Science Service-Learning Projects 5

Elementary

1. **Students worked with a community garden association to raise seedlings and grow food for the** hungry. Students started by identifying that food is unequally distributed throughout the world and their own city.
2. **Students learned about the effects of smoking cigarettes and vaping on the human body and** decided to teach others in hopes of preventing peers from smoking/vaping and encouraging family members to quit.
3. **While studying the impacts of pollutants on rivers, students planned a community river clean-up** day. During the clean up they held workshops on environmental impacts of pollution on the river.
4. **During a trip to the waste management center, students learned about mercury collection. After** researching the harmful effects of mercury pollution, they worked with the center to create an educational campaign to inform residents about the issue and host a Thermometer Exchange Day.
5. **Students partnered with a local TV weather person to monitor area weather and reported their** findings electronically to global audiences.
6. **Students learned about non-renewable and renewable resources as part of their energy unit.** They created a calendar to teach parents and other community members how to reduce their energy use with specific seasonal suggestions.

Middle

1. **Students in partnership with the local conservation commission, hosted community tours of** vernal pools (a body of water that only appears at certain times of the year and is identified by the animals that live there). They taught the importance of this particular type of wetland to the community.
2. **While studying various ecosystems, students read in the local paper that native salmon species** are dramatically declining. They contacted The Department of Wildlife and Fisheries to see how they could help. They learned about various salmon breeding programs and then decided to participate in one of them.
3. **A science teacher heard at a curriculum meeting that local 4th graders study geology. Her students** accepted a challenge to develop educational kits and lessons on local geological formations.
4. **Partnering with the city planner and local trail association, students worked to establish a** 16+ mile multi-use loop trail. They mapped existing trails with GPS, entered data into ArcView, (a GIS program) and worked to identify locations for expansion.

Additional Service-Learning Projects on Back

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Science
Service-Learning Projects

Middle

1. **After researching the impact of non-point source pollution on their local bay, students decided** to create informational packets and make 4 public service announcements to educate the community on the health of the bay.
2. **After doing an energy audit of their school in partnership with professionals from their state's Energy** Education Program, students discovered that most areas were lit at a higher than recommended level. They worked with their custodian and administrators to replace incandescent bulbs with more efficient compact fluorescent ones. They also converted the continually-lit exit signs to LEDs. They predicted just the exit sign conversion would save their school $1800 annually in energy costs.
3. **As part of a unit on viruses, students collected and analyzed data to change the cleaning practices** in the cafeteria, in hopes of reducing the spread of certain microbes during flu season.

High

1. **Biology students worked with a local conservation group to identify and map with GPS the** location of all vernal pools in their town. They used the data to create policy that classifies vernal pools as wetlands, thereby restricting development in these areas.
2. **Special education students beautified the space outside the school as part of their study of plants** and the environment. Based on their knowledge of plants they picked appropriate species and labeled them for others.
3. **Partnering with the Department of Environmental Protection, a marine biology class monitored** the water quality of a local river. They posted their information on a website and compared their data with other stream teams in the state. They used this information to make a presentation to their local town council, suggesting water quality improvement strategies for the river.
4. **As part of their physics class, students studied wave motion and its affects on their local beaches.** Dismayed at what they found, they formulated solutions to local beach erosion and presented these findings to local officials.
5. **Answering a need for hands-on science units based on state standards, students developed** elementary-level lessons based on concepts they learned in their high school astronomy unit.
6. **Alternative education students did a community-mapping project to identify resources for children.** They discovered that many youngsters are without bicycles and have no means to acquire one. Working with the school social worker and local bike shop, they refurbished and distributed bicycles to those young students who needed one.
7. **After learning about the impact of air quality on humans, biology students monitored the impact of** vehicular idling outside of their school. They utilized this information to develop a policy banning idling outside of the school building. They also shared their findings with the state in the hopes of banning idling outside of all school buildings.

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