

Becoming a Sustainable School through the

START Program

*Creating a healthier, happier and more sustainable school
so that present and future generations can thrive.*

What is 'Sustainability'?

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”



A changing climate impacts all aspects of present and future students' lives: food security, extreme weather events, economic disruptions, health and mental-health impacts, the loss of natural systems, societal impacts, and unforeseen challenges.

How can we best educate and empower them to thrive in a changing world? What can we do now to protect the planet they will inherit? How can our school become part of the transition to a sustainable future?

'Sustainability'

It's not just an environmental thing.

A flourishing planet that can replenish its resources.

ENVIRONMENT

The overall health and well-being of people & communities.

SOCIETY

Resilient & thriving economies that uplift all members of society.

ECONOMY



Healthy Environment – Healthy Society – Healthy Economy

Why create a sustainable school?

Sustainable schools:

- provide healthier learning and working environments
- are cost effective and can even save schools money
- equip students with knowledge, skills, attitudes and optimism to thrive in a changing world
- reduce environmental impacts
- become models for their communities and engines for positive change

"Education can bring about a fundamental shift in how we think, act, and discharge our responsibilities toward one another and the planet."

- Irina Bokova, Director-General of UNESCO.



Sustainable Schools are Cost-Effective

The cost of zero energy and waste reduction measures can be offset by, for example, downsizing heating, ventilating, and air-conditioning systems, reducing both life cycle and first costs, as well as minimizing food and product waste, and creating more efficient, circular systems.

A review of 30 green schools in the USA found that:

- Green schools use approximately 33% less energy and 32% less water.
- Greening a school costs 2% more than conventional schools in the short term, but long-term schools directly save approx. 4x the cost of going green.

Source: Kats, G. Greening America's Schools: Costs and Benefits (2006). <https://usd116.org/files/facilitiesreport/rptgreening.pdf>

Read more [here](#) and [here](#).

**Green schools also
enjoy a 72% improved
community image!**

(Source: [Greening America's Schools: Costs and Benefits \(2006\)](#).)



Embracing sustainability can help to **future-proof our school**. As the world increasingly prioritizes sustainability, schools that proactively address these concerns will be better equipped to adapt to changing expectations and remain competitive in the education landscape.

Student Education & Empowerment

In 2019, **78% of all adults believe that schools should teach about the causes, consequences, and potential solutions to global warming.** Despite strong support for teaching climate change, **only 42% of teachers reported teaching climate change** in their classes.

The changing environment will shape students' futures— where they live, the work they will do, and their quality of life.

Schools are *crucial* for equipping today's students with **knowledge and skills they need** to tackle challenges their generation will face.

How can we **ensure they are prepared** to address these new challenges and find solutions? How can we nurture and educate **a new generation** of stewards eager to **innovate** and create lasting positive change in their communities?

- Sources:
- This Is Planet Ed (The Aspen Institute), "K12 ClimateActionPlan - Education," accessed online: <https://www.thisisplaneted.org/img/K12-ClimateActionPlan-Education-Screen.pdf>
 - Marlon, J *et al*, "Yale Climate Opinion Maps 2020," Yale Program on Climate Change Communications, September 2, 2020, <https://climatecommunication.yale.edu/visualizations-data/ycom-us/>
 - Anya Kamenetz, "Most Teachers Don't Teach Climate Change; 4 In 5 Parents Wish They Did," NPR, April 22, 2019, <https://www.npr.org/2019/04/22/714262267/most-teachers-dont-teach-climatechange-4-in-5-parents-wish-they-did>

"We really need to pick up speed because otherwise we will have a whole generation of students who will graduate with this climate anxiety and will not know what to do because they have not been prepared by our education systems."

Radhika Iyengar, director of the education sector at Columbia Climate School's Center for Sustainable Development.



Student Wellness

Research of young people aged 16–25 years old shows that:

- **59%** reported being **very or extremely worried** about climate change, and **54%** said it makes them **feel motivated to take action**.
- 84% were at least moderately worried.
- **More than three-quarters find the future frightening** and feel a sense of **betrayal by adults** in general and governments in particular.
- **54% of teens** say they **have learned little or nothing about how to reduce the effects of climate change in school**.

A recent Lancet study of more than 10,000 young people aged 16–25 years old, living across 10 countries (including the United States).

Sustainable schools can create a sense of **hope, optimism and empowerment by taking meaningful action and engaging students in solutions**, and equipping them with knowledge and skills to tackle challenges their generation will face.



