

Green schools are making an impact on our world, but how? There are many important statements, issues, and facts to discuss about them. This is happening everywhere around the world, but is significantly making an impression on the United States, and it is beneficial to our health especially without all of the toxic materials and pesticides. The food a school serves can also take part in making a school green. Green schools support everyone from the students to staffs and the environment, in more ways than one. Everyone can do their part by disposing their trash properly or taking some time out of their daily lives to assist in their school gardens, or even building a school efficiently. Schools that are environmentally friendly keeps the Earth from falling apart.

A green school is a school that tries to be toxic free, concerning with the environmental health with everyone in it. Some say that a green school require less to run, releasing resources to genuinely alter students' education. ("U.s. green building," 2008) A green school also makes its environment more wholesome. For example, pesticides are often dispersed in almost all school cafeterias to exhaust insects, and on athletic fields to destroy weeds. All pesticides are poisonous, and hence, schools cannot be announced as "safe", because of the health and environmental chances they could get sick by their use.

On November 8th, 2001, the San Francisco Unified School District has actually received an award for addressing indoor air quality. (Ackerman, 2001) The health risks of children, or even adults to having too much exposure to pesticides can result to behavior problems and learning disabilities like A.D.D.. It can also cause cancer, weaken or diminish immune systems, and aging of assorted body systems. ("Chem-

tox", n.d.)

AstroTurf, or also known as artificial turf is a material that is environmentally friendly. It can assist in the "greening" of schools by planting them on athletic fields, like at Galileo High School in San Francisco. Having AstroTurf will save energy and time to maintain versus traditional lawn. It will save water and stay trimmed throughout the year. Some say that AstroTurf are polluted with lead from the pigment of the grass, and can be displayed as a hazard to children, athletes or anyone if it is inhaled or swallowed. On the other hand, students at Galileo High School likes their somewhat new football field because of its color. Exposure to lead can cause brain damage or even death, but some like it because of its padded surface. (McCarthy, 2008)

What makes a school green is what we do for it. There can be separate bins for recycling, trash and compost. A few years ago, Lisa Franzen, an Environmental Science teacher at Galileo High School received many recycling bins for merely all the classrooms, offices and other extra rooms in school. This encouraged and reminded everyone that they should recycle. If she had not gotten those bins, the students and staff would have just thrown their used paper and plastic in the trash bin and taken the environment for granted.

An education garden could be a plus for a greener school. Thus, the students can plant flowers, trees, nurture vegetables, and other plants. During my interview with Lisa Franzen, she informed me about a garden in our school. Franzen stated that there will be different kinds of fruit and vegetables grown in the garden that will contribute to the school's salad bar. Recently, there was a garden club that was organized in the beginning of the school year of 2010. They will be helping out with the garden and

taking care of it. Although this sounds really exciting to the students and staffs at school, Franzen is still working on building the garden in the next year or so.

Having low-flow toilets are also beneficial to making a school green because they save massive amounts of water. Other things like parking lots that use crushed gravel or sand retains more heat than parking lots with paved with concrete. You can utilize this, and put water pipes under the parking lot. Thus, the pavement will heat up the water pipes. Going into more details, we can make our schools sustainable by installing higher ceilings that provide better classroom acoustics so that the teacher or student does not have to use as much energy projecting their voice. Zero-cut off lighting (not using light at all) is useful, and highly environmentally friendly. It keeps light inside school and keeps from disrupting the neighborhood with brightness.

The Precautionary Principle encourages policies and decision making supported by the concept of “an ounce of prevention is worth a pound of cure.” (“Mendocino partnership for the precautionary principle”, n.d.) A developing number of cities, including San Francisco, have followed the Precautionary Principle as guidance for a range of decisions to change environmental health and safety, to cut down costs, and to boost sustainability in government practices. This includes switching over to non-toxic cleaners and environmentally sound purchasing. Sound purchasing is to buy superb quality food from a local market with a reduced cost that are competitive with large grocery stores.

Members of a green school puts in efforts to cut down their school’s ecological footprints. They make school environments fitter by using energy efficient light bulbs, eat less meat, and recycling. They also get the entire community considering about

solutions to the problems we face. Our actual school systems are threats to our children's health because of the toxic plastic and chemicals from school supplies, bus fumes, and the lack of nutrition in school lunches, especially if kids are spending about eight hours a day at school, five days a week. This shows signs of unsustainability, and large contributors to society's deep environmental and health problems. Schools can be changed into a healthy environment for students and staffs while changing ecological sustainability by utilizing alternatives to toxic chemicals. Schools can also be a healthy environment for students and staffs by engaging green building and maintenance practices. Also, switching resource consumption patterns, providing nutritious food, and instructing students to be responsible of their communities, the earth and its resources.

