

GROWING GREEN SCHOOLS



A Playbook for Launching
a District-Wide
Sustainability Initiative



educational ideas, inc.



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INTRODUCTION


As communities across the country navigate the challenges posed by climate change, it is imperative that schools examine their environmental impact as well as empower the next generation with the knowledge and skills necessary to build a sustainable world.

A district-wide sustainability initiative not only mitigates schools' ecological footprint, but also fosters student engagement, academic achievement, and overall well-being. From improved indoor air quality to energy and cost savings, the positive impacts reverberate far beyond the confines of the classroom, extending into the realms of public health, community pride, and long-term environmental stewardship.

This playbook serves as a comprehensive roadmap for school districts embarking on a transformative journey toward environmental sustainability. The tools, insights, and practical tips will support educational leaders, administrators, teachers, and stakeholders to successfully implement a district-wide sustainability initiative.

By weaving sustainability into the fabric of our educational system, we nurture a generation of environmentally conscious citizens who are equipped to tackle the complex challenges of our time.





A Look at Environmental Sustainability in School Districts

What Is Environmental Sustainability?

Environmental sustainability encompasses a set of principles aimed at preserving the delicate balance between human needs and the health of our planet. It is the recognition that our actions today have far-reaching consequences for future generations. By adopting sustainable practices, we strive to meet the needs of the present without compromising the ability of future generations to meet their own needs. This holistic approach encompasses ecological integrity, social equity, and economic vitality, forming the pillars upon which a sustainable society is built.

The Role of Schools in Creating a Sustainable Society

Schools serve as microcosms of society, nurturing and shaping young minds. By integrating sustainable practices into the daily fabric of education, we empower students with the knowledge, skills, and values required to become responsible stewards of the environment. However, it is not enough to merely teach sustainability; schools must lead by example.

When school districts commit to schoolwide sustainability initiatives, they're modeling behaviors that support a commitment to address the environmental challenges we all face. This culture of sustainability permeates every aspect of the educational experience. When students see their teachers, administrators, and staff members actively engaged in sustainable practices—such as energy conservation, waste reduction, or sustainable transportation—they not only learn the practical aspects of sustainability but also develop a deep sense of agency and hope.

Sustainability practices within school districts also yield numerous tangible benefits.



4 KEY BENEFITS OF ENVIRONMENTAL SUSTAINABILITY INITIATIVES FOR DISTRICTS



1. Educational Value:

Incorporating environmental sustainability into the curriculum provides students with valuable knowledge and skills. It fosters a sense of responsibility and encourages critical thinking, problem solving, and collaboration. By experiencing sustainable practices firsthand, students develop a deeper understanding of the interconnectedness of environmental, social, and economic systems.



2. Cost Savings:

Many sustainable practices, can result in cost savings. By reducing energy consumption, optimizing resource usage, and implementing waste reduction strategies, districts can lower utility bills and operational expenses. These financial savings can then be redirected toward educational programs and facility improvements.



3. Health and Well Being:

Implementing measures like improved indoor air quality, access to natural light, and green spaces can enhance the learning environment and promote overall well being. Furthermore, reducing exposure to harmful chemicals and toxins through eco-friendly practices contributes to a healthier environment.



4. Community Engagement and Reputation:

By involving students, families, businesses, and community organizations in sustainability initiatives, districts foster stronger relationships and create a sense of shared responsibility for the environment. Additionally, being recognized as an environmentally sustainable district can enhance the reputation of the district and attract students, staff, and community members who value sustainability.

Fast Facts on Green Schools

On average, green schools use

33% LESS ENERGY 

and

 **32% LESS WATER**

than conventionally constructed schools, significantly reducing utility costs. [Source](#)

The typical green school



SAVES \$100,000 PER YEAR ON OPERATING COSTS,

enough to hire at least **one new teacher**, buy **200 new computers**, or purchase **5,000 textbooks**. [Source](#)





U.S. DEPARTMENT OF EDUCATION GREEN RIBBON SCHOOLS

In 2011, the U.S. Department of Education launched the [Green Ribbon Schools](#) award, which has had a significant impact on the adoption of environmentally-friendly practices in school districts.

There are three pillars that are at the heart of a “green school:”

Pillar 1: Reducing environmental impacts, such as waste, water, energy, greenhouse gases, and transportation, and encompassing the areas of school facilities, grounds, and operations

Pillar 2: Improving health and wellness by promoting a healthy physical environment, such as air quality, contaminant control, moisture control, pest management, daylighting, and acoustical and thermal comfort, and student and staff wellness practices, such as healthy school food and outdoor physical activity

Pillar 3: Offering effective environmental and sustainability education, including civic learning, green careers, and STEM connections. [Source](#)



SPOTLIGHT ON A GREEN SCHOOL DISTRICT



Gulf Shores City Schools, AL

Situated adjacent to a state park and a wetland, Gulf Shores City Schools (GSCS) has embraced a sustainability focus that encourages teachers to incorporate outdoor learning experiences, allowing students to explore and appreciate the local environment. The district takes pride in promoting environmental education through its Science by the Shore sustainability curriculum and specialized career academies such as Aquaponics, Gulf Coast Ecology, and Marine Science.

