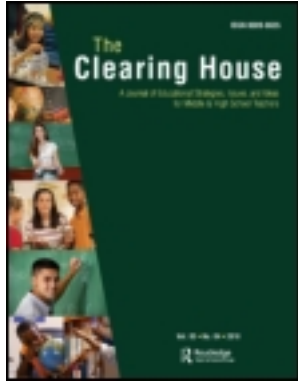


This article was downloaded by: [University of Hawaii at Manoa]

On: 09 February 2014, At: 17:41

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



The Clearing House: A Journal of Educational Strategies, Issues and Ideas

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/vtch20>

Terrible Knowledge and Tertiary Trauma, Part II: Suggestions for Teaching about the Atomic Bombings, with Particular Attention to Middle School

Mara Miller^a

^a Philosophy and Japanese Studies , Honolulu , HI

Published online: 05 Jul 2013.

To cite this article: Mara Miller (2013) Terrible Knowledge and Tertiary Trauma, Part II: Suggestions for Teaching about the Atomic Bombings, with Particular Attention to Middle School, *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 86:5, 164-173

To link to this article: <http://dx.doi.org/10.1080/00098655.2013.795128>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Terrible Knowledge and Tertiary Trauma, Part II: Suggestions for Teaching about the Atomic Bombings, with Particular Attention to Middle School

MARA MILLER

Abstract: In a companion article, “Terrible Knowledge And Tertiary Trauma, Part I: Japanese Nuclear Trauma And Resistance To The Atomic Bomb” (this issue), I argue that we need to teach about the atomic bombings of Hiroshima and Nagasaki, even though the material is difficult emotionally as well as intellectually. Because of the nature of the information, this topic can be as difficult for graduate students (and their professors!) as for younger students. Teaching about the atomic bombings, however, demands special treatment if we are to prevent a sense of isolation, immobilization, or helplessness in students. We can do this by building a strong community of learning, offering students as much control over their learning as possible, and helping them find ways to connect to larger social and political processes and movements that make sense of an endangered world. Here I offer some thoughts on how to teach it, along with discussion questions, applicable to K–graduate school. Since middle-school students are becoming keenly aware of the larger world through the Internet, and middle school teaching can be (comparatively) easy to adapt for other age groups, I also offer some suggestions of some materials and projects appropriate for use with that age group.

Keywords: activism, compassion, film, genocide, mindfulness, racism, tertiary trauma, war, teacher development, teaching strategies, philosophy for children, collaboration

In “Terrible Knowledge and Tertiary Trauma, Part I: Teaching about Japanese Nuclear Trauma and Resistance to the Atomic Bomb” (this issue), I argued that we need to teach about the atomic bombings of Hiroshima and Nagasaki even though the material is both emotionally and intellectually difficult. Here I offer some thoughts on how to teach the bombings along with discussion questions that are applicable to kindergarten through graduate school. Because of the nature of the information, this topic can be as difficult for graduate students (and their professors!) as it is for younger students; because the threats of nuclear accident, terrorism, and even warfare are ongoing and in the news, even young students hear about it and may become worried—and want some answers. Since middle school students are becoming keenly aware of the larger world through the tools such as the Internet, and middle school teaching can be (relatively) easy to adapt for older or younger students, I also offer some suggestions of some materials and projects appropriate for use with that age group, with some resources for classroom use in an appendix.

General Principles

Due to their complexity and their cross-cultural, historical, and multidisciplinary nature, the atomic bombings are perfectly suited for the implementation of several widely recognized principles for 21st-century learning, such as the Common Core Standards

Mara Miller is an Independent Scholar of Philosophy and Japanese Studies in Honolulu, HI.

(CCS) and standards advocated by the Schools of the Future social network in Hawaii; the "Integrated Studies, Project-Based Learning, Social and Emotional Learning, Teacher Development, and Technology Integration" advocated by groups such as Edutopia/Envision Schools and The George Lucas Foundation (<http://www.edutopia.org/core-concepts>); and the Partnership for 21st Century Skills' "essential skills for success in today's world, such as critical thinking, problem solving, communication and collaboration" (<http://www.21stcenturyskills.org>). The Bill and Melinda Gates Foundation and the International Baccalaureate (IBA) make similar recommendations. Specific CCSs are referred to in the notes to this article as they come up.

Where this subject matter demands special treatment is in the prevention of a sense of isolation, immobilization, or helplessness in students. We do this by building a strong community of learning, offering students as much control over their learning as possible, and helping them find ways to connect to larger social and political processes and movements that make sense of an endangered world. Before exploring these issues, we will briefly discuss materials.

Materials

Compared to even a few years ago, reliable books and websites are far more widely available. Most websites are for adults, of course, and I would caution against encouraging middle school (or even high school) students to surf the Web for this material on their own. (Exceptions are listed in the References at the end of this article.) Surfing the Web can be somewhat addictive for any age group and under any circumstances, and these images and information are too disturbing for students to be able to make mature judgments about when "enough is enough." Using preselected sites in the classroom is another matter; I include some in appendix. (see also Miller, in this issue).