It is a striking fact that schools across the country routinely endanger children by exposing them to pesticides. For example, in the late 1990s, Connecticut schools described about 67 of 77 school districts analyzed sprayed pesticides indoors, where they could remain on desks, toys and other surfaces for up to two weeks. In Washington, approximately 29 of 33 school districts examined one or more pesticides that can cause cancer, or damage the nervous system, hormone system or reproductive system. In California, close to 43 of 46 school districts saw pesticides with a huge majority using one or more of 27 risky pesticides that can cause cancer, impact the reproductive system, stimulate the hormone system, or behave as a nerve toxin. (Karliner, 2005)

There is an appalling change in diet-related disease among children in school, connected to the choice of meals eaten at school. The overwhelming majority of schools provide soft drinks and junk food to be sold on campus. The health costs of

permitting junk food, fast food, and soda vending machines at school does not give any financial benefits that the companies supply. (Karlner, 2005) Many districts and state governments have suggested, or are suggesting to ban these unhealthy foods from public schools. We can stop this by having schools make healthy lunches hand in hand with local or regional small farmers. Programs like The San Francisco Green Schoolyard Alliance let children to comprehend about nutrition and food systems. It functions children and families of San Francisco by changing and backing up green schoolyards. The SFGSA supply resources, training, and active support to school communities to support them to make and continue outdoor learning environments. (Fuller, n.d.)

All communities should be involved to make a school green, and find ways to figure solutions for the problems we are faced with. There are probably communities around your neighborhood where you can improve the looks of your environment. There is an organization in San Francisco called San Francisco Schoolyard Alliance which backs up school communities to change their schoolyard into a colorful outdoor classroom and a booming ecosystem. (Fuller, n.d.) Last year, in early February, San Francisco Mayor, Gavin Newsom exposed GreenFinanceSF, a \$150 million program to green up the city's homes and businesses by crediting the installation of solar panels, new energy efficiency systems, and water conservation improvements. San Francisco is the first grand city to adopt the properties of financing model. Also, GreenFinanceSF is worthy for its size and power, stating that most programs just concentrate on installing solar lay outs. (Woody, 2010)

There are in fact a developing number of efforts to move us in this direction

to address these issues, and to make our schools a healthier place. For instance, the American Public Health Association recently states that “every child and school employee should have a right to an environmentally safe and healthy school that is clean and in good repair.” For this to happen APHA says, “federal, state, and local entities must work together to use resources effectively and efficiently to address school siting, construction, maintenance, and other practices to ensure the provision of an environmentally safe and healthy school.” (Karliner, 2005)

Once schools learn about the damage that toxic materials and chemicals can do, everyone can do their part, and assist. There are plenty of ways to green your school. The Green Schools Initiative is an organization that dedicates itself to informing everyone about green schools. It also organizes events, they have a green product buying guide, and also educates you about the green movement. (Karliner, 2005) For everyone to do their part, you may establish your own “green team”, recruiting other students, or faculty that share your views and perspectives about going green. Integrating environmental awareness classes into the curriculum is a smart choice to show students what is occurring in the world that they can change.

There are plenty of resources available for schools to “greenify” them. Some of them include removing all toxic paints, finishes, and polishes. You can also install airtight exterior windows to keep heat inside the facility during the winter. Non-polluting solar power is useful for cutting costs of your bills and producing some electricity. Materials that have been manufactured out of recycled and renewable resources are also helpful in the construction of green schools. Another addition you could add is to replace the rattling electricity consuming, incandescent light bulbs with energy

efficient compact fluorescent light bulbs, also known as CFL.

There are multiple reasons for choosing to be a green school. For example, it is a substitute to the current school systems that threaten our children's health. These schools contribute to our society's environmental and health issues. With a green school, it can provide a healthy setting for students and staff, while promoting ecological sustainability. Green schools also use alternative materials for the construction of the building that will not be toxic for the school's environment.

Environmental education should be an important element in any child's education, supporting children to realize and increase the natural world around them and to further critical thinking and environmental responsibility. Generally, almost two thirds of all elementary and alternative teachers consider environment in their curriculum. Yet, the subject frequently continues to be isolated, with neither state nor federal government agencies setting adequate resources into environmental education or teacher training. (Karliner, 2005) My interviewee, Lisa Franzen gives students who are interested in growing a garden an enormous opportunity and an impressive teachable moment for them to learn about ecological sustainability, environmental health and, personal responsibility. Leadership through their hands and taking part in making their own schools healthier can be more efficient, sustainable, and a beautiful center for learning.

