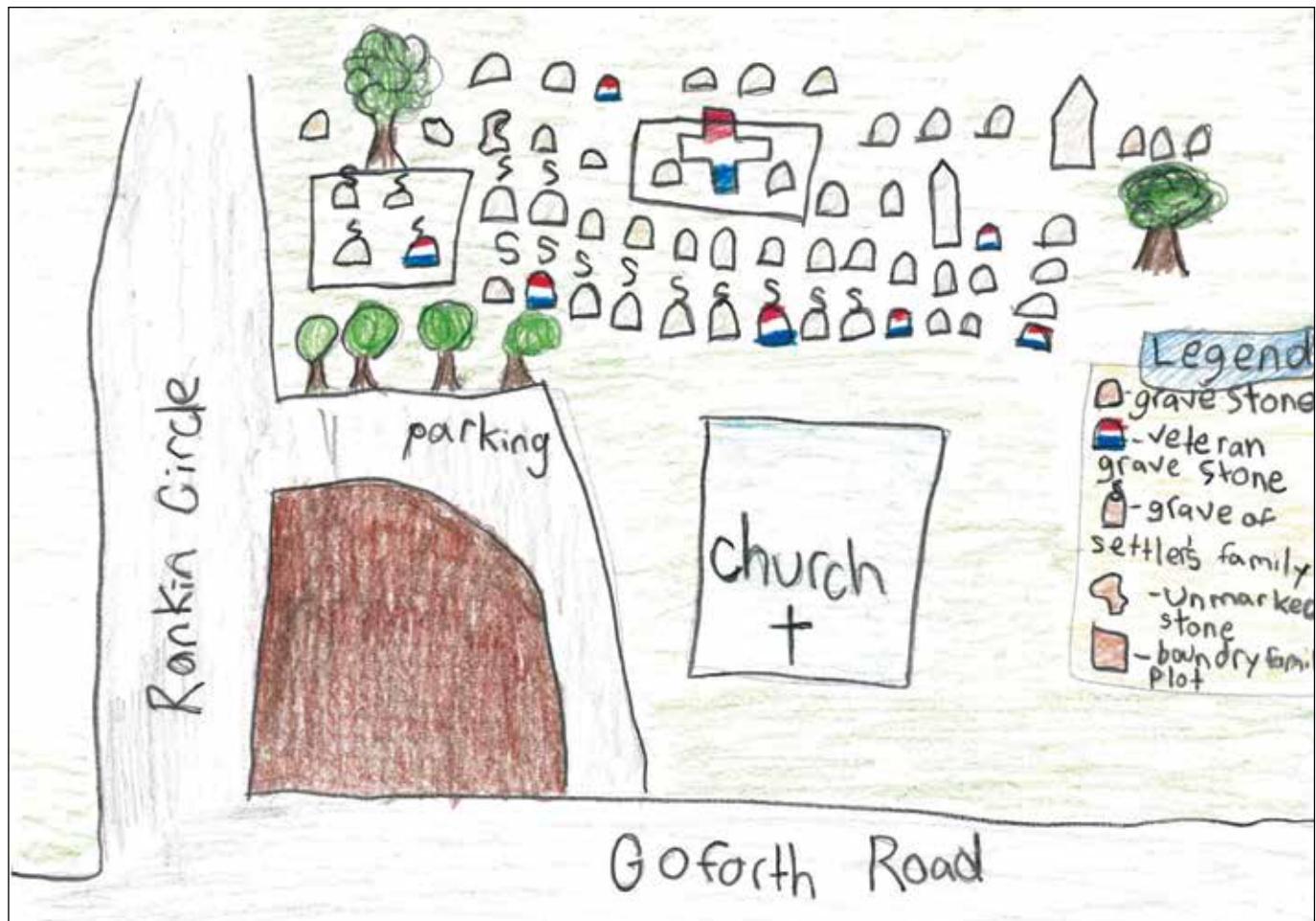
Cemeteries have traditionally been cast as scary and creepy places in children’s literature, as well as in popular television shows and movies. Spooky media images, coupled with exaggerated stories from their friends, might leave young learners wary of cemeteries and with feelings of fear and anxiety. Cemeteries are, however, unique community resources that deserve consideration as a teaching tool. In the children’s book *My Backyard History Book*, author David Weitzman, shares a variety of activities that enable students to see that history is alive within the local community.—It is the songs that their grandparents sang and the “house where your mother was born.” It can be fun discovering “all the things that make the history of your place and your people and you special.”¹

