

Paper Crane Project Progress Report 2021-2022

Project Name	: Paper Crane Project
Project Purpose	: To develop a curriculum to teach nuclear history and discourse to Chicago Public School middle school students.
Project Member	: Yuki Miyamoto, Aiko Kojima Hibino, Jessica Kibblewhite, Laura Gluckman
Project Funders	: Union of the Concerned Scientists, Hiroshima Peace Creation Grant
Report period	: March 2021 ~ August 2022

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1. Project Activities (as of August 16th, 2022)

- a. Target subjects
6th grade students at National Teachers Academy (NTA) in Chicago Public Schools (CPS)
- b. Duration
Pilot preparation: March, 2021 ~ May, 2022, Pilot teaching: May, 2022. The project is ongoing.
- c. Purpose
In summer 2019, a Chicago Public high school located in the north of the city discarded [a number of copies of John Hersey's *Hiroshima into a dumpster*](#). In light of this incident, we realized how little students learn about nuclear weapons (their power and aftereffects) even in college, and we thought that particularly in the city of Chicago, home to the University of Chicago, which made a significant contribution to the Manhattan Project, the significance of nuclear weapons in history and their negative legacy should be taught in pre-university education. Also inspired by the passage of "[Teaching Equitable Asian American Community History \[TEAACH\] Act](#)" in Illinois in April 2021, which requires all public schools to teach Asian American community history in the 2022-23 school year, this project aims to create a curriculum to teach nuclear history and discourses to middle school students in CPS, that will be adopted by many schools in Chicago and Illinois after the 2022-23 school year, when the TEAACH Act takes effect.
- d. Progress (March 2021 ~ August 2022)

In the first year of the project (2021-22), a pilot version of the curriculum was developed and taught to 6th grade students at one CPS school, NTA. The class period was set for May 2022, the "Asian/Pacific Islander American Month" in the United States. Project members met regularly to prepare for the project.

March-November 2021: Building a Common Understanding

In the United States, not only students but also adults, in general, are not very familiar with the history of nuclear weapons. Therefore, in the initial meetings, Yuki Miyamoto led study sessions on the Manhattan Project, the atomic bombings of Hiroshima and Nagasaki, nuclear testing, the "peaceful" use of nuclear energy and nuclear power, radiation exposure, and environmental pollution, as professional training for teachers who would be teaching children in the classroom. [The reading list for the study sessions](#) is attached. Through the study sessions, critical points to emphasize in curriculum development were also suggested from the teachers' point of view.

December 2021 - April 2022: Curriculum Development

In creating the curriculum, this project paid particular attention to the fact that World War II world history was not required in elementary schools in Illinois, and therefore, sixth graders had almost no knowledge of the history, geopolitics, etc. of the period. Also, since this was before the TEAACH Act was enacted, it was expected that many students would be unfamiliar with the society, geography, and culture of Japan and other Asian countries. On the other hand, the meta-issues raised by nuclear history and its negative legacies, such as human rights, colonialism, nationalism, racism, and misogyny, were considered to be well understood by the students since Black history is a required subject under Illinois law and the NTA is particularly committed to

social justice and human rights education. Therefore, the first step was to stimulate students' interest in the topic of nuclear history. Then through critical reading and discussion of materials, we expected students to draw their own conclusions about nuclear history and its negative legacy.

The specific teaching method used was the Structured Academic Controversy (SAC) method proposed by Jessica Kibblewhite and Laura Gluckman. SAC is a method in which both sides of an issue are examined and a conclusion is reached through discussion. Unlike debates, the purpose is not to decide who wins or loses, but to examine the issue from all angles and build a common understanding. Rather than unilateral teaching with a teacher's conclusion, we hoped that students would engage in the topic and gain a deeper understanding of the issues.

May 2022: Teaching

Classes were held from [May 5-25, 2022](#), for a little over two weeks. Taking an interdisciplinary approach, during this period students worked intensively on nuclear history and issues in a social studies class that is combined with English language arts (ELA) class in the mornings and a science class in the afternoons. Prior to this, a class library was set up in April to stimulate interest in the topic among students who, as mentioned above, had little knowledge of the subject. By borrowing and reading books from the library, we hoped that the students would gain some knowledge of the topic before the curriculum began in May. [A list of books for the classroom libraries](#) is attached.