There are a number of informative nonfiction books appropriate for middle school. R. Conrad Stein's (1993) *The Manhattan Project* is accurate, well illustrated, and multifaceted, integrating the science of nuclear fission and the history of World War II with information on economics and geography (the costs of the bomb development, the various locations of the project, etc.) and making it a perfect jumping-off point for class discussion and student research.¹ Stein also quotes eyewitnesses, and relates stories based on individuals' experiences or character: how two European scientists came to realize there might be danger to the United States from German attempts to create atomic weapons; the steps they took to bring it to the president's attention; and the reasoning behind the near-fanatical insistence on secrecy by General Leslie Groves, the military commander of the whole project. The book provides a sug-

gestive introduction to the social history of knowledge transmission, mentioning (1) the mistaken suspicions of Germany's weapons development and (2) U.S. ignorance of Hitler's abandonment of the project; it implies the importance of good spying and intelligence. Teachers who enjoy connecting their subjects with different disciplinary approaches will find a lot to work with in this short introduction to the topic.

Similar material and range of issues are covered in R. G. Grant's (1998) *Hiroshima and Nagasaki*, but in much greater detail; deciding to drop the bomb, for instance, gets 10 pages.

For more personal looks at individuals' experiences of the bombings, there are also several stories based on accounts by or about actual survivors (see appendix). The *Asahi Shinbun*, one of the principal daily national newspapers in Japan, presents the views on nuclear power of several Japanese accomplished in the arts and politics (<http://www.asahi.com/hibakusha/english/shimen/hibakukoku2012/hibakukoku2012-01e.html>). Among them are several versions of the story of Sadako Sasaki, a little girl at the time of the bombings. Her futile hope that folding a thousand paper cranes would lead to her cure from radiation-induced fatal illness inspired statues at the two atomic bombing peace parks in Japan and the custom of Japanese school children making chains of cranes and taking them to the museums (Coerr 1977). While this tradition can seem maudlin to adults, it offers children the hope they so desperately need, and indeed making origami crane chains and sending them either to classes in Japan or to the museums would be a good way to establish connection and counter the sense of helplessness. (The lesson, of course, is that ultimately neither hope nor superstition nor sheer industry and determination conquer physical reality.)

Toshi Maruki's (1982) picture book *Hiroshima No Pika* is rewarding to all ages. Iri Maruki and his wife, Toshi, both professional artists, went to Hiroshima three days after the bombing to help Iri's uncle; they stayed for several weeks, and three years later began to devote the rest of their lives to painting about these (and other similar or related) disasters, such as the Nanking Massacre, Auschwitz, and Minamata (Maruki and Maruki 1988). Their work, housed in a gallery outside Tokyo, can be found online at <http://www.aya.or.jp/~marukimns/english/indexE.htm>. The site also includes poems, which are well worth reading.

One of the most influential survivor stories has been the *manga* (comic book) classic *Barefoot Gen* by Keiji Nakazawa, based on his own experiences as a child, now in several volumes (Nakazawa 1973-1985). An anime film version for children but with equal appeal to adults, directed by Mori Masaki (1983), takes viewers through the experience of the bombing of Hiroshima in an emotionally intense way with, remarkably, no blaming of

Americans, although also no mention of the Japanese role in starting the war. Gen's father, like Nakazawa's, was against the war, and the film starts out with the difficulties this forces on the family. The film is beautifully made and gripping; there is joy and humor as well as loss, horror, and pain. The children are given roles in saving family members and others. Everyone from early elementary through graduate school can get a lot out of this film. (See the discussion questions further on.)

Several websites interested in philosophy for children (i.e., "philosophy for kids") have lesson plans that are useful in discussing the moral issues of what students read and watch on the atomic bombings and other forms of warfare. See, for example, the Northwest Center for Philosophy for Children's (University of Washington) unit on "Moral Philosophy and the Holocaust" (<http://depts.washington.edu/nwcenter/lessonsplansholocaust.html>).

Its main themes are: "What is a community? What shapes its identity? Is it morally permissible to resist authority in certain situations? Is it ever morally obligatory to resist? Is indifference morally wrong? What keeps people silent in the face of moral wrongs? How does knowledge of past wrongs affect our moral responsibilities? Do we have a moral obligation to help others? Who has the power to forgive oppressors? Is forgiveness always possible? What is courage?" One might complete a longer list of questions, but it would be hard to write a better one.

Methods and Strategies for the Teacher

The chief difficulty in teaching about the atomic bombings—or about any material about trauma—is that it can set off very strong feelings within both students and teachers. Yet this can also be an advantage, particularly with so-called reluctant learners and with students who are strong in existential intelligence.

We want students to learn to empathize. Yet this very empathy can be distressing for them—it can also reverberate with the students' own experiences in complicated ways (as is reflected in recent studies of complicated grief); some of them may have witnessed real-life violence, for instance. Their distress can in turn be distressing for us as teachers, as can some of their ways of dealing with their distress—inappropriate humor, for instance. (Our intuition about this is one of the reasons we avoid teaching such topics.) There are ways to prevent damaging reactions, however.

First, do not rush through this subject. Understanding and integrating such material takes time. Especially, do not rush to fill the silence when you or a student has raised a question. It is hard for all of us to find the words to fit these events and experiences. Often, just when I thought no one was even thinking, someone would (*finally*) say something brave, empathetic, and/or brilliant.²

Second, be explicit about the goals of the class and the reasons for teaching the material. Encourage students to discuss why they might take on such a topic. Getting the students on board with it, and getting them started immediately on the critical thinking aspect, gives them a sense of control that is useful with such daunting material.³

Use discussion as much as possible. This is very hard stuff to deal with, and practice helps. Remember that this is a very complicated set of events and decisions, and it is hard to learn it all, so you can allow some trade-offs here. While certain bits of information are probably essential, students—of any age, and regardless of the subject in which it is being taught—do not need to know everything about it. We can accept imperfect knowledge, especially as many aspects are still controversial and even experts' knowledge of them is in some cases still incomplete.