One of the activities that Weitzman suggests to help students internalize this community-history connection is a field trip to a local cemetery; such a trip is a particularly good idea today. With the economy as it is, funds for materials and travel have been greatly reduced or eliminated. A visit to a local cemetery typically does not strain classroom budgets, as it requires minimal travel



and can generally be accomplished for free. The materials needed for on-site research are common classroom supplies and basic recording devices generally found in a school’s media center.

A trip to a local cemetery offers ample opportunities for teachers to make interdisciplinary connections in their elementary classrooms; cemeteries are “part science, part art, part history.”² Cemeteries provide students a chance to see, firsthand, how architecture, stonemasonry, mortality rates, and even names have changed over time within the local community. A cemetery field trip also can be an introduction to the social studies topics of economics, religion, geography, immigration history, and public



health. Integrating mathematics and problem solving into the study of cemetery burial plots helps students gain a deeper understanding of social issues and struggles. Students can practice representing and interpreting data, which is essential in elementary mathematics.³ In addition, cemeteries provide students with an opportunity to investigate science topics and be actively involved in the process of doing science, essential to the development of scientific literacy.⁴ Earth science objectives, such as properties of earth materials and changes in environments, can be explored in detail during a trip to the local cemetery.

When school groups visit the same cemetery over several years, the teacher also learns more and more about that particular property and the history of the community. This makes each successive visit richer for you and for each new group of students. In this article, we outline the planning and enactment of field-based activities during a field trip to a cemetery by fourth graders from Blowing Rock, North Carolina. The activities emphasize social studies, science, and math themes to engage and challenge students.

Prior to Your Visit

When deciding which cemetery to visit, older community members, and the local library or historical society can help you select an appropriate site. Factors to consider when

selecting the cemetery include: accessibility, proximity, and cultural and historical connections. (Does the cemetery contain graves from several centuries? Does it have graves from citizens of just one, or of varying ethnicities, religions, etc.? Would a particular cemetery link particularly well with this semester's social studies curriculum?).

Once you identify a cemetery and receive permission for your visit, a conversation about the history and historical utility of cemeteries will provide students with a context for their visit and dispel any (spooky) misconceptions about cemeteries. Class discussions can provide students with a sense of what they might encounter on their trip to the cemetery: the various types of cemeteries (military, church, public, family, ethnic); different types of monuments (headstone, obelisk, bedstead, table tomb, government issue for soldiers); and the mementos left by people to honor the deceased (toys, flowers, pebbles, incense, food).⁵

An advance trip to scout the cemetery for headstone symbols will help you create a useful list of what students will see. Our students identified and read about the symbols in our local cemetery prior to the trip to understand more about them and some of the secretive fraternal organizations that they represented, including the Freemasons/Masons, Woodmen of the World, Shriners, Eastern Star, American Legion, Elk, Moose, and the Odd Fellows.⁶ Specifically,

students identified membership requirements, procedures, and famous members, and they explained the meaning behind the organizational symbols. They also researched the origin of terms used to describe burial grounds and buildings (e.g. potter's field, God's Acre, charnel house).

Photos and gravestone rubbings are an excellent way to record and gather information from the visit. However, gravestone rubbings are controversial because, if not done properly, the activity may damage the grave marker. If you elect to make gravestone rubbings, several reputable sources are available to guide you in how to do this carefully, such as "Some Gravestone Rubbing Do's and Don'ts."⁷ A list of possible supplies for your field trip can be found on page 1 of the **PULLOUT** that follows this article.

A few days before the trip we assigned research roles and responsibilities to individual students. Depending on your objectives, roles might include: cartographers, reporters (written or oral, if video equipment is available), photographers, and tool supervisors (rubbing materials and other supplies). Ninety minutes to two hours (the longer visit for older students) is a reasonable length of stay to complete most of the tasks.

