

August Newsletter

"back to school
edition"

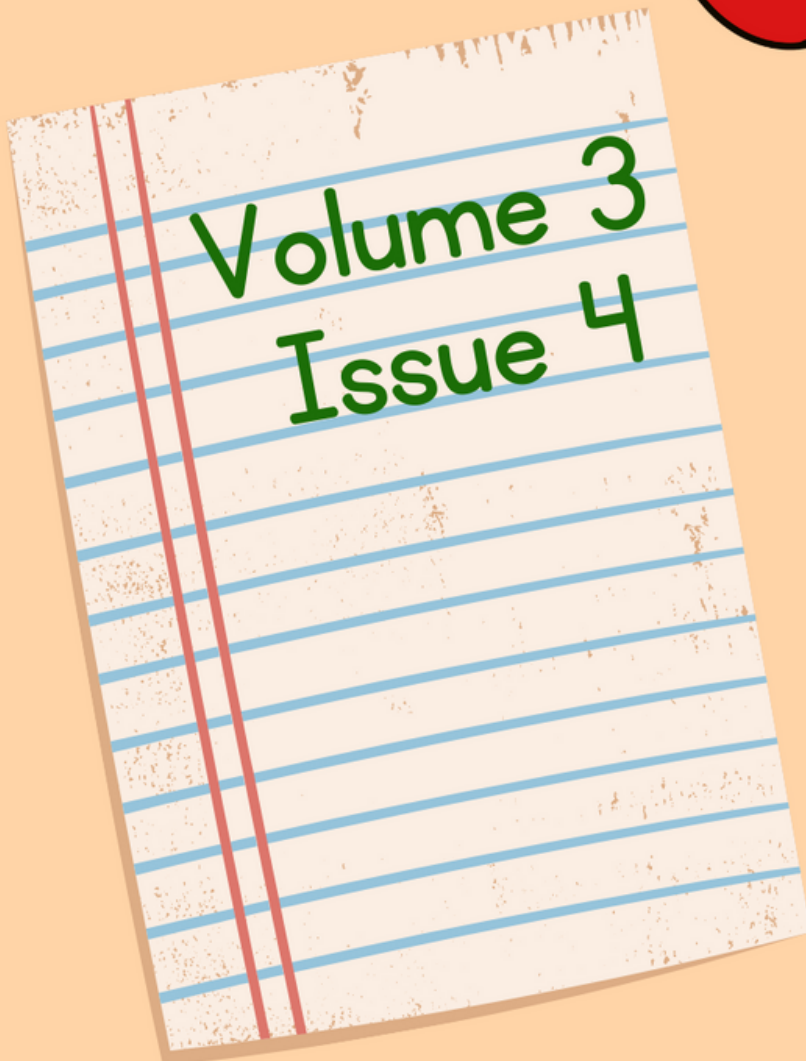


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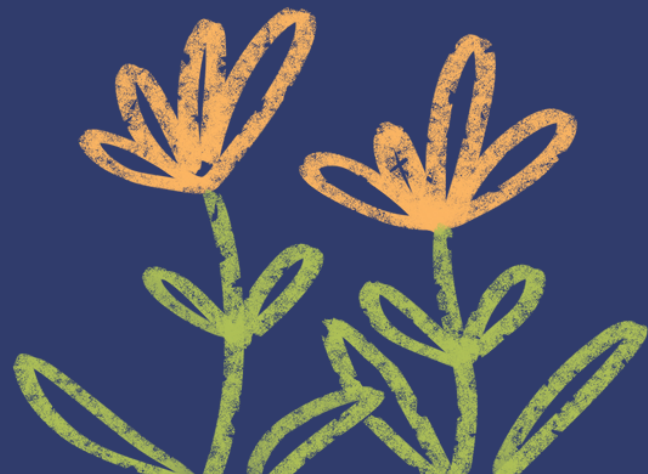
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AUGUST ACTION OF THE MONTH:

GROW YOUR OWN FOOD

BY: ABIGAIL STOFER ART BY: HANNAH LEE

If you've ever wanted to grow your own fresh fruits and vegetables, you're in luck because SLIA's August Action of the Month is Grow Your Own Food! Gardening can certainly be a commitment, but if you prepare properly, it can be a truly rewarding experience, as well as a way to connect with your community through sharing your bounty.