At GSCS, students are not confined to traditional classrooms; they learn by engaging in hands-on activities. Electric cars, water quality testing, and outdoor classrooms enrich their educational journey, instilling a deep connection to the natural world. History courses are designed to foster awareness about climate change, along with potential solutions, empowering students to become informed global citizens.

With an aim to reduce its ecological footprint, GSCS has implemented numerous sustainability initiatives. Energy and water use have been significantly reduced through the installation of energy efficient lighting, air conditioning systems, motion sensors, low-flow fixtures, and hands-free switches. Solar panels harness clean energy, and the use of wells and reclaimed water conserves precious resources.

GSCS prioritizes environmentally conscious transportation options. The district oversees a "bike train," ensuring students' safe commute to school, and multiple "bike barns" provide ample space for biking field trips to nearby beaches, wetlands, and lagoons. Additionally, the district has replaced traditional buses with models that significantly reduce transportation emissions.

Healthy and sustainable eating practices are also at the forefront of GSCS initiatives. Locally grown vegetables are offered in school cafeterias, and "Eat a Rainbow Week" promotes nutritious and diverse food choices. Moreover, GSCS exemplifies a closed-loop system by composting food waste, which is then used to enrich the on-site garden. Students actively cultivate produce in raised beds, greenhouses, hydroponic towers, and labs. A significant portion of this homegrown food is utilized in the district's three cafeterias, fostering a sense of community and sustainability.

[Learn more about this Green Ribbon School](#)

Alabama





Getting Started

Establish a Dedicated “Green Team” Committee

Your first step in launching a sustainability initiative will be to assemble a committee comprising of teachers, administrators, students, families, and community members who are passionate about sustainability and environmental issues. This committee will drive the initiative and coordinate efforts. Involve these stakeholders in a collaborative discussion to form the Green Team and define its mission, goals, and roles. Ensure that the team’s composition reflects diverse perspectives and expertise to drive well-rounded and effective sustainability efforts.

The district should also create a structured framework for the Green Team to operate within, establishing regular meetings and communication channels.

Create an Action Plan

The Green Team should work together to create an action plan with clear steps, responsibilities, and timelines. Adapt the sample on page 9 to meet your district’s particular goals, resources, and needs.



SAMPLE ACTION PLAN FOR A GREEN TEAM COMMITTEE

1. Conduct a Sustainability Audit (see page 11):

- Assess the current environmental practices and sustainability efforts within the school.
- Identify areas of improvement and opportunities for implementing sustainable initiatives.
- Collect data on energy consumption, waste generation, water usage, and other relevant metrics.

2. Define Goals and Objectives:

- Collaboratively establish clear and measurable goals for the sustainability initiative, considering the specific needs and resources of the school. Examples of specific goals might be “have 90% of students walking to school on Wednesdays” or “commit to using recycled paper and setting school printers to print double sided.”
- Determine specific focus areas, such as energy conservation, waste reduction, water efficiency, green curriculum integration, or community outreach.

3. Develop a Plan and Timeline:

- Break down the goals into actionable steps and create a timeline for implementation.
- Assign responsibilities to committee members based on their expertise and interests.
- Determine the necessary resources, budget, and potential partnerships required to achieve the objectives.

4. Engage and Educate the School Community:

- Develop a comprehensive communication strategy to raise awareness and promote participation in sustainability initiatives.
- Organize workshops, seminars, or guest speakers to educate students, staff, parents, and the wider community about the importance of sustainability.
- Utilize newsletters, social media, and other communication channels to share updates, success stories, and relevant resources.

5. Implement Sustainable Practices:

- Install energy-efficient lighting and appliances.
- Implement recycling and composting programs.
- Encourage active transportation and carpooling.
- Incorporate sustainability into the curriculum across grade levels.
- Establish a school garden or green space.
- Develop implementation guidelines, protocols, and timelines for each initiative.

6. Monitor and Evaluate Progress:

- Regularly track and measure the progress of the sustainability initiatives.
- Collect and analyze data related to energy consumption, waste reduction, water usage, and other relevant metrics.
- Evaluate the effectiveness of each initiative and make adjustments as necessary.



7. Celebrate Achievements and Promote Recognition:

- Acknowledge and celebrate milestones, achievements, and the efforts of the school community in implementing sustainability initiatives.
- Recognize individuals or groups who have made significant contributions to the sustainability efforts.
- Share success stories with the wider community to inspire and encourage others to adopt sustainable practices.