As we planned our trip, we also discussed proper behavior. Students should behave respectfully in a cemetery, stepping around (not on) graves, stones, and mementos. Many headstones are unstable due to weathering, so students should avoid leaning on or stepping on monuments or markers.

The Visit

Upon entering the small church cemetery, students began to discuss excitedly what they were seeing. They started to identify stone types and make observations about the natural surroundings, using science skills of investigation and classification. Several students began to think about how the cemetery interacted with the natural world. One student commented, "The ground must be shifting because some of the older tombstones are leaning over." Another student asked, "I wonder how big this tree was when this cemetery was started?" Students recognized that the cemetery changed over time, partially due to natural factors, and partly to human alterations.

Students were able to see, first hand, some of the science concepts they had discussed in class. For example, as a component to studying rocks and minerals, students had conducted an analysis to determine which type of stone is best at resisting weathering, lichen growth, and other deteriorating forces. During their trip, two students discussed the variables of stone deterioration. The first (touching a headstone) said, "This is granite, and it doesn't look weathered at all." The other student, pointing to the 1979 on the stone, replied, "It is pretty new though." These interactions highlight the students' use of investigation and research skills to identify patterns and themes as they

walked through the cemetery. Students took photographs of the various rocks used for gravestones to analyze when they returned to class.

The use of mathematics in a cemetery setting provides an entrance point to the life stories that have shaped history. Understanding the value that data analysis provides becomes one focus of quantitative literacy, which includes applying analytical skills, using and analyzing basic statistics, making inferences, and understanding simple graphs.

After introducing students to the property and reminding them of the goals of our visit, we assisted students as they counted the total number of graves. Teacher and students walked slowly through the cemetery, together counting headstones and markers, taking care not to count any of them twice.

On a data collection sheet, students recorded the name, gender, birth date, death date, whether the person was a U.S. veteran, and the type of stone. (See page 2 of the **PULLOUT**.) They also quickly sketched any symbol they found on the stone. Older students can be assigned to a specific group of stones, with each student completing data sheets for a few (from three to seven) stones. In this way, a single intermediate class might be able to survey an older section of a small town cemetery, or maybe the entire property. Younger elementary students could watch the teacher fill out a simple data sheet (with spaces for recording only the name and birth and death dates on a stone), and then complete one themselves.

Recording and Note Taking

In a cemetery, multiple stories exist, etched on the grave markers. Many of the individual stories are hinted at by the dates of birth and death recorded on each headstone. Prior to collecting any data, students need to devise a method of record keeping. You can choose to use the handout provided, but first see what students suggest as interesting observations and data to record.

Students may design a simple tally chart or a more elaborate system. Creating a useful data sheet is a crucial step toward ensuring the success of the project; if data is not collected in a manner that is understandable, the results will not be valid. Remember also that the more data collected, the more likely it is that conclusions drawn from the data will be accurate.

One of the social studies activities students did was draw maps of the cemetery on site. Some outlined the whole cemetery, while others drew more detailed maps of one section. (The amount of detail students include in their maps is limited only by their developmental level and instructions from the teacher.) The maps helped students trace family heritage, as they identified graves of some of the earliest settlers in the town, as well as their descendants. One student observed, "More of the older

headstones have religious sayings and crosses than newer ones.” Another inquired, “What does AE mean?” (It’s an abbreviation for the Latin *aetatis*, “years of life” or “in the year of his or her life”). Someone pondered, “Why do some graves only have a plain (unmarked) stone without a name?” The answer to these questions would help reveal the socioeconomics of the town, as well as the religious and ethnic composition of its inhabitants over the years.

Visual evidence taken back to class, in addition to photos, included gravestone rubbings. Our fourth graders worked in teams of two to make the rubbings, following the method described at www.gravestonestudies.org/information.htm.

After the Visit

Following the field trip, a full class discussion enabled students to do some general reporting, get clarification on confusing data, and decide who would work on various aspects of our analysis of the trip (making math computations, determining the meaning of Latin phrases or unusual symbols, downloading images from the camera, etc.). Next, research teams were given some uninterrupted blocks of time to complete their designated tasks. Some students continued to investigate genealogy, while others refined their “field maps,” adding elevation, specific location (from www.lat-long.com), and other details that were revealed in the photographs that students took.