In other words, figure out a rhythm that works for you. Let up if you need to—even before a module is finished. You can come back later if necessary. Bring students into this decision-making process. If it is part of a history class, for instance, you can teach the historical basics at one point and return to the experience of it later after the class has learned more about empathy and taking the point of view of the other from other readings. I have stopped films in the middle so a college class could process the emotion through discussion—and sometimes to allow time for crying.⁴

"Communities of Learning" may be your strongest ally. Ideally, teachers who tackle this subject matter will already have taken preliminary steps to establish a community of learners in their classes, such as those recommended by the League for Innovation in the Community College (www.league.org/; namely, <http://www.league.org/gettingresults/web/p/module1.pdf>).⁵ Encourage all ways you and they can think of to share the burdens of this study—collaborating, discussing, listening carefully, voicing their fears and opinions out loud, making artwork about it and showing it to other classes, and so on. Let them relate what they are learning to other things they have learned, even when the connection may seem a bit far-fetched. It is better to explore the issues and work out the illogical parts and unreliable evidence later, than to shove things aside without considering them fully. This also helps students trust in the future, since they are modeling the processes of sharing burdens and decision making.⁶

Also, share the blessings, because there are some. Records show that people demonstrated not only callousness, cowardice, greed, and disregard for others, but human kindness, caring, bravery, dignity, strength, and stoicism. *Barefoot Gen*, the film, is especially valuable here.⁷

This topic also helps develop empathy and reciprocity of perspectives, as well as the concept of "multiplicity of

perspectives.” Emotions may run high. Encourage students to talk about the strong emotions that may come up, and stress that it is okay to feel this deeply, and even to have conflicting emotions. (For comparison, octogenarians interviewed in Ken Burns’s [2012] documentary *The Dust Bowl* wept on camera 70 years later when describing how a sister died, or a family pet or livestock was destroyed. One man was distraught recalling how his farming community gathered to club to death the hordes of jackrabbits that were eating the few crops that had survived—animals they had no relationship with.) Supply tissues—enough boxes strategically placed so students don’t feel conspicuous reaching for them. (Some schools do this as a matter of course.)

You can mention that if their friend gets really upset, they can put their arm on their friend’s shoulder to comfort them. (You can do this yourself if the student doesn’t seem to have a close friend who leaps to the task, although school cultures differ on this; I’d ask them first if it’s okay.) Comforting each other—and experimenting with ways to do this that are not patronizing or offensive—is a skill that will bear powerful fruit.

Some people believe there were racist elements to the American decision to drop the bombs, and while the evidence (that I’ve seen) does not prove this, it is suggestive, and some students will read racism into it even without the issue being raised for them. I think with middle school students—and many others—you should probably not try to answer this question definitively, and certainly not in a quick yes-or-no way. It is more valuable to use the question (if it comes up) to lead to other questions of how we could find out, what kinds of evidence we would look for, and so on. It is a good place to shift to other contexts of racism, and the differences between racism, discrimination, bias, and so on.⁸ Taking a few days or weeks to consider these issues would be win-win. On the other hand, you can also point out that racism is a deep and far-reaching topic that people spend their lives working on, and not all questions can be answered quickly and surely. We may never have a definitive answer on this one.⁹

Similarly, the bombings may raise issues of real-life violence that students have experienced or witnessed. They can use their readings to make connections between different kinds of experience, and to be more thoughtful about other people’s suffering as well as their own.¹⁰ (New research on posttraumatic stress disorder shows commonalities across many different types of trauma.)

A word of caution here: We often rush to judge whose suffering is worse or more deserving of compassion. Elie Wiesel pointed out, however, in a television interview in response to an interviewer’s question about how different genocides compare and which are worse, that it is not a question of comparing, but of “points of reference.”¹¹

You may find it valuable to spend some time just thinking about your own experiences with violence. I did this before I taught my first class on “Violence and Resistance in Philosophical Perspective,” and I have always been glad I did—not just because it kept me from dismissing or trivializing students’ experiences and observations (there’s bound to be someone who’s lost a hamster), but because of what it taught me about myself (how much pain or fear I had brushed off, and then why), about our society (how we learn to dismiss or trivialize or ignore so many kinds and levels of violence, and how pervasive violence is in America), and because I have continued to use this knowledge in other courses—and other parts of my life.

There is an enormous amount of violence in contemporary life, much of it unacknowledged. We can prepare as teachers to meet students’ reactions more gracefully by just paying attention to this violence within or adjacent to our own lives: noticing whether it was temporary or life changing, willful or accidental, direct or second hand (relative raped, friend killed); whether it happened to someone close or to a stranger on the street; whether it was wrenching or just troublesome, life threatening, or dealing with injury/maiming or loss of property or “just” painful; and whether it happened to someone/something recognized as important or to someone dismissed as unimportant (a stepparent or “ex,” whom you’re supposed to be “over,” or a pet).¹²

One of the best “shields” in the human arsenal is humor, and some of the Japanese who have tackled the subject of the bombing, including victims, utilize humor in their accounts. *Barefoot Gen* was made for young children but is informative and moving for all ages. It shows many humorous moments (as well as many moments of joy and intimacy). Both Masuji Ibuse’s (1978) book *Black Rain*, about survivors’ experiences of the bombings, and Shohei Imamura’s (1989) film based on it use humor. The three crucial features of their use of humor that make it acceptable are: (1) the humor is always “victimless,” (2) it never makes light of the events or the pain or injuries, and (3) it is always harmless—no one is injured by it. Discuss the uses of humor and when it is hurtful with the class.