8. Foster Continuous Improvement:

- Encourage ongoing professional development for committee members to stay updated on current sustainability practices and innovations.
- Regularly revisit and revise the action plan to reflect evolving goals, emerging opportunities, and challenges.
- Seek feedback from the school community to identify areas for improvement and gather new ideas for sustainable initiatives.

9. Expand and Engage:

- Collaborate with local organizations, businesses, and community groups that share the commitment to sustainability.
- Seek funding opportunities, grants, or sponsorships to support larger-scale sustainability projects.
- Network with other schools or districts to exchange ideas, best practices, and lessons learned.



Conduct a Sustainability Audit

Once the Green Team has been established and has formulated its goals, they can get to work. At the outset, the team will want to conduct a comprehensive assessment of your school district to identify gaps and opportunities for integrating climate education and sustainability. What is being taught across the curriculum? Is environmental/sustainability education being integrated into various subjects, and how? Are there any environmentally friendly practices already in place?

The information you glean will provide a baseline for future improvements. Use the sample audit on page 11 as a starting point, adapting it as needed to fit the specific needs and context of your school district.

SAMPLE DISTRICT-WIDE ENVIRONMENTAL IMPACT AND SUSTAINABILITY AUDIT

Administrative Policies and Practices:

Review district policies related to environmental sustainability.

- Assess the effectiveness of waste management and recycling programs. For example:
 - Does the district have a composting program?
 - Does the district collect recycling?
- Evaluate energy conservation practices in district buildings.
- Examine water conservation measures implemented in district facilities.
- Assess transportation policies and practices to promote sustainability. For example:
 - Is there a walk/bike to school program?
 - Is there safe bicycle storage for students?
 - Do schools forbid idling during pick-up times?



Curricula Assessment:

- Review the current curricula across grade levels and subjects.
- Identify existing climate education and sustainability topics integrated into the curricula.
- Evaluate the depth and frequency of coverage for these topics.
- Determine if climate education and sustainability are addressed across multiple disciplines.
- Identify any gaps or missed opportunities for incorporating environmental education.

Professional Development:

- Assess the availability of professional development opportunities related to climate education and sustainability for teachers.
- Determine the extent to which teachers are encouraged and supported in incorporating environmental education in their instruction.
- Identify any barriers or challenges teachers face in integrating climate education into their teaching practices.

Community Engagement:

- Evaluate the district's engagement with local organizations and community members focused on environmental sustainability.
- Identify partnerships and collaborative initiatives aimed at promoting sustainability within the community.
- Assess the involvement of parents/guardians in sustainability-related activities and decision-making processes.

Infrastructure and Facilities:

- Evaluate the environmental impact of district buildings and facilities.
- Assess energy efficiency measures, including lighting, heating, and cooling systems. For example:
 - Do people turn off the lights when rooms are not in use?
 - Does your district use energy-efficient lighting, such as LEDs?
- Evaluate water conservation practices and infrastructure, including plumbing fixtures and irrigation systems. For example:
 - Does the district use low-flow toilets?
 - Do students bring their own refillable water bottles to school?
- Assess the presence of renewable energy sources, such as solar panels or wind turbines, in district facilities.



Data Collection and Tracking:

- Determine if the district collects data on its environmental impact and sustainability practices.
- Assess the effectiveness of data tracking systems and reporting mechanisms.
- Identify key performance indicators to measure progress in environmental sustainability efforts.

Student and Community Involvement:

- Evaluate student involvement in environmental clubs, initiatives, field trips and outdoor learning or projects.
- Assess the availability of environmental education opportunities beyond the classroom, such as outdoor education programs.
- Identify opportunities for engaging community members in local environmental initiatives and events.

Resource Allocation and Budget:

- Assess the allocation of resources and funding for environmental sustainability initiatives.
- Identify potential areas for reallocating resources to support sustainability efforts.
- Evaluate the budgetary considerations and priorities related to environmental sustainability.

Evaluation and Continuous Improvement:

- Determine if there are processes in place for evaluating the effectiveness of environmental sustainability initiatives.
- Assess the mechanisms for gathering feedback from stakeholders, including students, parents, and teachers.
- Identify opportunities for continuous improvement and refinement of sustainability efforts.

Conduct an Environmental Sustainability Initiative Survey

As they proceed with their action plan, the Green Team should foster open communication and engage stakeholders at all levels. Seek input from teachers, students, families, local organizations, and community members to gather diverse perspectives and encourage ownership of the sustainability vision. Become aware of any potential pushback early in the process. Consider hosting town hall meetings, sending surveys, holding workshops, and conducting focus groups to involve stakeholders and hear their views.

One effective way to gather input is by distributing a survey. Use the sample survey on page 14 to gather insights, customizing it to meet your own district's needs.



SAMPLE ENVIRONMENTAL SUSTAINABILITY INITIATIVE SURVEY

Thank you for participating in this survey to help us develop an environmental sustainability initiative for our school district. Your input is valuable in shaping our plans and ensuring that we address the needs and concerns of all stakeholders.