The photographs also enabled students to compare the gravestones to rock samples of the most commonly used rocks—“shale, sandstone, marble, limestone, soapstone, and granite”—to determine which materials were used in the local cemetery. Once rock types were identified, students could compare and contrast how physical and chemical properties would make particular gravestones more prone to weathering and deterioration. Limestone graves, for example, are particularly prone to weathering from acid rain because limestone is composed primarily of calcium carbonate (from fossilized marine organisms), which reacts with acid.⁸ Students’ observation, research, and analysis enabled them to deduce the best rock type to use for gravestone longevity. (They chose granite).

Depending on the age of the students, they can take their study of rocks further and investigate where gravestone rocks come from and the landforms associated with them. For example, marble is a metamorphic rock formed under intense heat and pressure associated with mountain ranges that were formed during tectonic plate collisions, like the Appalachian Mountain range, where we live.⁹ This type of analysis helps students see how their local cemetery might connect to local, regional, and national landforms. Students are not simply learning earth science content from these types of activities; they are also developing their scientific literacy by using science process skills in a meaningful content-oriented unit.¹⁰

Using the birth and death dates, students looked for

patterns in the data. For example, according to our data set, lifespan increased during the 1800s and then declined slightly between 1890 and 1940. Such a result allows the teacher to discuss the importance of sample size. U.S. Census data reveal that life expectancy has steadily increased, for men and women, over the course of the last two centuries, with only temporary “dips” in the ascending line (**PULLOUT, PAGES 3 &4**). Here are some discussion Q&A topics.

QUESTION: *Why would Americans enjoy increasing lifespan over the decades?*

ANSWER: *It's due mainly to better nutrition, good hygiene, modern medicine, and improvements in workplace and auto safety.*

QUESTION: *Why were our students' results different from those of larger studies?*

ANSWER: *During that time period, 1890–1940, there were two events that shortened the life spans of many young adults—the Spanish Flu epidemic in 1918 and World War I. So, it might be interesting to search for historical information on how the population of Blowing Rock was affected by those events. Also, young women had high maternal mortality rates during that period.¹¹ It could also be the case that many long-lived persons born in Blowing Rock moved away during their lives, and were buried elsewhere. There may be other reasons why data from one small cemetery does not closely reflect trends of the larger, national population.*

We also asked students to consider the following questions: What can your results tell you about the population of Blowing Rock, North Carolina? What could the results suggest about events going on in the town during specific years? Were there waves of immigrants from a certain part of the world? Was there an ongoing war? Were there any great epidemics during the span of U.S. history represented in the cemetery? When were antibiotics first manufactured?

After discussing these questions, students were allowed to research them for a few days. When they reconvened, students reported a wealth of information, which opened opportunities for critical thought processes and reflection. One learner reported, “I found out that just knowing the answer is not enough. I understood better when I found out the reasons for the answer.” Students reviewed regional and local census records, the evolution of medical practices, and the dates for wars and natural disasters. The answers to these questions helped students to begin to comprehend and see the complexity of the historical narrative.

In sum, although it was a relatively small sample size, students were able to make some reasonable assumptions

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about the data, and they formed some hypotheses based on their research. One group of learners recalled reading the novel *Blue*, a historical fiction story of one family's struggle during the polio epidemic in Hickory, North Carolina during World War II, and wondered aloud if any of the local graves contained victims of that epidemic.¹²

Variations

The general procedures described above are designed for a visit to a local community cemetery. Those living in urban areas, especially near historic or notable cemeteries may want to expand the scope of their objectives to include learning about noteworthy Americans and their place in society. Additionally, it may be worth reviewing some of the prominent cemeteries in America, should students have an opportunity to visit them during holidays or family vacations. Many notable cemeteries (Old Granary Burying Ground in Boston; Mount Auburn Cemetery in Cambridge; Sleepy Hollow Cemetery in Concord, where famous authors are buried; St. Paul's Cathedral and Cemetery in New York City, where George Washington worshipped until the nation's capital was moved from New York to Philadelphia) have websites that feature photographs and contain information about the burial ground. Comparisons could then be made between research gathered at the local cemetery and information taken from reputable websites. Geographic connections can be made when researching famous cemeteries in New Orleans, which has more than 40 cemeteries above ground, such as St. Louis Cemetery No. 1. Why such an odd construction? Much of the city sits below sea level.¹³