Along with mindfulness training, remind students that it is okay to be happy—essential, in fact. Those events are over. If we are to deal successfully with their implications, on the other hand, we need to be at our best.

Developing Students’ Skills

Consider developing critical thinking by making lists of pros and cons, starting with “Pros and Cons of Teaching about the Atomic Bombings—Should We Do It or Not?”¹³

Combine reading, writing, and discussion with visual or performing arts.¹⁴

Have students write about it—including their decision-making process.¹⁵

Sketching or drawing, writing music, writing or acting in skits, and so on, not only support different kinds of learners but also offer emotional support when the content (or process) of cognitive learning is itself stressful. Whether this means collaborating with arts teachers during this module or simply offering time and materials for such work within your own classroom—and allowing them to show it to and discuss it with classmates after—artistic production allows students to demonstrate some control as well as express their feelings and beliefs. Researchers are now exploring connections between the arts and excelling in science, technology, engineering, and mathematics, and other more cognitive fields.¹⁶ David Markus (2012), among others, argues that the arts facilitate social and emotional learning as well.

Self-care

In addition, we must teach self-care—for the teacher and the students. This, again, can be quite complex. At a minimum, I recommend people recognize the difficulty of the task they take on when they study this subject and resolve to take care of themselves and each other. How? Work within a community of learning—don't tackle it on your own. Holocaust studies communities are very helpful here, but we must also reach out to people teaching genocide, war and peace studies, race, ethnic studies, and so on.

There are very useful ways to develop *mindfulness*, which is the ability to notice what you are thinking, feeling, and attending to without judgment and without running from it or trying to change it or giving in to it as an uncontrollable obsession. While mindfulness originated in religious practices, it has been part of the American medical establishment's regime for controlling heart disease for some decades now (Benson and Klipper 1975) and need not be related to any system of belief or challenge other values systems.

I teach the method taught by Vietnamese Buddhist priest (and author of over a hundred books) Thich Nhat Hanh, which he relied on when he had to keep rebuilding an orphanage that was bombed repeatedly during the Vietnam War.¹⁷ You can discuss with students why you would not insist they adopt a religious viewpoint other than their own (if you teach at a Buddhist academy, you can probably skip this step), and what makes a practice or belief religious in the first place. (Take three minutes to a semester for this step, depending on the class and the grade level.) This discussion also helps to ground the students in the conviction that you respect them. It also helps to discuss with students

that the way you are teaching mindfulness is a physical practice (that's why heart surgeons now insist on it) with implications for our emotional life. The ultimate goal here is learning to let go of the topic or images when they intrude outside of class. Give students explicit permission to "change the subject" on their own brain.

One physical practice is preparation through nutrition. Students should not have low blood sugar when they learn about such things. Emphasize the role of protein in learning and blood-sugar fluctuation in mood management, both great topics for Internet searching; the Centers for Disease Control, Mayo Clinic, and others have sites presenting information to the public on a level seventh graders can understand—they can also get a lesson in science literacy as you explore why information from these sites is reliable.

Conclusion

Despite the difficulties, both the knowledge and the skills students learn for dealing with subjects like this will be useful in other contexts, too. By building a sense of community as we work through this material, and encouraging students' empowerment, it becomes a deeply rewarding area of study with lifelong effects.

Projects

Visual and Performing Arts Projects

1. Design posters or a PowerPoint presentation, or write and perform a one-act play, to inform younger students in your school how to act in case of an emergency or disaster in your neighborhood.
2. If your community has suffered a disaster, draw a picture or map of your neighborhood with "before" and "after" versions.
3. The Gernika Peace Museum Foundation's (http://www.museodelapaz.org/en/taller_des_en.php?idtaller=5) workshop on Hiroshima and Nagasaki suggests that students "convert the destruction of Hiroshima and Nagasaki into a message of peace." Try it! (Note: This city's name is usually spelled "Guernica" in English.)
4. Imagine a scene after the bombing, perhaps one taken from a survivor's account. Draw or paint it from a couple of different points of view—a child's, a sick person's, the pilot's, or a soldier's or nurse's or doctor's or cat's.
5. Is there a episode from the *manga* version of *Barefoot Gen* that Masaki omitted from his film, or did not discuss fully? Write it as a script for a movie scene. Act it out with some of your classmates.¹⁸

Political and Social Activism Projects

1. Find out if your mayor is a member of Mayors for Peace (<http://www.mayorsforpeace.org/>). (Note: This is a great site for geography lessons! Discuss why

some countries might have more members than others.) Is your mayor active? In what ways? Write to him or her and ask about your city's involvement. Offer your services. Is there anything you and your class can do to help?