Please answer the following questions to the best of your ability.

If you'd like, please provide your name (optional):

1. Are you a:

- Teacher
- Student
- Parent/Guardian
- Representative of a local organization
- Community member

2. How aware are you of environmental issues and sustainability practices?

- Not at all aware
- Somewhat aware
- Moderately aware
- Very aware
- Extremely aware

3. In your opinion, how important is it for our school district to prioritize environmentally friendly practices?

- Not important
- Somewhat important
- Moderately important
- Very important
- Extremely important

4. Are you aware of any existing environmental sustainability initiatives or practices in our school district? If yes, please briefly describe them.

5. Do you believe these existing initiatives/practices are effective in promoting environmental sustainability?

- Yes No

Please explain your answer.



6. Which of the following would you like to see our school district do?

Please select all that apply:

- Recycling
- Composting
- Energy conservation
- Water conservation
- Making it easier and safer to bike to school
- Making it easier and safer to walk to school
- School garden
- Locally grown and/or produced food served in the cafeteria
- Environmental education

Are there any other things not listed above that you would like our school district to do in order to be more environmentally friendly? Please share them here.

7. How would you like to be involved in the development and implementation of the environmental sustainability initiative?

Select all that apply:

- Participating in planning committees
- Volunteering for sustainability-related activities
- Providing expertise or resources
- Attending informational sessions/workshops

Other (please specify)

8. Are there any local organizations or community members that you think would be helpful to our school district as we work to be more environmentally friendly? If so, please provide their names and contact information.

9. Please use this space to provide any additional comments, suggestions, or concerns you may have regarding the environmental sustainability initiative.

THANK YOU

for taking the time to complete this survey. Your feedback is greatly appreciated and will help shape our efforts toward environmental sustainability.



PRACTICAL ENERGY EFFICIENCY TIPS FOR SCHOOLS



Heating and Cooling Systems:

- Upgrade to ground source heat pumps for 20% to 50% energy cost savings and lower greenhouse gas emissions.
- Consider installing solar hot water systems on school roofs to reduce water heating costs significantly.
- Apply solar reflective paint to exterior walls and roof.
- Cover school parking lots with solar panels.



Lighting:

- Retrofit lighting with energy-efficient bulbs or auto on/off technologies to cut down electricity consumption.
- Utilize natural lighting where possible to reduce dependency on artificial lighting and save energy.



Computers and Appliances:

- Plug appliances into power bars to easily turn them off when not in use and reduce “vampire loads” of electricity.
- Opt for Energy Star-rated computers, equipment, and appliances to ensure higher efficiency and reduced energy consumption. For example, choose LCD monitors over CRT monitors for significant energy savings.

Create a Vision Statement

After concluding your audit and gathering survey responses, the Green Team may wish to collaboratively establish a clear and compelling vision statement that outlines the district’s long-term goals for environmental sustainability. This statement should be inspiring, concise, and aligned with the district’s values and educational mission. Share the statement on the district website and in other communication materials to spread the word and ignite enthusiasm for the effort!

Customize the vision statement on page 17 to align with the specific values, goals, and aspirations of your school district.



SAMPLE VISION STATEMENT

Creating a Thriving Future: Empowering Our Students, Inspiring Our Community

At [School District Name], we envision a future where environmental sustainability is not just a concept, but a way of life. We are dedicated to cultivating a learning environment where every student, teacher, staff member, and community member actively participates in the pursuit of a greener and healthier world.

Through comprehensive and innovative education, we will integrate climate literacy and sustainability practices across our curricula, equipping students with the knowledge, skills, and critical thinking and collaborative problem-solving abilities needed to address complex environmental challenges. We will provide opportunities for hands-on learning, encouraging students to become environmental advocates and change agents in their own communities.

Our commitment extends beyond the classroom. We will collaborate with local organizations, community leaders, and parents to foster meaningful partnerships that promote environmental awareness, encourage sustainable practices, and amplify our impact. Together, we will build a network of support that engages and inspires everyone to contribute to a more sustainable future.

As a school district, we recognize our responsibility to model sustainability in our operations and facilities. We will strive for energy efficiency, implement waste reduction and recycling programs, conserve water resources, and create eco-friendly learning environments. By leading by example, we will inspire others to follow suit and be active participants in creating a greener, more sustainable community.

Together, we can create a world where our students thrive, our community flourishes, and our planet thrives.



SPOTLIGHT ON A GREEN SCHOOL DISTRICT



Moreno Valley Unified School District, CA

In 2010, the Moreno Valley Unified School District (MVUSD) school board adopted an innovative environmental education policy, laying the foundation for a sustainable future.

MVUSD firmly believes in the power of experiential learning, and ecological clubs and field trips provide students with immersive experiences in environmental and sustainability learning. These activities extend beyond campus boundaries, allowing students to engage with their community and apply their knowledge to practical situations.