In the western part of our nation, several states have "Boot Hill" cemeteries made famous by gunslingers from the Old West. Additionally, military cemeteries are located in 39 states; many established during or just after the Civil War. If you teach in an area (typically in southwestern states such as Texas or Arizona) with a significant Mexican-American population, students may have a chance to witness a *Dia de los Muertos* (Day of the Dead) celebration, which takes place on the first two days of November. This distinctive cultural celebration honors deceased family members and may feature activities at the cemetery.

Whether or not students get to visit some of our nation's famous burial grounds, a one-hour trip to the local cemetery can provide a relevant context for interdisciplinary learning. Students can observe rocks and landforms, collect data and look for patterns, and expand social studies skills and knowledge. The trip can allow students to make meaningful connections to their local communities, while completing a field-based research project. Cemeteries can provide a revealing snapshot of what occurred decades or even centuries ago. When analyzing birth and death dates, students may begin asking questions about life spans, which

can be an introduction to population studies.¹⁴ A visit to the cemetery can also be an opportunity for service learning. Many local cemeteries are neglected and will be beyond repair if an intervention is not made. Preserving a piece of local history, while developing critical thinking skills, is a strong pedagogical combination and a natural choice for fostering active citizenship. Ask the groundskeeper, and your local historical society, if there is any appropriate task for your students.

Notes

1. David Weitzman, *My Backyard History Book* (Boston, MA: Little, Brown and Company, 1975).
2. Gaylord Cooper, *Stories Told in Stone: A Manual for Genealogy Research* (Louisville, KY: Motes Books, 2009).
3. National Council of Teachers of Mathematics, www.nctm.org.
4. National Science Education Standards; www.nap.edu/openbook.php?record_id=4962&page=1.
5. Meg Greene, *Rest in Peace: A History of American Cemeteries* (Minneapolis, MN: Twenty-First Century Books, 2008).
6. Douglas Kiester, *Stories in Stone: A Field Guide to Cemetery Symbolism and Iconography* (New York: MJF Books, 2004); Gaylord Cooper, 2009.
7. Association of Gravestone Studies, "Some Gravestone Rubbing Do's and Don'ts," www.gravestonestudies.org/faq.htm; Gaylord Cooper.
8. Gaylord Cooper, 2009.
9. National Park Service, "Explore Geology," www.nature.nps.gov/geology/parks/nama.
10. Michael J. Padilla, *The Science Process Skills. Research Matters—to the Science Teacher* (Association for Research in Science Teaching, No. 9004, March 1990), www.narst.org/publications/research/skill.cfm; R. A. Duschl, H. A. Schweingruber, and A. W. Shouse, eds., *Taking Science to School: Learning and Teaching Science in Grades K-8*. (Washington, DC: The National Academies Press., 2007).
11. Beginning in the late 19th century, more women started delivering at hospitals instead of at home, but the rates of infection (sepsis) were much greater in hospitals and maternal mortality rates didn't drop dramatically until sulfonamides and penicillin became available and obstetric training improved in the 1930s–1940s.
12. Joyce Moyer Hostetter, *Blue* (Honesdale, PA: Boyds Mills Press, 2010).
13. The Weather Channel, "Louisiana Cemeteries Sinking, Washing Away" (January 3, 2013), www.weather.com.
14. Population Connection has just released a new edition of an elementary curriculum, *Counting on People: K-5 Activities for Global Citizenship* (\$10 on CD-ROM). Two activities might fit especially well with a field trip to a cemetery. "People Count" is a census activity, in which students survey peers in their school to collect data on their household members' ages and genders and then create bar graphs and analyze their data. "The Stork and the Grim Reaper" explores birth and death rates with a simple demonstration using two bowls of water and two measuring cups. See all the teaching resources at www.populationeducation.org.

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