The SAC theme for [social science/ELA](#) was "Should the U.S. government have used nuclear weapons against the Japanese people during World War II?" and the theme for [science](#) was "Should the U.S. government make nuclear power the primary source of electricity to reduce CO2 emissions?" The students were divided into groups of 5-6 students each, and each group was further divided into two, with one being for and the other against, to read materials and summarize arguments. The groups presented their arguments, discussed them, and came to a group conclusion. Finally, the class as a whole discussed the issues and came to a conclusion. We also invited Tai Yamamoto, an origami instructor at the Japanese Culture Center of Chicago, to give students an origami crane workshop. Yuki Miyamoto then gave [a lecture](#) on the symbolism of origami cranes, Sadako Sasaki, radiation survivors, and atomic bomb sickness, as well as the Atomic Bomb Casualty Commission (ABCC) from a racial and colonialist perspective.

The SAC documents are attached, and the actual class discussion can be seen on the project's website (<https://www.teachnuclearhistory.org/2022>).

e. Results and Impact

[Social studies/ELA](#): Students read arguments that are for the usage of atomic weaponry, including that the atomic bombings ended the war early and saved lives and that the atomic bombings ended Japanese colonial policies and war crimes. They also read arguments against the atomic bombings including the impact of the Soviet Union's involvement in the war on Japan's surrender, the presence of Koreans and other people from colonized land in Hiroshima and Nagasaki at the time of the bombings, and the effects of radiation exposure over many generations after the war. The class discussion then concluded that the U.S. government should not have used nuclear weapons against the Japanese, based on historical evidence that supports the expected surrender of Japan even without the atomic bombings. During the discussion, students also questioned from a colonialism lens if there was a possibility of atomic bombings of Germany.

Science: Students read about the low CO2 emissions of nuclear power as an argument in favor of nuclear energy. As arguments against nuclear energy, they read about the past accidents at Chernobyl and Fukushima, the dangers and economic ineffectiveness of nuclear power, the exposure of workers involved in the entire process from uranium mining to nuclear operation and nuclear waste disposal, and the environmental pollution of indigenous settlements. The class discussion then led to the conclusion that nuclear power could be effective as a countermeasure against climate change, but that its danger and unethical nature were problematic.

The project activities were covered by several media:

- June 15, 2022, NHK (Nippon Hoso Kyokai, Japanese public broadcaster) [“BS International News” program](#)
- July 18, 2022, Chugoku Shimbun (Hiroshima’s regional newspaper) [“平和教育 米で広がり シカゴで広島出身の宮本さん 原爆や核問題カリキュラム作り授業”](#), [“Japanese professor from Hiroshima tries to spread peace education in the U.S. by creating curriculum focusing on the A-bombings and nuclear issues”](#)
- August 29, 2022, Chalkbeat, (online educational newspaper) [“Chicago educators create new lessons on Asian American history, nuclear power”](#)
- October 4, 2022, Nuclear Hotseat (nuclear issue podcast) [“NH #589: “Cool” Nuclear History Education for Kids – Prof. Yuki Miyamoto, Aiko Kojima Hibino”](#)

2. Financial Report

The project is funded by Union of Concerned Scientists (\$9,950) and Hiroshima Peace Grant (\$1,797.76). We expended the grant from Union of Concerned Scientists mostly as we proposed in the budget, except that “books and resources” were covered by Hiroshima Peace Grant, and that “students’ field trip” could not happen due to the COVID-19 protocol. The details of expenditure and the next year’s budget was reported to both funders.

3. Future Plans

In June 2022, after the end of the school year, we reviewed and evaluated the pilot curriculum and discussed future developments. First, in social science/ELA, the SAC was generally successful, but the teacher in charge, Jessica Kibblewhite, expressed a desire to cover the anti-nuclear movement further next year. In science, in consideration that many of the groups' SAC conclusions were ambiguous, such as "use nuclear power with safety in mind," Laura Gluckman, the teacher in charge of the course, expressed a desire to read more material from the perspective of environmental justice next year. She also expressed a desire to explore the question of science and ethics deeper. We will revise next year's lesson plan accordingly. We are also considering some form of cross-grade learning opportunities, such as inviting 7th and 8th graders to participate, in order to broaden the curriculum beyond 6th grade to include the entire middle school (grades 6-8).

We are currently working on compiling the results of the pilot and the future plan on the project's [website](https://www.teachnuclearhistory.org/). (<https://www.teachnuclearhistory.org/>)

As a first step toward expanding the program to schools outside of the NTA, we are seeking collaboration with Facing History and Ourselves, an organization that supports history education from a social justice perspective. We are also forming a partnership with Asian Americans Advancing Justice (AAJ), an organization that was deeply involved in the establishment of the TEAACH Act and is currently working to train teachers to teach Asian American history under the Act.