Sustainability is integrated into the very fabric of MVUSD's infrastructure. Fifteen of the district's 42 sites have on-site solar energy generating systems, significantly reducing the district's carbon footprint. Additionally, the district employs water conservation techniques such as rainwater harvesting, xeriscaping, drip irrigation, and retention ponds to responsibly manage water resources.

In 2020, MVUSD demonstrated its commitment to sustainable practices by creating the role of an energy specialist manager (ESM). This dedicated professional oversees the optimization of HVAC, irrigation, and other energy-using systems in every school. By sharing energy conservation, health, and educational resources with teachers and staff, the ESM reinforces a culture of sustainability and resource efficiency.

MVUSD's commitment to environmentally responsible transportation is evident through its transition from diesel to electric and alternative-fuel buses. The district boasts a fleet of 42 electric school buses, 28 compressed natural gas buses, and 31 propane buses, reducing emissions and contributing to cleaner air in the community.

Promoting health and well-being is another core value at MVUSD. The district ensures that elementary school students receive additional fresh fruits and vegetables as snacks outside of regular meal service, thanks to funding from the USDA Department of Defense Fresh Fruit and Vegetable Program.

MVUSD's commitment to fostering a sustainable mindset extends to its school gardens, maintained by students, staff, and families at 17 of the district's 42 schools. These gardens serve as vibrant learning spaces, nurturing environmental science, STEAM (Science, Technology, Engineering, Arts, and Mathematics), language arts, and social and emotional learning.

[Learn more about this Green Ribbon School](#)



CREATE A CURRICULUM FRAMEWORK FOR ENVIRONMENTAL SUSTAINABILITY

Working to integrate environmental education into the curricula is an important aspect of an overall sustainability initiative. There are numerous ways in which districts, schools, and individual teachers can incorporate environmental education into the curricula across various subjects—as evidenced by the inspiring stories of the Green Schools showcased throughout this playbook.

By developing a comprehensive framework and executing a well-planned integration strategy, teachers and curriculum specialists can successfully incorporate climate and sustainability topics across the curricula, nurturing environmentally conscious and empowered global citizens. Here are some steps to developing a framework for curricula integration.

Steps to Develop a Curriculum Framework for Environmental Sustainability



1 Identify Learning Objectives:

Begin by defining clear learning objectives and outcomes for integrating climate and sustainability topics into the curricula. Determine the specific knowledge, skills, and attitudes you want students to develop through these initiatives.



2 Conduct a Needs Assessment:

Conduct a thorough needs assessment to identify gaps in the curricula related to climate and sustainability. Consider student interests, local environmental issues, and relevant content that aligns with academic standards.



3 Collaborate and Seek Expertise:

Engage with fellow teachers, curriculum specialists, and external experts in climate and sustainability to develop a comprehensive and well-rounded framework. Collaboration ensures diverse perspectives and expertise in crafting the sustainability curriculum.



4 Align with Standards:

Ensure that the curriculum aligns with and support educational standards in multiple subject areas, both at the national and local levels.



5 Consider Age-Appropriateness:

Tailor the framework to suit the age and developmental levels of students. Approach the topics in an age-appropriate manner, making topics relevant, engaging, and accessible to learners of all ages.



9 Incorporate Project-Based Learning (PBL):

Find opportunities to leverage PBL using real-world issues related to climate and sustainability. PBL empowers students to take an active role in problem solving and creating meaningful solutions.



6 Craft Professional Development Opportunities:

Provide teachers and curriculum specialists with opportunities to enhance their understanding of climate and sustainability topics and how to integrate the topic into existing lessons. Workshops, webinars, and training sessions can equip educators with the necessary knowledge and innovative teaching strategies.



10 Engage with the Local Context:

Make the curriculum relevant to students' lives by incorporating local environmental issues and case studies. Engaging with the local context fosters a sense of ownership and empowers students to become agents of change in their communities. [Three STEM experts share examples here.](#)



7 Gather Resources:

Compile a variety of relevant teaching resources, including textbooks, articles, videos, interactive simulations, and hands-on activities. [One Step](#) provides schools with a video-based supplemental climate science curriculum that seamlessly integrates into science, history, geography, math, and ELA with comprehensive teacher supports.



11 Encourage Interdisciplinary Connections:

Encourage teachers from different subjects to collaborate and find opportunities for interdisciplinary connections. For instance, science teachers can work with language arts teachers to incorporate climate-related literature into the curriculum.



8 Create a Curriculum Map:

Map out where climate and sustainability topics will be integrated into the existing curriculum. Identify the specific lessons, units, or projects where these themes will be infused.



12 Plan Field Trips and Guest Speakers:

Organize field trips to local environmental sites, nature reserves, sustainable farms, or waste management facilities. Invite guest speakers, such as environmental scientists or activists, to share their experiences and insights with students.