2. Make an origami peace-crane chain and send it to the peace museum in either Nagasaki or Hiroshima. Their permanent displays of such chains, both indoors and in the peace parks, are one of the most moving features of those sites. Ask the museums to e-mail or phone in a picture of the chains.
3. Many Japanese classes visit the memorials and museums in Nagasaki and Hiroshima. Can you contact one of these classes and ask the students to write or e-mail you about their experiences there? Tell them about your study and the conclusions you have reached. Send them a photo of one of your art projects.
4. What peace anniversaries does your city honor? What do they do? Should you participate? How?
5. Considering the potential dangers of accidents at nuclear power plants, what should power companies, zoning boards, and governments consider when they plan, design, or choose a site and when they maintain, train workers for, and regulate such facilities. Write a concise letter about your concerns and send it to whomever you decide is appropriate. (Perhaps the newspaper.) Discuss it as a class.

Questions for Discussion and Writing

1. What prompted President Roosevelt to start the Manhattan Project? As Hungarian physicists educated in Germany, Leo Szilard and Edward Teller had special knowledge about the Nazis and about the physics of atomic bombs. What did they fear, and what did they do about it?
Suppose you, like Szilard and Teller, had information others didn't have about something that endangered your country or community or family. Whom would you want to know about it? How would you get the information to them? How could you be sure they read your e-mail? Consider, also, your social network. In 1929 Hungarian writer Krigyes Karinthy published a short story, "Chains," that posited that everyone in the world is connected to anyone else by at most five other people. The theory, now known as "six degrees of separation," has been studied by mathematicians and social scientists (Travers and Milgram 1969; Milgram 1967).
2. In some important ways, the bombings of Hiroshima and Nagasaki are unique events in world history. But they also share features with other disasters and even with some other unique events, such as the Holocaust and the earthquake/tsunami/nuclear power plant accident that hit the Fukushima area of Japan on March 11, 2011. How are the atomic

bombings unique? Pick one other event and show how they are similar and different.¹⁹

3. Despite their own uniqueness, disasters have a lot in common. What do people need to know and do in order to be safe in different kinds of disasters? (My sixth graders brought this topic to my attention when they came in after their science class on earthquakes.) How do fires, tsunami, earthquakes, and so on, differ in terms of what you need to do? Who is in charge of disaster management in your city or town? Where do you find out about their plans?
4. After the bombings, most streets and buildings were destroyed and people could hardly figure out where they were. How do you know where you are in your neighborhood? How do you get around? What landmarks do you use? What features could you see (or have you used) to navigate in case of disaster?²⁰
5. If you've been through a natural or other disaster, what were the most compassionate, smartest, or bravest things you saw someone do? Would you do anything differently next time? Discuss your decision making at the time.²¹
Have you ever done anything compassionate or smart or brave? What did you do? How did you feel? What was your parents' reaction? (Were they angry afterward, or proud?)
How is it different taking action in an emergency than in ordinary life?
6. It took a long time to figure out how many people died in the two bombings, and there is still disagreement about the numbers. Why might this be? What problems did social scientists and government officials face in trying to find the answers? Would the problems be the same today or different?
7. Hitoshi Motoshima, the former mayor of Nagasaki, stated that "the atomic bomb was a valid way to end Japan's aggression without further delay. . . . The atomic bombing was a consequence of Japan's invasion and assault. If Japan had not started the war, no one would have dropped any atomic bombs on it. What we should do is continue to apologize from the bottom of our heart to people in the Asia Pacific region, including China and the Korean Peninsula. Otherwise, Japanese cannot make a persuasive call for a nuclear-free world even by speaking of the damage done by the bomb" (<http://www.asahi.com/hibakusha/english/shimen/hibakukoku2012/hibakukoku2012-03e.html>). Do you agree with him? Would it matter to you if your city were destroyed by an act of war, such as a bomb, rather than a natural disaster? Why? How are they different morally?
Mayor Motoshima was shot by someone who disagreed with his views. Was that appropriate? What should someone who disagrees with a prominent figure's political positions on his or her country's

moral responsibility do to express his or her feelings and views?²²

8. Study *Guernica*, Picasso's famous painting of the bombing of civilians during the Spanish Civil War (<http://www.pablopicasso.org/guernica.jsp>).²³ What's going on in the painting? How is it composed? Why is everything so fragmented? (Teachers may enjoy *Picasso's War: The Destruction of Guernica, and the Masterpiece That Changed the World* [Martin 2002]).
9. The Gernika Peace Museum Foundation's permanent exhibition explores two themes, history and peace, through three questions: "What is peace? What happened in Gernika in the absence of peace? What about peace in the world today?" Why do you suppose the Foundation chose those three themes? How are they relevant to you and your study of Hiroshima and Nagasaki? (http://www.museodelapaz.org/en/expo_des_en.php?idexposicion=2).
10. Many people believe that once a country adopts a new technology, especially a new kind of weapon, there's no going back—the technology or weapon will inevitably continue to be used until it is replaced by something more effective. This is not true, however. There are a few examples of countries deciding to stop using a weapon they had already adopted. In the early 17th century, Japan did this with guns (which they had imported and then developed the technology to start making themselves), deciding to return to the use of swords only (Perrin 1988), and South Africa renounced nuclear weapons (Federation of American Scientists, n.d.). Are there any comparable debates today (e.g., the use of drones)

Discussion Questions for *Barefoot Gen*²⁴

*Family Life and Social Structure*²⁵

1. Were Gen and his little brother, Shinji, close? How do you know?
2. What was their family life like before the bombing? Was their family at all like yours or like other families you know? How were they different?
3. What were Gen's parents views on the war? How did Gen and Shinji feel about the ways the war and their father's views affected them?
4. Do your parents fit in with their society or are there ways in which, like Gen's, they disagree with others?
5. How did Gen and Shinji help their family?
6. Why did Gen want his mother to keep Ryuta?
7. How did Gen and Ryuta help their mother?
8. What made them hopeful about the future at the end of the movie?