Health Benefits for Students and Staff

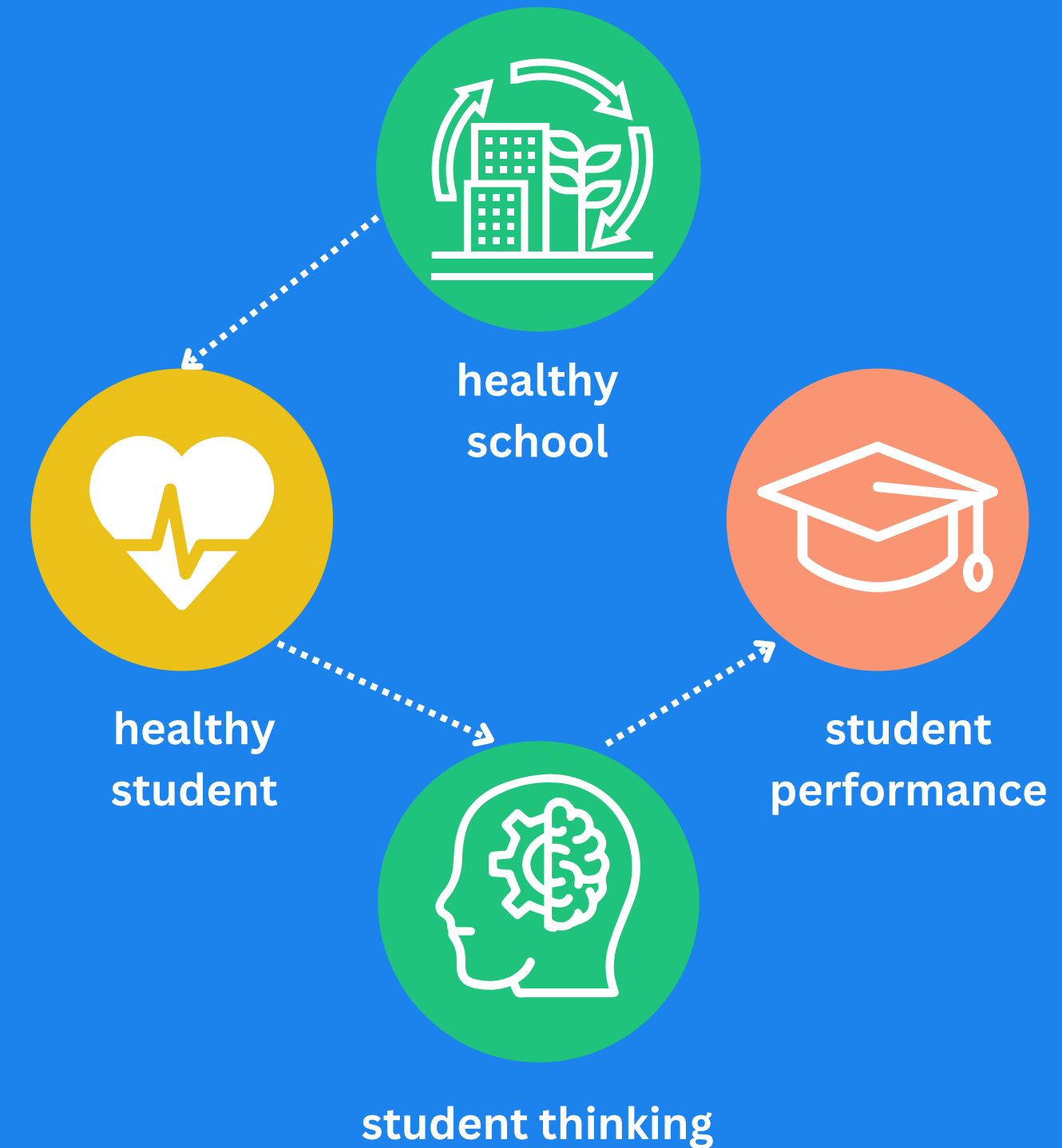
A study of green schools and universities in the United States found:

- a 41.5% improvement in the health of students and teachers (such as reduced incidence of asthma, flu, respiratory problems and headaches)
- up to 15% improvement in student learning and productivity
- up to 25% improvement on test scores due to good lighting and ventilation.

Green schools regularly report lower rates of staff turnover -- with research estimating that staff retention in green schools translates to around \$4 per square foot over a 20 year period.

Source: Gregory Kats, *Greening America's Schools: Costs and Benefits*, A Capital E Report, October 2006

Learn about more benefits [here](#).



"The school building influences students' health and academic performance. Investing in school buildings is an investment in our collective future. It is time for action."

(Harvard T.H. Chan School of Public Health: *Schools for Health: Foundations for Student Success*)

Environmental & Climate Benefits

In the U.S. alone, K-12 schools:

- Are one of the largest public energy consumers, producing emissions equivalent to **18 coal-fired power plants (72 million metric tons of CO₂)**.
- Occupy **7.5 billions square feet of buildings**.
- Operate the largest transit fleet with **480,000 school buses**.
- Serve over 7 billion meals each year and generate **530,000 tons of food waste**.