Environmental Education Across the Curricula



Science:

- Conduct hands-on experiments and investigations related to environmental topics, such as water quality testing, composting, or plant growth.
- Study ecosystems, biodiversity, and food chains through field trips to local parks or nature reserves.
- Teach students about climate change, its causes, and potential solutions through engaging discussions and research projects.
- Explore renewable energy sources and their impact on the environment.
- Organize nature walks to observe and document local flora and fauna.



Social Studies:

- Study the historical impacts of human activities on the environment, such as deforestation, industrialization, and urbanization.
- Examine how different cultures and civilizations have interacted with their environments and practiced sustainable living.
- Analyze environmental policies and their effects on communities and ecosystems.
- Explore environmental justice issues and their implications for marginalized communities.



English Language Arts:

- Incorporate environmental literature and books that address sustainability themes.
- Encourage students to write essays, poems, or stories about environmental issues and their personal experiences with nature.
- Conduct research and persuasive writing projects on environmental advocacy and conservation efforts.



Mathematics:

- Use real-world environmental data for statistical analysis, graphing, and problem-solving exercises.
- Explore population growth and its impact on natural resources through mathematical models.
- Calculate and compare energy consumption and carbon footprints of different activities.



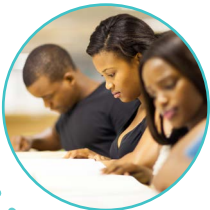
Art:

- Create artwork inspired by nature and environmental themes.
- Use recycled materials for art projects to promote sustainability and waste reduction.
- Collaborate on murals or installations that raise awareness about local environmental issues.



Physical Education:

- Incorporate outdoor activities like nature hikes, scavenger hunts, or orienteering to connect students with nature.
- Organize fitness challenges that promote the benefits of active transportation, like walking or biking to school.



Civics and Government:

- Explore how environmental laws and policies are developed and implemented at the local, state, and federal levels.
- Encourage students to engage in civic action by writing letters to policymakers or participating in local environmental initiatives.

One Step's cross-curricular, real-world videos and lesson plans feature many of the ideas above—[explore them here](#).



Sample Lesson Plan

Ecoboats: The Solution That Floats

The city of Douala, Cameroon has a major issue. It is a city that thrives mainly on fishing, but the water in the rivers are so polluted with plastic bottles that it is difficult for fish to survive, and for fishermen to catch enough fish to support themselves.

In this video-based lesson, students will see how one young entrepreneur solves two problems with one solution, all while diverting tons of plastic waste.

Plans available for grades 4–12.



SPOTLIGHT ON A GREEN SCHOOL DISTRICT



Arbor Ridge K8 School, FL

In 2019, Arbor Ridge K8 School (Arbor Ridge) took a proactive step toward promoting sustainability education and recognizing the profound impact that educational institutions can have on the resilience of local and global communities. Arbor Ridge proudly holds the title of a School of Excellence in its district's annual Green Schools Recognition Program, and its dedication to sustainability has been acknowledged through multiple awards for water conservation and fostering a culture of environmental responsibility.

To promote resource conservation, Arbor Ridge has implemented energy-efficient light fixtures and low-flow water fixtures throughout the school premises. Informative signage encourages students and staff to take active roles in preserving precious resources. The school's vibrant gardens, including eight raised bed vegetable gardens, a wildflower garden, a butterfly garden, and a multi-unit hydroponics garden, serve as living laboratories where students cultivate and harvest fresh produce. This bountiful harvest is shared generously with fellow students, teachers, and families, reinforcing the values of sustainability and community.

Arbor Ridge prioritizes the well-being of its students and staff by collaborating with multiple departments and utility companies to ensure excellent indoor air quality (IAQ) and a contaminant-free environment.

Empowering students to be advocates for change, Arbor Ridge encourages them to write letters to local representatives to address pressing environmental issues. In second grade enrichment classes, students learn about environmental disasters in history, discuss the events, and create impactful posters to share the information with their peers and the community through grade-level newsletters.

Arbor Ridge embraces a culture of collective action by hosting schoolwide environmental events that engage the entire community. From the Eco Fair at Family Fun Night to Water Week during Earth Month, and from Trick or Trash conservation events to campus cleanups, these events bring students, families, and staff together to make a positive impact on their surroundings.

[Learn more about this Green Ribbon School](#)





Creating a Long-Term Sustainable Future

As your sustainability initiative takes root, you'll want to establish a system for monitoring and evaluating its progress. Set measurable targets and track key performance indicators related to energy consumption, waste reduction, water usage, and curriculum integration.

Regularly collect and analyze data to assess the effectiveness of implemented initiatives. Use these data to identify areas of improvement and celebrate successes. Communicate progress to stakeholders, including the school board, staff, students, parents, and the wider community.