*Themes*²⁶

1. Wikipedia states that "major themes throughout [*Barefoot Gen*]. . . are power, hegemony, resistance

and loyalty" (http://en.wikipedia.org/wiki/Barefoot_Gen). True enough (and relatively more important in the *manga* than the film), but I am always equally struck by its antiwar stance and its emphasis on how even the most powerless among us can exert a powerful positive impact on our communities (and even save lives). How does *Barefoot Gen* (either the *manga* or film) demonstrate these themes? Are there other themes that seem more important to you?

2. What actually happened in this film? Are there any situations today in which similar kinds of things happen?
3. War and disasters can make even the bravest and strongest of us helpless, as Gen, Shinji, Ryuta, and his parents discover. What do they try to do that they simply cannot do? Why not?
There are also, however, a number of ways in which they do manage to save, or help, themselves or other people. What are they?
4. Many of the adults, such as the doctor Gen takes the injured soldier to see, fail the kids. Why? What are the limitations on the help that people can give in such situations?
5. Houses in Japan and some other places used to be made almost entirely of wood and were built very close together. This made them extremely vulnerable to fire and to collapsing, not only in war but also in earthquakes. Now architects, city planners, and the construction industry not only use different materials but also have learned to support wooden houses with special kinds of supports. They also plan empty areas in cities as firebreaks and as places for people to gather in a disaster. What are the safety measures used in the buildings you live and work in? Are there special vulnerabilities in their construction and design? Do the buildings have any special accommodations because of their geographic location?

Genre, Format, Style, and Comparing the Manga and the Film

1. What are the most important differences between the *manga* and the film? Which of them are "inherent in the medium"? Are there things an anime film can do that a live-action movie cannot?²⁷
2. Some of the differences are not due to the medium but were deliberately created by director Mori Masaki. Consider the scene toward the beginning when Gen and Shinji steal the carp in the rich man's garden—only a few panels in the *manga*, but long, elaborate, and visually and emotionally rich in the movie. Why do you suppose he chose to develop this scene the way he did? What does he give his audience through this elaboration?
3. How does Masaki get viewers to see the world from Gen's point of view?

4. How does the film select themes to emphasize that the *manga* did not?
5. How does Masaki use techniques similar to those in *Guernica*, Picasso's famous painting of the bombing of civilians during the Spanish Civil War? What other techniques does he use? How does his use of color, or of pacing, change when the bomb hits and during the scenes where people are moving through the burning city?

Other Issues

1. Masaki made this film to show to Japanese children. Would you recommend it for other children? How old do you think they should be before they see it, and why?
2. Why do you suppose Masaki made this as an anime instead of a life-action film? Would it have worked as claymation?
3. How can you prevent yourself from being depressed by this movie? What can you do to remind yourself to feel better afterward?
4. Are there things you can do to help make sure nothing like this happens again? Can you work on any of them now, while you're still young?

Acknowledgments

I am grateful to the Hiroshima Peace Culture Foundation, which invited me to address their 2003 conference on teaching about the atomic bombings, and to Drexel University and the Center for Japanese Studies at the University of Hawaii-Manoa for opportunities to present my ideas and to receive valuable criticism. Moore College of Art and Design provided much-appreciated travel funding, enabling me to present my work in Hiroshima. I thank my intern Austin Rooks (University of Hawaii-Manoa 2013) for his editorial help in the preparation of the final drafts of this manuscript, John Zuern (University of Hawaii-Manoa) for his sponsorship of the English Department's internship program, and my students for their responses to my teaching this material. I presented the thesis of this article as an editorial in the *Honolulu Star-Advertiser* on August 8, 2012: "12 Reasons the Atomic Bombings of Japan Should Be Taught" (<http://www.staradvertiser.com/s?action = login&f = y>).

Notes

1. Stein (1993) states that "military experts estimated that an invasion of the main Japanese islands could result in a million American casualties" (25). This is double the claim made by President Harry Truman's secretary of war, Henry Stimson ("as many as half a million American casualties"), in his memoirs and his 1947 article to the American public in *The Atlantic* (Johnson 1996, 39).
2. Virtually all the Common Core Standards (CCS) on Speaking and Listening 7.SL.1-6 will be developed in such a discussion. Discussions like this are also related to 7.W.10: "Write routinely over extended time frames