Imagine the cumulative impact if all schools were sustainable schools!

Learn more about the benefits [here](#).



"We are at a **crossroads**.

This is the **time for action**.

We have the tools and know-how required to limit warming and **secure a liveable future**."

-- Hoesung Lee, chair of the Intergovernmental Panel on Climate Change

Sources:

- National Center for Education Statistics, 2019: "Educational Institutions," Digest of Education Statistics, 2019 (NCES 2021-009), accessed [here](#).
- U.S. Energy Information Administration, "Table PBA3. Sum of major fuel consumption totals and gross energy intensities by building activity subcategories, 2012". Access [here](#).
- School Nutrition Association, "School Meal Trends & Stats," accessed [here](#).

Schools are at the heart of communities.

They are **role-models** and incubators that that **nurture, educate and prepare** each generation for adult life.

Schools have a **unique opportunity** and **profound responsibility** to lead the transition to a sustainable future in which people and planet can thrive.

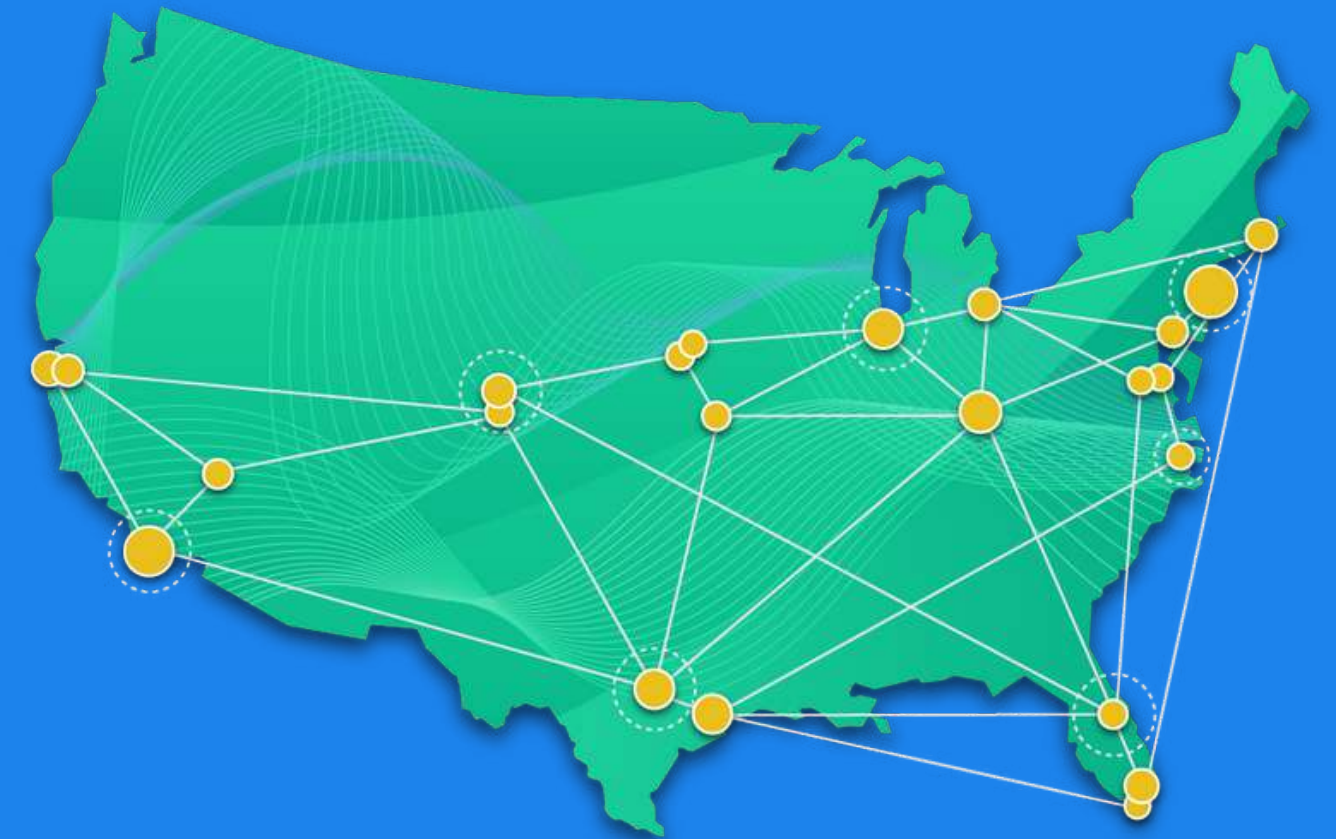
But how do we get there?