Consider conducting regular surveys or assessments to gather feedback and insights from stakeholders. Their ongoing input can provide valuable perspectives and ideas for enhancing the sustainability efforts within your school district.

Remain open to experimentation and adjustments as necessary; sustainability is a dynamic process that requires adaptability to changing circumstances and new opportunities!





INSPIRE AND ENGAGE STUDENTS WITH SOLUTION-FOCUSED CLIMATE EDUCATION

A 2021 global survey of youth ages 16–25 found that 59% are “extremely worried” about climate change and more than 45% said their feelings about climate change negatively affected their daily life and functioning.

Educators can help young people deal with what is known as “climate anxiety” by introducing them to innovators from around the world who are developing solutions to address the challenges and impacts of climate change. One Step is a video-based climate science curriculum for grades 4–12 that takes students on a journey around the globe to explore green solutions and technologies while learning important standards-aligned concepts.

Try One Step FREE!

Schedule a quick chat and we’ll set you up with a free trial subscription for your school or district.

[Schedule a Chat](#)

59%

are “extremely worried” about climate change

45%

said their feelings about climate change negatively affected their daily life and functioning

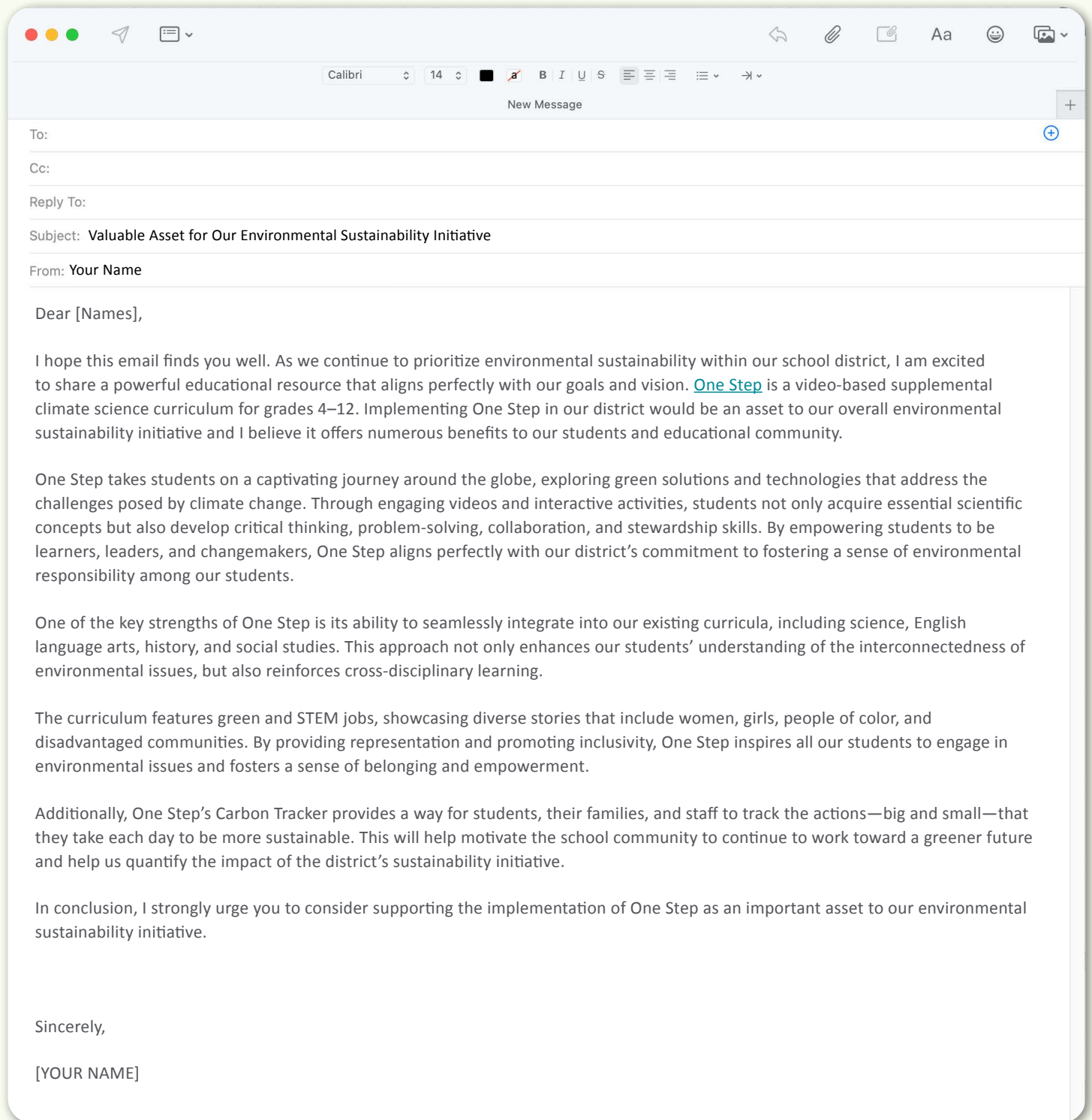


Considering implementing One Step?