And that's not all! By growing your own food, you eliminate the carbon impact of the preparation, packaging, and transportation of the food you find in your local grocery store. If you start a community garden, it will provide accessible, high-quality, low-cost produce that contributes to community resilience and social equity. There is even a nutritional difference between homegrown and store bought produce. Fruits and vegetables that are allowed to ripen on the vine rather than being picked early to send to stores have more natural sugars and nutrients.

The first step is to choose where you want to start your garden. If you have a yard, look for a flat area with good soil that drains well. If you have poor soil, the best solution is to use planter boxes. Your area should get six to eight hours of sunlight a day, though there are many plants such as root veggies or leafy greens that require only two to four hours of sun.

If you don't have a private space, there are many other places to grow plants such as a community garden, rooftops, balconies, or sidewalks. There are many plants such as herbs or micro-greens that can grow in smaller spaces and are a nice addition to your kitchen windowsill. For plants such as cherry tomatoes or melons, you can even look into vertical gardening.

The next step is to choose what you want to grow. Some important things to consider are what plants grow best in the climate you live in. Do your research! A good place to start is the USDA's [Plant Hardiness Zone Map](#), which provides the average annual minimum winter temperature for different zones. You also need to consider the timing as some plants thrive in specific seasons.

It is also important to recognize that some plants need more attention than others. Plants that are low-maintenance for beginner gardeners include herbs, peppers, tomatoes, peas, and lettuce. However, you should also make sure that you are growing plants that you will actually eat and enjoy!

Once you've decided what you are going to plant, it's time to get prepared to start planting. Make a calendar of when you are planting what and a map of where the seeds will be planted. Some tips are to plant the tallest plants on the north side to minimize shading other plants, and plant the shorter plants on the south side. Plot according to how much sunlight each plant needs and space plants apart. (A good rule of thumb is two feet apart.)

You're also going to need some supplies. For indoor plants, you may need pots and drainage plates, hanging baskets, soil, a trowel, pruning shears, a watering can, trellises, and grow lights. If you are planting outside, you may need a shovel, trowel, pruning shears, a watering can, garden beds, and a labeling system. Before planting anything, make sure you remove any weeds and add fertilizer to the soil.



Finally, it's time to care for your garden and harvest the fruits of your labor! Make sure you water your plants either early in the morning or evening for maximum water efficiency. A good rule to follow is to stick your thumb in the soil to gauge whether you need to water the plant or not. Make sure to focus on watering the roots rather than the leaves, and if it makes it easier, you can look into a drip irrigation system with a timer.

In order to ensure your plants have enough room to grow, pull weeds regularly. Some plants will need to be trimmed regularly. When your fruits and vegetables are finally ripe and ready to harvest, congratulations! You have successfully made it through your first harvest. If you can't eat all your produce right away, make it last through canning, cooking, or sharing with your neighbors, family, and friends.

Track your household's carbon footprint and take action with us! Learn about the "Grow Your Own Food" action in more depth on the [Cleaner Contra Costa Challenge website](#), funded through a grant from the Bay Area Air Quality Management District.





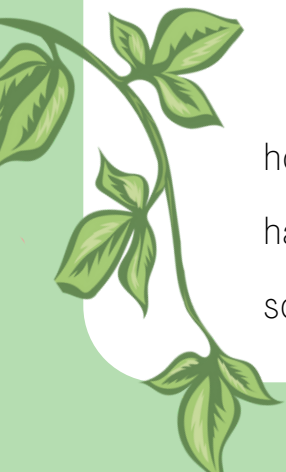
ECO-GREEN: COMING INTO THE NEW SCHOOL YEAR

By: Joshua Odiase



It's right around the corner! Ready or not, it's almost time to go back to school. Even though the all-consuming workload from teachers such as tests and homework will be a part of your life once again, you should still try to keep up with staying sustainable because, unlike school, the climate crisis doesn't wait. If you've never really thought about how your school supplies could be contributing to harming the environment, you're not alone. The subtle plastic wrap of one flair pen box may seem harmless, but not when you account for the amount of plastic packaging and toxic components in school supplies that are mass-produced and outsourced to stores such as Walmart, Staples, or Office Depot.. To prevent this from happening, we're here to provide some eco-friendly tips and strategies so you can also start teaching your friends and family about conscious consumerism to protect our environment.