- (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences."
3. 7.SL.1: "Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. A. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. B. Follow rules of collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. C. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. D. Acknowledge new information expressed by others and, when warranted, modify their own views."
 4. 6-8.RH.8: "Distinguish among fact, opinion, and reasoned judgment in a text."
 5. I resonated to the account provided by a fifth-year teacher at a Los Angeles elementary school of "some things that I find important in building a community of learners: Fostering responsibility and self-direction; Set clear routines and clear expectations; Ensure emotional and physical safety; Know your students; Peer interaction; Focus on personal improvement, not competition" ("Teaching in the Inner City," *Teaching in the Inner City* blog, May 7, 2007, <http://cityteacher.wordpress.com/2007/05/07/buliding-a-community-of-learners-in-an-inner-city-classroom/>, accessed December 2, 2012).
 6. Again, 7.SL.1, and also 7.W.2: "Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. A. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headlines), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. B. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. C. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. D. Use precise language and domain-specific vocabulary to inform about or explain the topic. E. Establish and maintain a formal style. F. Provide a concluding statement or section that follows from the supports the information or explanation presented."
 7. 7.RL.9: "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history."
 8. *Welcome to Sociology* has a clear and succinct discussion of the differences (Basirico et al. 2009).
 9. 7.RI.6: "Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others," or 7.RI.8: "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims."
 10. 7.W.3: "Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. A. Engage and orient the reader by establishing a context and

point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. B. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. C. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. D. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey the experiences and events. E. Provide a conclusion that follows from and reflects on the narrated experiences or events."

11. 7.L.4: "Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary)."
12. I should mention that for various reasons I have led a very privileged life in this respect. Nonetheless, my list at that time—20 years ago—was several pages long, once I stopped telling myself "that doesn't count." Two very close friends of mine were murdered (in unrelated events), despite not living in places with drive-by killings, and so on.
13. 6-8.WHST.1: "Write arguments focused on discipline-specific content. A. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. B. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. C. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. D. Establish and maintain a formal style. E. Provide a concluding statement or section that follows from and supports the argument presented."
14. 6-8.RH.7: "Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts."
15. 6-8.WHST.10: "Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences."
16. See <http://www.edutopia.org/blog/visual-art-critical-thinking-andrew-miller>. See also STEAM, a movement originating at the Rhode Island School of Design (www.stemtosteam.org); Artful Thinking (www.pz.harvard.edu/tc/ and <http://www.smartplanet.com/blog/report/to-innovate-scientists-and-engineers-find-inspiration-in-the-arts/419>). In his education blog, Doug Haller (2012) argues that "something about art brings out creativity and innovation in ways different from but complementary to the sciences."
17. This is a Vietnamese form of Zen meditation and involves no deities. Although it will take longer to per-

fect the method, the principles are simple and can be taught in a single class: (1) Sit in a comfortable position with your feet flat on the floor (if on a chair) or folded in a lotus or semi-lotus position, and with your body balanced; (2) breathe in and out slowly and regularly, letting your breathing slow down naturally as you relax and letting the air fill your lungs deeply so that it pushes out your diaphragm; (3) close your eyes lightly or partially; (4) let go of all thoughts, or just pay attention to your breathing, perhaps counting as you breathe, or repeating mentally a simple *gatha* or poem. Thich Nhat Hanh has several books of these, but two are especially easy. Alternately, as you breathe in and out, say "in/out," "deep/slow," "calm/ease," "smile/release," or "present moment/only moment." Or, notice whatever you are feeling—whether physical or emotional—and say "breathing in, I feel [hungry, thirsty, or whatever]/breathing out, this [hunger/thirst/boredom] is me," changing the adjective and noun as you notice your feeling or attention is changing.

As described by Herbert Benson, the founder of the Mind/Body Medical Institute at Massachusetts General Hospital in Boston and the doctor who introduced Asian meditations into American medicine, you should start with a quiet, calm place. But Thich Nhat Hanh did not have that luxury, and he says this can be done anywhere, including on the subway (but *not* while driving! It induces the wrong kind of brainwaves for rapid decision making and executive function"). Zen and some other forms of Buddhist meditation are even done while walking or even running (assuming a safe location). There are, of course, many forms of meditation and some do involve a belief in deities.

Martin Luther King, Jr. nominated Thich Nhat Hanh for the Nobel Peace Prize in 1967; it was not awarded that year. The letter of nomination is available at <http://www.hartford-hwp.com/archives/45a/025.html>.

18. 7.RL.7: "Compare and contrast a story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film)."
19. 6-8.WHST.2: "Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. A. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. B. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. C. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. D. Use precise language and domain-specific vocabulary to inform about or explain the topic. E. Establish and maintain a formal style and objective tone. F. Provide a concluding statement or section that follows from and supports the information or explanation presented."
20. 7.W.3: See note 11.
21. Ibid.
22. 6-8.WHST.1: See note 13.
23. There are countless images of this painting on the Internet, but the one provided by PabloPicasso.org has wonderful supplementary information and a great list of quotes from Picasso.

24. Ever since I was blindsided (sucker-punched?) by a (college) student who told the class in his self-introduction that he had once set a dog on fire (yes, it turned out to be a true story), I have prefaced class discussions with a mention of the “rules” for such things: (1) students should not talk about something they do not want other people to know (they may not have thought about this), (2) some things students tell me I may be legally *required* to pass on to authorities—the “positive duty to report.” (Discuss why we have created these laws—reminding students that they can tell you privately.) This develops awareness about several important issues—privacy, confidentiality, protection of children, the appropriateness of different kinds of situations for various kinds of situations, society’s changing views on different kinds of behavior and on who is responsible for what, and so on.
25. 7.RI.3 applies to all the questions: “Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).”
26. 7.RL.2 applies to questions 1–3: “Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.”
27. 7.RL.7: please see note 19.