Adapt and share the sample letter on page 26 to educate school board members and other stakeholders about its unique solution-oriented approach to climate science.



SAMPLE LETTER TO SHARE WITH SCHOOL BOARD MEMBERS AND OTHER STAKEHOLDERS



The image shows a screenshot of an email composition window. At the top, there are window control buttons (red, yellow, green) and a toolbar with icons for undo, redo, attachments, font size (Aa), emojis, and a gallery. Below the toolbar is a rich text editor with a menu bar containing options like Calibri, 14, bold (B), italic (I), underline (U), strikethrough (ABC), bulleted list, numbered list, link, and unlink. The main body of the email is titled "New Message" and contains the following text:

To:

Cc:

Reply To:

Subject: **Valuable Asset for Our Environmental Sustainability Initiative**

From: **Your Name**

Dear [Names],

I hope this email finds you well. As we continue to prioritize environmental sustainability within our school district, I am excited to share a powerful educational resource that aligns perfectly with our goals and vision. [One Step](#) is a video-based supplemental climate science curriculum for grades 4–12. Implementing One Step in our district would be an asset to our overall environmental sustainability initiative and I believe it offers numerous benefits to our students and educational community.

One Step takes students on a captivating journey around the globe, exploring green solutions and technologies that address the challenges posed by climate change. Through engaging videos and interactive activities, students not only acquire essential scientific concepts but also develop critical thinking, problem-solving, collaboration, and stewardship skills. By empowering students to be learners, leaders, and changemakers, One Step aligns perfectly with our district’s commitment to fostering a sense of environmental responsibility among our students.

One of the key strengths of One Step is its ability to seamlessly integrate into our existing curricula, including science, English language arts, history, and social studies. This approach not only enhances our students’ understanding of the interconnectedness of environmental issues, but also reinforces cross-disciplinary learning.

The curriculum features green and STEM jobs, showcasing diverse stories that include women, girls, people of color, and disadvantaged communities. By providing representation and promoting inclusivity, One Step inspires all our students to engage in environmental issues and fosters a sense of belonging and empowerment.

Additionally, One Step’s Carbon Tracker provides a way for students, their families, and staff to track the actions—big and small—that they take each day to be more sustainable. This will help motivate the school community to continue to work toward a greener future and help us quantify the impact of the district’s sustainability initiative.

In conclusion, I strongly urge you to consider supporting the implementation of One Step as an important asset to our environmental sustainability initiative.

Sincerely,

[YOUR NAME]



Conclusion

It is our hope that this playbook has sparked a desire to start or continue an environmental sustainability program within your school district. The benefits we have explored, from empowering students to reducing costs, are not mere abstract concepts; they are tangible outcomes waiting to be realized.

By integrating sustainability into the fabric of our educational institutions, we shape generations of environmentally conscious citizens, equipped with the tools to confront the challenges that lie ahead. Together, we can foster a collective commitment to environmental stewardship, empowering students, teachers, families, and community members to make a real and lasting impact on the world we share.

Please share what your district, school, or classroom is doing to #Stompoutcarbon. We'd love to see what you're up to!



Resources

Seeking further information? Check out these articles, research studies, and reports on sustainability in schools, as well as guidance on federal initiatives for funding and grants that can help support a district-wide effort.

In the News

- [*A New Program Will Train Teachers to Teach Climate Change, Without the 'Doom and Gloom'*](#)
- [*Climate Education in the U.S.: Where It Stands, and Why It Matters*](#)
- [*Organizations Across the Country Commit to Supporting School Infrastructure and Sustainability*](#)

Funding

- [Renew America's Schools Grant](#): "This competitive award focuses on funding infrastructure upgrades at K-12 public school facilities, prioritizing high-need school communities."
- [U.S Department of Education Green Ribbon Schools](#)

Resources

- [The Whole School Sustainability Framework](#)
- [Green Schools National Network](#)
- [Green Schools Alliance](#)
- [Getting climate-ready: a guide for schools on climate action](#)
- [Sustainability and Climate Change Across Learning Environments \(SCALES\)](#)
- [Pack a Waste-Free Lunch](#)

Leftovers to
LIFESAVER

ONE STEP

Get the Lesson

ONE STEP

BIOGAS:
GARBAGE
POWER

LESSON PLAN | GRADES 6-8

#stompoutcarbon for a better tomorrow!

Sample Lesson Plan From Leftovers to Lifesavers

In this video-based lesson, students explore the "hidden power" of rotting food. Working primarily in small groups, they discuss the impacts of methane, both in the environment and as a renewable energy source called biogas. Students will apply their knowledge by designing an experiment to determine how to increase biogas production and provide feedback on other experiment designs.

Plans available for grades 6-8.