First, use what's available to you now. You would be surprised how many pens and notebooks are forgotten or barely used. If you have a surplus of school supplies, consider donating to a local school.





Using secondhand items is also a great way to reduce your environmental footprint; online stores like eBay have lots of sellers who dedicate their entire business to this type of trade. Second, buying eco-friendly supplies is another effective way to protect the environment. Often, stores that sell eco-friendly supplies usually dividend the profit from those supplies and send them to initiatives, organizations, and nonprofits that support the fight against climate change. So, it's a two-for-one deal if you think about it. If you are wondering where you can find these cost-effective supplies that will help you complete assignments and save the environment at the same time, look no further than companies such as Sprouts World, which has a variety of supplies available on [Amazon](#); [Decomposition](#), which provides recycled notebooks; Onyx which sells wood erasers on [EarthHero](#) and [Amazon](#); and Amber + Rose, which recycles newspaper pencils that you can find on [Etsy](#) along with many other companies that sell backpacks, pencils, paper, binders, pencil bags, etc.

Products from these wonderful companies have brought in an era where there is zero need to buy anything plastic because of the many alternatives from sustainable stationery suppliers.





Take into account that not everyone can afford supplies because of economic circumstances, and make sure to check if you have any leftover supplies from past school years. Look for places that give donations so you can avoid hurting your wallet before committing to any purchases. We're trying to help the environment and teach you about conscious consumerism while also keeping your wallet happy!



If you are still hesitant about how much impact eco-friendly school supplies can truly have, recall that the emerging climate crisis is affected by many factors. We have become accustomed to environmental calamities we see on the news that create mental heuristics that associate the climate crisis with colossal polluters such as fossil fuels and unregulated factory production. It is true that those factors contribute immensely to the problem, but subtle polluters such as plastic in the environment still fly under the radar. That's why we are here to inform you about the impact of conscious consumerism that the media doesn't show. You just have to keep in mind, nothing is too small. Whether you buy eco-friendly supplies or reuse old ones, it's a step to combating the ever growing climate change crisis.






SUSTAINABILITY AT SCHOOL

By: Alison Chiu

In the midst of rushing from class to class at school, doing classwork, and managing relationships, it can be hard to spare some time to think about how sustainable your school might be. While some schools may have better policies and processes in place for sustainability, others may be lacking in that department. Nevertheless, you never truly know until you find out for yourself!

Surprisingly (or maybe unsurprisingly), the “single-most common material” produced by and wasted in schools is food! Studies found that out of the total food made, 23.9% is wasted. This fact is supported by numerous other studies from varying countries such as Sweden, Italy, and Spain, meaning that students and staff virtually worldwide waste about $\frac{1}{3}$ of their plate at lunch. Fruits and vegetables were found to make up a whopping 50% of the wasted food, while eggs and poultry made up the least wasted food category. Furthermore, it was found that a significant portion of the wasted food (focusing on elementary schools) actually came from the portion of food that schools needed to buy to meet the U.S. Department of Agricultural standards.

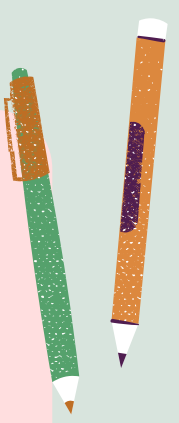



Such a seemingly small problem was found to have very serious, real-life impacts. The researchers even suggested that the implications of such findings meant that the wasted food had a significant impact on issues like climate change. This problem can not only be mitigated by solving problems with school food waste on a greater scale, but it can also be remedied on a smaller scale. Just by simply finishing your plate or grabbing only what you know you will eat, you can help solve this huge problem a little bit.

Additionally, it was discovered that 78% of school waste found in the trash could actually be put into composting or recycling programs. One estimate states that about 24% of school waste is paper, and others agree that over 40% of waste is paper. Despite these conflicting statistics, the reality is that paper waste is too common in school. Over 900 million trees get cut down every year just for schools. To put that into perspective, using the proposed idea that one large tree can sustain four people a day with its oxygen means that 900 million trees could sustain an estimated three billion and six hundred people a day! On top of that, think about the devastating impacts the process of deforestation has on the environment, animal habitats, and soil. It is just horrifying to think about how damaging it is for paper to get made and sent to schools but never getting recycled or reused. Of course this problem is happening on a large scale, but you can do your part by choosing to recycle your paper in school.