REFERENCES

- Basirico, L. A., B. G. Cashion, J. R. Eshelman, and D. Morgan. 2009. *Welcome to sociology*, 2nd ed. New York: Horizon Textbook Publishing.
- Benson, H., and M. Klipper. 1975. *The relaxation response*. New York: HarperTorch.
- Burns, K., dir. 2012. *The dust bowl*. PBS.
- Coerr, E. 1977. *Sadako and the thousand paper cranes*. New York: Penguin Group.
- Federation of American Scientists. n.d. South Africa: Nuclear weapons program. <http://www.fas.org/nuke/guide/rsa/nuke/index.html>.
- Grant, R. G. 1998. *Hiroshima and Nagasaki*. Austin, TX: Steck-Vaughn.
- Haller, D. 2012. Full STEAM ahead: Arts, STEM, and 21st century learning. *SmartBlog on Education*, October 31. <http://smartblogs.com/education/2012/10/31/full-steam-ahead-arts-stem-21st-century-learning/>.
- Ibuse, M. 1978. *Black rain*, trans. John Bestor. Tokyo: Kodansha (Japanese edition, 1965).
- Imamura, S., dir. 1989. *Black rain*. Tohokushinsha Film.
- Johnson, R. D. 1996. Historical inquiry and the public memory: The Hiroshima decision as a case study. *Education About Asia* 1(1): 39–44.
- Markus, D. 2012. The social and emotional benefits of being weirdly creative. *Edutopia: What Works in Education*, August 29. <http://www.edutopia.org/blog/stw-arts-integration>.
- Martin, R. 2002. *Picasso's war: The destruction of Guernica, and the masterpiece that changed the world*. New York: Dutton.
- Maruki, I., and T. Maruki. 1988. *The Hiroshima panels*, trans. N. Hunter with Y. Ishikawa. Higashimatsuyama, Saitama, Japan: Maruki Gallery.
- Maruki, T. 1982. *Hiroshima No Pika*. New York: Lothrop, Lee & Shepard.
- Milgram, S. 1967. The small world problem. *Psychology Today* 2: 60–67.
- Masaki, M., dir. 1983. *Barefoot Gen*. Chatworth, CA: Image Entertainment.
- Nakazawa, K. 1973–1985. *Barefoot Gen, vol. 1: A cartoon story of Hiroshima*, trans. The Gen Project. Philadelphia, PA: New Society Publishers.
- Perrin, N. 1988. *Giving up the gun: Japan's reversion to the sword, 1543–1879*. Boston: David R. Godine.
- Stein, R. C. 1993. *The Manhattan Project*. Chicago: Children's Press.
- Travers, J., and S. Milgram. 1969. An experimental study of the small world problem. *Sociometry* 32(4): 425–43.

Appendix: Resources for Classroom Use

The following books received strong recommendations from the *School Library Journal* or *Cahners Business Information*. Most are illustrated.

General Histories and Overviews

- Hoare, S. 1987. *Hiroshima*. London: B.T. Batsford. (Grades 4–8)
- Minear, R. 1996. Hiroshima, HIROSHIMA, “Hiroshima,” *Hiroshima: The event and its facts*. *Education About Asia* 1(1): 31–38.
- Seddon, T. 1995. *Atom bomb*. New York: W.H. Freeman. (For slightly younger students, Grades 3–6)
- Sherrow, V. 1994. *Hiroshima*. Upper Saddle River, NJ: Silver Burdett.

Accounts of the Manhattan Project, the Development of the Bomb and the Debates Regarding Its Use, and the Arms Race

- Blow, M. 1968. *The history of the atom bomb*. New York: Harper Collins.
- Cohen, D. 1999. *The Manhattan Project*. Minneapolis: 21st Century. (Grades 7–10)
- Grant, R. G. 1998. *Hiroshima and Nagasaki*. Austin, TX: Steck-Vaughn.
- Lawton, C. A. 2004. *Hiroshima: The story of the first atom bomb*. Somerville, MA: Candlewick Press.
- Malam, J. 2002. *The bombing of Hiroshima*. Mankato, MN: Smart Apple Media. (9–13 years)
- Stein, R. C. 1992. *The Manhattan Project*. Chicago: Children's Press.
- Young, R. 1994. *Hiroshima: Fifty years of debate*. New York: Dillon Press.

Stories of Real People Who Experienced the Atom Bomb on Hiroshima

- Asahi Shinbun. *For those who pray for peace: Hiroshima Jogakuin Alumni Association collection of memoirs commemorating the 60th anniversary of the atomic bomb*. <http://www.asahi.com/hibakusha/english/others/jogakuin/>.
- Coerr, E. 1993. *Sadako*. New York: Putnam.
- Kodama, T. 1995. *Shin's tricycle*. New York: Walker & Co.
- Lifton, B. J. 1970. *Return to Hiroshima*. New York: Atheneum.
- Maruki, I., and T. Maruki. 1972, 1988. *The Hiroshima panels*, trans. Nancy Hunter with Yasuo Ishikawa. Higashimatsuyama, Saitama, Japan: Maruki Gallery.
- Maruki, T. 1982. *Hiroshima No Pika*. New York: Lothrop.
- Masaki, M., dir. 1983. *Barefoot Gen*. Chatworth, CA: Image Entertainment. (DVD)
- Nakamoto, H. 1970. *My Japan 1930–1951*. New York: McGraw-Hill.
- Nakazawa, K. 1973–1985. *Barefoot Gen, vol. 1: A cartoon story of Hiroshima*, trans. The Gen Project. Philadelphia, PA: New Society Publishers. (English edition, 1989)