

**Be Nice to Spiders
End Arachnocide
John Muir Elementary School
Service-Learning Project**

Contact Information

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Introduction and Description of the Lesson

John Muir School is located in a wealthy residential neighborhood in North Berkeley, on the East side of the San Francisco Bay. Our student population of 250 is almost entirely bussed in from less-advantaged areas. After a few students in our second grade classroom witnessed an adult at our school reacting to a spider by stepping on it, the children were moved to action. This followed an extensive class study of spiders after which the children made posters to educate their peers and the community about the benefits of spiders. The posters were placed around the school and a few were given to local parks, gardens, and a local group that leads lessons in our creek area. Students regularly reported instances of how they had informed their families and other children in the school that spiders are important to the ecosystem, that spiders are not dangerous, and that spiders benefit people. As part of the unit, we also read books about people who were and were not afraid of spiders. One example of those is entitled Be Nice to Spiders.

Lesson Plan

Instructional Process

Preparation

Identifying community needs: The children identified this need when, after they were deeply offended by the adult killing the spider, they were highly motivated to educate the population-at-large to help end arachnocide. They requested that we take this on as a project.

Content standards:

WRITING—1.0 Writing Strategies; 2.0 Writing Applications; WRITTEN AND ORAL ENGLISH LANGUAGE CONVENTIONS 1.0;

MATH NUMBER SENSE—1.0 Students understand the relationship between numbers, quantities, and place value in whole numbers up to 1,000; 3.0 Students model and solve simple problems involving multiplication and division; 6.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, hundreds, and thousands places; **ALGEBRA AND FUNCTIONS**—1.0 Students model, represent, and interpret

number relationships to create and solve problems involving addition and subtraction; **MATHEMATICAL REASONING**—1.0 Students make decisions about how to set up a problem; 2.0 Students solve problems and justify their reasoning.

SCIENCE—Life Sciences;

HISTORY-SOCIAL SCIENCE—2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments; 2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g., Cesar Chavez);

VISUAL AND PERFORMING ARTS—2.0 **CREATIVE EXPRESSION**—Creating, Performing, and Participating in the Visual Arts—Skills, Processes, Materials, and Tools; Communication and Expression Through Original Works of Art; 4.0 **AESTHETIC VALUING**—Responding to, Analyzing, and Making Judgments About Works in the Visual Arts—Derive Meaning; Make Informed Judgments; 5.0 **CONNECTIONS, RELATIONSHIPS, APPLICATIONS**—Connecting and Applying What Is Learned in the Visual Arts to Other Art Forms and Subject Areas and to Careers—Connections and Applications; Visual Literacy; Career and Career-Related Skills.

Civic responsibility outcomes: Children were shocked initially by the grown-up's reaction and had trouble recalling that many of them had had negative feelings toward spiders when our study first began. This was a great way for children to see the power of education not only in terms of their own development of ideas but also as a means to influence others. Outcomes:

Educating others for positive environmental and social change
The development of leadership, communication and social skills

Students were able to know what they would be expected to know and do: through teacher demonstrations and examples of what was expected during each activity and class discussions about expectations.

Building on & use of prior knowledge: Children utilized previously taught skills including brainstorming solutions, making educational posters, and considering effectiveness of different places to hang them for maximal exposure. Also, they thought about the upcoming weather and decided to laminate the posters.

Issues that needed to be addressed prior to the service:

It was important for parents to know about the project and to identify any students that were allergic to spiders. It was also important to let students know spider bites are generally mild but can cause allergic reactions.

Invite a local park naturalist or arachnofile to come to you classroom to educate students more about the natural history of spiders and show examples of some different types of spiders if possible.

Action

Ensuring high quality service: This project was initiated and driven by the students thus youth voice was a very strong component. Students identified a need for education about spiders first-hand thus the project met an authentic need.

Standards: **Reading and Writing:** Children discussed different genres and purposes of writing; they wrote and read their own and others' letters and posters—both draft and final copies. **Math:** Students determined how many posters needed to be made and how that number applied to the number of students in the classroom, how many and which posters should be sent to each place for maximum effectiveness (i.e., near creek and gardens). **Science:** Children saw the important impact of spiders on the environment, which led to an appreciation of their right to exist and procreate—and protection of that right. **Social Studies:** Children mapped locations in school where spiders are found or likely to be found; students saw the difference a concerted effort can make in leading a campaign for a worthy cause—as reflected in both their efforts and in those of Cesar Chavez. **Art:** Students critiqued several posters for effectiveness; they simplified a style guide as well as the need for bright, eye-catching colors and preference for certain media (felt pens over colored pencils or paints); this was aided by children's opportunity to interview graphic designer.

Social & Personal Responsibility: The students identified these areas through classroom discussions before and during the service. The problem and its solution came directly from the children and their personal compulsion to see a wrong rectified not only in an immediate, reactionary sense but in a more long-term manner by spreading the message into the community.

Participation: A map of the school was created and children identified several spots where posters about spiders could be seen by the most people. For example, one place was inside the double doors through which everyone enters and exits for recess; others were placed in our school garden and near the cafeteria. Since every child made a poster, there were too many for one school. Students decided to offer some to local parks, other gardens, and a local group that leads lessons in our creek area. All discussion and creative activities took place during the academic day. Children helped the teacher hang the posters at the school site during free time.

Supervision: The decision regarding placement of the posters was done with the teacher in small groups during free times such as recess.