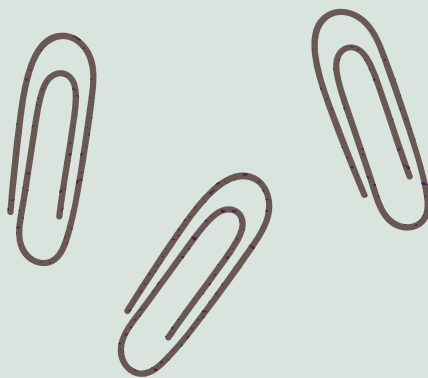
Lastly, 50% of schools' waste was revealed to have been from stuff that could have been composted such as food waste, liquids, and non-recyclable paper. Fixing this issue by composting more is a way to cut down on waste a "significant amount". There are actually numerous ways for schools to do so, depending on budget and different types of schools, including composting with worms, schoolyard composting, large-scale composting, and much more.





With worms, it's relatively easy: set up a box, use bedding, put worms in, measure waste, prevent pests, and that's it! To do schoolyard composting, make sure someone is maintaining the composting site and the collection system and an expert is on hand to consult with. Finally, to do large-scale composting, you have to check with your school's current garbage hauler to see if they do composting or you'll have to hunt around for other places that compost. For more information, look [here](#).

Overall, the problem with waste is huge in schools, almost beyond imagination. From things like food waste to paper waste to materials that could be composted, these issues further hurt the environment and add to current issues. In some ways, these problems seem insignificant when examined on a small scale. Throwing away some of your food you did not feel like finishing, trashing a couple of pieces of random paper, and skipping composting your food might seem inconsequential. But if you take into account that millions of students across the country and the world are doing the same wasteful action, it increases the frequency of these damages exponentially and multiplies the issues into almost insurmountable problems. So, at school, take some time to finish your food, recycle those papers, compost your stuff, or just avoid being wasteful, and you can stop being part of a larger problem contributing to climate change.



A YEAR'S WASTE IN A MASON

by Russell Wang

Art by Kyle Suen



Schools and universities create around **562,442 tons of waste** each year in California alone- from leftover food to wasted paper- and with the next school year right around the corner, it's important that we look at all the ways we can reduce waste.

And before anyone says it's too difficult or simply impossible, look at one classroom at Oxford Elementary (located in Berkeley, California) that has already managed to do this, fitting an **entire year's worth of trash into a couple of mason jars**.

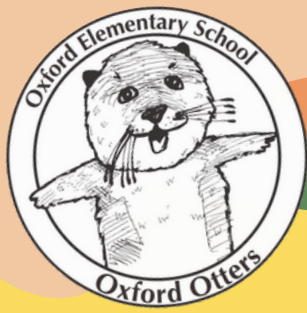


Jacqueline Omania, a teacher at Oxford Elementary, committed to decreasing waste in her classroom after watching the documentary, **A Plastic Ocean**, which discussed plastic pollution. Her students' initial waste count consisted of five gallon-sized trash bags, but a couple years later, decreased down to only a couple of mason jars.



Let's dive into how she managed to achieve this. Ms. Omania began with a waste audit, in order to identify the culprits of her classroom's waste. It came as no surprise that food waste and school equipment, including glue sticks, markers and binders, were at the top of the list.





It is estimated that each student wastes around 67 pounds of lunch food every school year.

To combat this, students were encouraged to bring packed lunches instead, ensuring that they only brought food they would eat. Using reusable containers also decreased the use of plastic wrapping found on many lunch items. They also set up a compost, for the little food that was wasted.

To combat the wasteful school stationary used each year, the class banned glue sticks, markers and binders, as well as replacing yellow pencils with biodegradable, unpainted ones. The class also started reusing paper, using scrap paper for notes, and encouraging everyone to use both sides.



HOW COULD YOU MAKE YOUR SCHOOL MORE SUSTAINABLE AND ECO-FRIENDLY?