Many schools across the United States or even other parts of the world are joining in the green revolution, doing everything they can to save the environment. Preserving nature can take a lot of hard work, and participating schools are ready and willing to help. Some schools, like Galileo High, have environmental science classes,

taught by Lisa Franzen, that can raise awareness about this revolution. These classes include studies of the earth's systems and resources, such as plate tectonics, change in weather, and natural disasters. Where we get our global water resources and usage, like ocean circulation, water issues, and conservation. How the living world, such as ecosystem change, populations, keystone species, and species diversity. Energy resource and consumption for example, fossil fuels and nuclear energy uses are key in learning about being green.

19 In Bali, the Green School has been creating its construction and for its curriculum. (Cernansky, 2011) Green School is an organization with authorizing worldwide citizens and green innovators who are stimulated to take responsibility for the sustainability of the world. ("Green School", n.d.) The school's 75 buildings are cooled down and powered with renewable energy sources like micro-hydro power, solar power, and bio-diesel. (Cernansky, 2011) Micro-hydro power is moving water so it turns a turbine, the turbine makes the generator spin around, and electricity is produced. (Cunningham, n.d.) Solar power is energy that come from the sun, and bio-diesel is a tidy burning alternative fuel, produced from native and renewable resources. Bamboo, lalang-alang grass, which is a local grass, and traditional mud walls form the structure of the buildings. The school was cautiously built on 20 acres of land, and is on an organic agricultural system, created to succeed to do better with the earthy ecology of the land. (Cernansky, 2011)

Green schools are initially better for students because of the healthier environment. There is a peaceful sense among everyone, a calm feel that puts people at ease while watching a beautiful setting, such as a garden filled with colorful fruits and

vegetables and blooming flowers. By growing a portion of the food they eat at school, students may gain better nutritional habits. Students can also obtain what they learn at school and apply it at home for their family and friends. Green schools warn students about their health, local food systems, and educate them about everything around them, including people, plants, animals, and the planet that we live on. Students will enjoy the tranquilized environment and possibly do better in school.

Children are nearly the most undefendable populations when revealed to toxic chemicals. Yet, they are exposed at school through the application of pesticides and almighty cleaning agents, poor building design and maintenance, lead paint contamination, and poor ventilation on the daily basis. Half of our nation's 115,000 schools have problems associated to indoor air quality. This can turn out in "sick building syndrome," enhance absence from work, and a general negative impacts on a child's ability to evolve and learn. Of the 48 pesticides usually exposed in schools, the U.S. Environmental Protection Agency categorized that 22 are possible or likely carcinogens. ("Facts and figures children, pesticides, and schools", 2000) Carcinogen is any substance that produce cancer. ("The first free dictionary", 2011)

Schools pays a good deal of money to heat and light buildings and to buy supplies. They can better children's health, defend the environment and beef up their financial situation by using alternative energy, construction and procurement policies. A procurement policy is just the rules and regulations that are put in place to order the impact of acquiring goods and services required by an organization to work efficiently. (Ward, n.d.) Schools' energy ingest makes them significant contributors to air pollution, global warming, and U.S. dependence on foreign oil. Just our K-12 schools' electricity

consumption alone equals to 42 days of U.S. trades of Saudi Arabian oil. (Karliner, 2005)

As globalization gathers the world to become petite, it becomes progressively effortless to see how the lives of people, plants, animals and ecosystems everywhere. They are tightly synchronized with one another, then why don't all schools go green to make the world a better place for everyone? ("Why to go green", n.d.) Some say that it is too expensive with all the huge expenses. With the economy we have now, most schools are not even looking at trying to go green. Others say that they do not have time, but if you do small things like unplugging appliances, recycling paper, and conserving water, over time it will make an outstanding difference. You can start by doing small things like following the three R's (reduce, recycle and reuse). Starting small will help you naturally combine green activities into your life.(Chait, 2008)

There were many careful procedures and considerations given in the production of green products and green schools. These were done to have a better impact on the environment and the future. Hazardous materials, such as lead paint and asbestos, are lethal if inhaled too often and must be removed in order to guarantee the safety of students and faculties. To battle the dangers of the weather and climates, certain equipment, such as ventilation ducts and windows can be serviced to ensure the safety of the school. These are only a few things that many people need to have for the perfect green school.

Green schools are making an impact in this generation and many to come. We can cut down ecological footprint by reducing the use of pesticides, toxic chemicals, and healthier food. There are a lot of ways to be involved like joining local communities,

or movements that support and assist in having a green environment. Lisa Franzen, the person I interviewed, do a lot of things to inform people about the environment we live in. She teaches environmental science for students, and she is planning to get a garden for Galileo High School. Green schools are also making a revolution around the world. It is better to have a green school because a lot of people are at risk of the toxic chemicals we use in our daily lives. Another reason is because we use a lot of energy and it will harm our environment in the long run.

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