Reflection

Before: Students reflected on what they could do to help prevent arachnocide.

During: Students were asked to brainstorm in a Think-Pair-Share style to help people appreciate spiders more. We developed a poster format as a model and discussed ways to positively and constructively critique each other's work.

After: In a discussion after distribution of the posters, children were asked to describe the process in terms of what had been accomplished both for them personally and in terms of the community-at-large. They were also asked to consider what they would do the next time they saw something they thought was done out of ignorance. We considered the different ways to confront the problem with adults versus children. We talked about methods of conflict resolution, with particular emphasis on informing and educating others without reacting in anger.

Student Assessment

I think the fact that the children began the project is pretty impressive in terms of their high degree of civic responsibility. This is particularly important because most of my children are from relatively oppressed populations in terms of ethnicity and socio-economic status. Their academic learning was assessed through teacher observation of the the writing in letters and on posters, the counting of posters, their scientific knowledge of spiders, the mapping of locations around the school to post, and the artwork on their posters.

Project Evaluation and Expansion

Evaluation: Everyone outside of the school community that we contacted was happy to oblige by hanging the posters, though some wanted to see them first (understandable, I guess). The children's poster-work was used to evaluate the appropriateness of the poster as a "genre" and their recollection of specific information on spiders from our previous study. (Example: Two children created posters suggesting that spiders were important for keeping flies out of the garden.) All children did create anatomically correct spiders in the drawings with legs coming out of the cephalothorax, with spinnerets, etc.) Most importantly for me, however, I considered the depth of their thinking and verbal expression in terms of trying to prevent further injustices and their methodologies in addressing all aspects of the problem. (See specific standards addressed above.)

Expansion: Two of the children came up with the second name of this lesson plan after a few brief lessons on roots, suffixes, and prefixes. I will incorporate this campaign into my future spider units. I would love to take my children off-campus to a pre-school or senior housing to spread their message. Perhaps we could make a banner for the street. I might also try to get the posters hung in the Tilden Nature Center before we make our annual field trip up there next year and make sure that our school was identified with the campaign. This year I did not do that as the children decided to each sign their poster at the bottom and a few used their last names. Next year we will not include names.

Celebration / Public Recognition

Celebration: Posters were hung in the classroom for us to appreciate for a week before being sent out into the community. Children expressed a little attachment to them but felt the overall need to hang them elsewhere overshadowed their desire to keep their work.

Public Recognition: I asked that every recipient send at least a brief note or e-mail thanking the students. I also photographed every poster in its permanent location and showed those photos to the children along with the address of each poster so children's families may be able to walk by and appreciate them.

Materials and Staff Development Needs

Classroom materials: scratch paper, poster paper, pencils, felt pens, and crayons.

Other: laminating machine.

Staff/Community Partners: willingness to display posters in high visibility place.

Funding and Resource Support / Sustainability

Funding and Resources: See materials above. No funding necessary.

Sustainability: As stated, this will become part of my regular unit on spiders. Additionally, I will encourage my children to become active in the face of what they identify as unfair treatment of any creature (human or otherwise); of course, I will remind them of our discussion on confrontation. At that time, we decided that for children especially, first assess your own safety, then try to make a clear statement, and then you might need to let it go, at least for the moment. The informational poster campaign is one way to still get your message out after the fact.

Part II - Lesson Plan Profile

Section A: Contact Information and Lesson Abstract

Contact Information

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Abstract

Be Nice To Spiders or End Arachnocide

Our school is located in a wealthy residential neighborhood in North Berkeley, on the East side of the San Francisco Bay. Our student population of _____ is almost entirely bussed in from less-advantaged areas. After a few students in our second grade classroom witnessed an adult at our school reacting to a spider by stepping on it, the children were moved to action. This followed an extensive class study of spiders after which the children made posters to educate their peers and the community about the benefits of spiders. The posters were placed around the school and a few were given to local parks, gardens, and a local group that leads lessons in our creek area. Students regularly reported instances of how they had informed their families and other children in the school that spiders are important to the ecosystem, that spiders are not dangerous, and that spiders benefit people. As part of the unit, we also read books about people who were and were not afraid of spiders. One example of those is entitled Be Nice to Spiders.

Degree of Complexity for Implementation of Service-Learning Project

Low

Section B

Educational Setting and Participant Information

Public

Comprehensive Schools

K-3

Participant Configuration

Whole Class Project

School Schedule

Traditional nine month

Section C: Service Provided - Kinds of service provided

Overview of Service

Level of Service

Advocacy – Making a difference through political action and or public education.

Service Issue Areas

Education and Environment

Duration of Service Activity

One Day

Specific Service Activity Areas

Education

Teaching/Docent Activities

Environment

**Appreciation of other life forms*

Section D: Lesson Content

Subject Area(s)

Visual and Performing Arts

English/ Language Arts

History / Social Science

Science

California State Academic Content Standards

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Civic/Social / Personal Responsibility Goals or Standards

- Educating others for positive environmental and social change
- The development of leadership, communication and social skills

Section E: Collaborating Partners Indicate the kinds of non-profit and for-profit partners that provide collaborative support (Select all that apply).

Community Based Organizations (CBO)

Other CBO's

Local/State/Federal Governmental Agencies

Parks and Recreation

Other

Educational Institutions

Elementary

Section F: Reflection Describe the kinds of reflection that will occur before, during and after the activity. Select all that apply.

Journals

Pictorial presentation

Oral presentation