- 1) Use environmentally friendly cleaning products.** Read the labels and be aware of the cautions and warnings that say these products contain ingredients harmful to the environment.
- 2) Create a school compost.** Food waste makes up the largest percentage of landfills, and it emits methane which contributes to the greenhouse effect which causes global warming. Composting avoids this and can enrich soil.
- 3) Reuse paper.** Create a bin for paper that has been used solely on one side so you can take from that stock instead of getting a new sheet. Additionally, you can create a bin for scrap paper that you can write smaller notes on.
- 4) Turn off school lights and computers when they aren't in use,** and shut doors to prevent heat from escaping, therefore wasting less energy.

There are many other ways to reduce waste in a classroom, and everyone should take part, whether it's something small or big. **Most importantly however, is educating fellow students on how to reduce classroom waste, as only then can we make true change as a united front.**

Future of Technology in Schools

by Aliyah Ramirez

At the end of the 2019-20 educational year, schools emptied, leaving teachers, staff, and students in their homes to navigate a new challenge of distance learning due to the COVID-19 pandemic. Using platforms like Zoom to communicate in the classroom and Canvas to submit a plentiful of PDFs before 11:59 PM, learning online and using technology became the new normal.

Even today, with students returning to full-time, in-person instruction after more than a year of asynchronous work from home, some teachers are sticking with online tools in the classroom . With the majority of educational resources accessible online, we can predict there will be little change to this new modern way of learning.

Students who had to endure this new way of learning over the past few years now carry valuable skills they can bring into their future workplaces in the 21st century's digital age. The future of online learning consists of tools such as Zoom, Canvas, Blackboard, Moodle, and Desire2Learn (D2L), opening the conversation for preferred learning styles of live, in-person instruction versus self-paced learning and assigned office hours. The debate continues with students' preferred styles being altered based on the accessibility of online resources and technology.

The progression of technology in schools will have a definite effect on the educational experience, and paperless schools can eventually become the new reality. With paper being replaced by online systems, typed letters can be sent by email, textbooks can be accessed online, and paper-based worksheets or forms can be available with shared data. Looking towards the future, reducing the amount of paper used in schools can be beneficial to the environment, provide digital safety of work, and give a better organization system for students and staff.

Large tech companies who help supply resources to schools are adapting their technology to be accessible to every student no matter the environment or subject, while taking into account learners of all abilities.

"Each year, and this year is no different, my goal is to continue to increase the appreciation of what technology can do for learning and understanding. I have witnessed first-hand the joy of understanding what had been previously inaccessible. It's worth the effort on everyone's part," claimed Martin McKay, founder and CEO of Texthelp.

The COVID-19 pandemic has made the exponential rise in use of technology and the internet evident and exposed children to the digital world at an earlier age than before. Mental health problems such as depression, self harm, and suicide among the younger population has increased indicating a possible connection between mental health and increased use of digital technology.

Digital connections have allowed children easier accessibility to information, social platforms, education, and other professional or support groups. While this may be beneficial if used correctly, the risk of inappropriate content (violent or sexual) can be a threat, leading to undesirable contact with strangers and online victimization.

"Understanding the impact of the digital environment on children's mental health requires a balanced consideration of not only the potential risks, but also the benefits of the online world," stated the Medical Press.

As we adapt to an ever changing world, increased industrialization and urbanization has led to the increase in demand for nuclear power for a technology based future. In order to meet global demands, fossil fuels have become the primary energy supply but have raised concerns due to increased global temperatures. However, in order to mitigate this growing issue, natural sources of power are taken more into account, leaving nuclear power as an alternative.

Instead of erasing nuclear power altogether, efficient sources of energy remain the highest priority. Studies have concluded that mining techniques have a more significant impact in resource utilization to power technology, with less of a drastic impact on the environment compared to greenhouse gas emissions. Although both energy techniques are within the nuclear power category, negative impacts on the environment are still prevalent despite the efficiency of the resource.

"Maintaining a circular economy, even for resource use, is important. Our findings can assist policy makers in formulating long-term energy policies which consider electricity and power generation using nuclear power," reported Associate Professor Shoki Kosai, the corresponding author of the life cycle assessment study.

As the education system adapts and better provides resources to mitigate the increased use of technology in schools, ensuring a healthy environment can be done in more ways than focusing on tech programs. Maintaining a healthy environment for students and staff with energy-efficient buildings, healthy food and physical exercise practices, equitable access to all resources, and interdisciplinary focuses on sustainability can keep schools green with technology still in the picture.

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