GREEN SCHOOLS ALLIANCE

The Green Schools Alliance (GSA) was created as a **nonprofit, peer-to-peer network of schools** -- a community of **school sustainability champions working collaboratively** to develop **sustainable solutions for their schools.**

Through **collaboration with and between schools**, the GSA has created the first-ever **Whole-School Sustainability dashboard:**



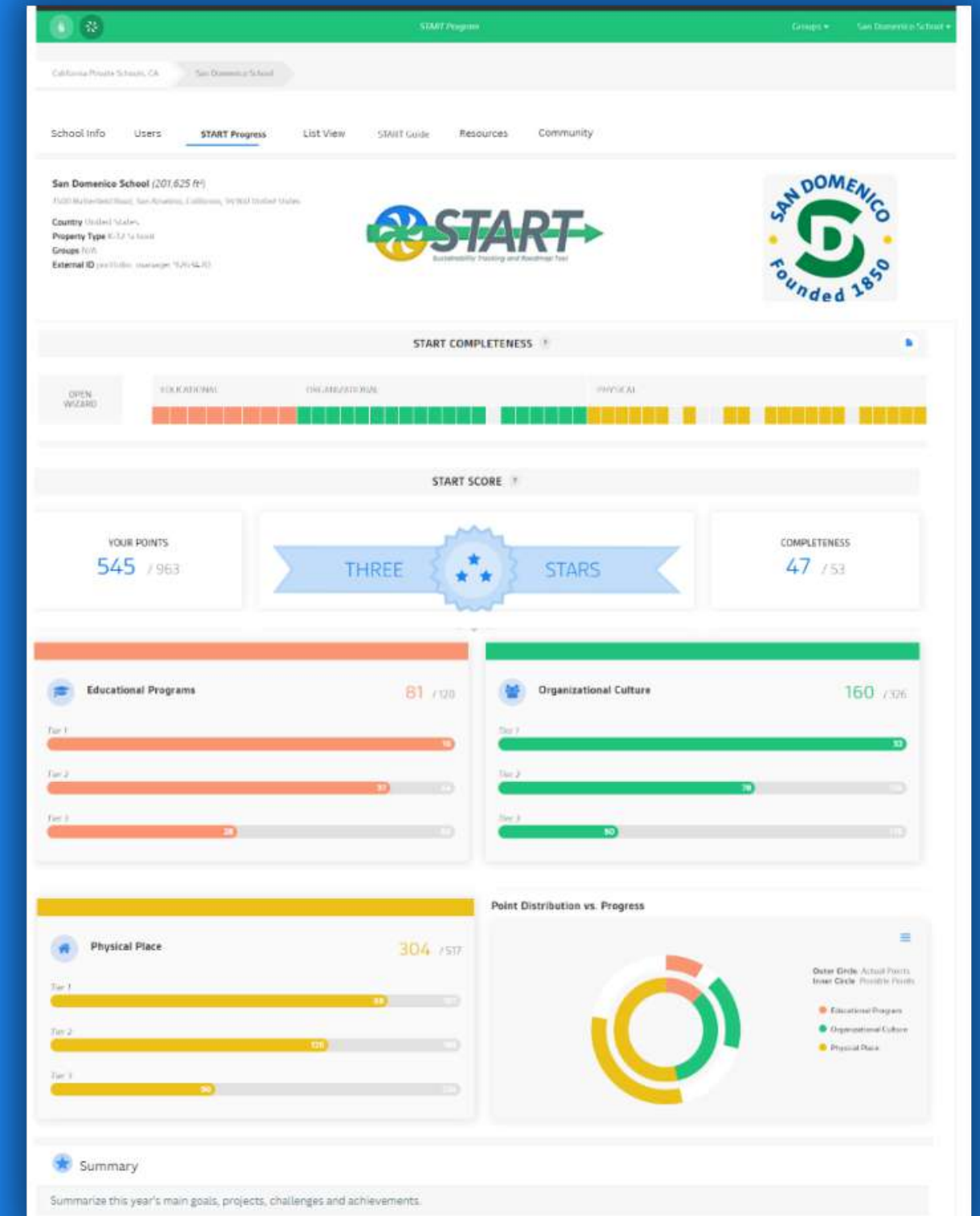
The mission of the Green Schools Alliance is to connect and empower schools to lead the transition to a sustainable and climate-resilient future.

What is START?

Created by schools, for schools, START is a framework and **online dashboard** that helps schools to make progress towards Whole-School Sustainability.

The *START* program can help us to:

- **Understand and simplify** the many components of school sustainability
- **Benchmark (assess)** our sustainability-levels across clear metrics
- **Plan** for progress
- **Access resources** to make changes
- **Educate and engage** students
- **Collaborate** with each other, and other schools
- **Track and communicate** our efforts
- **Celebrate our progress**



'Whole School Sustainability'

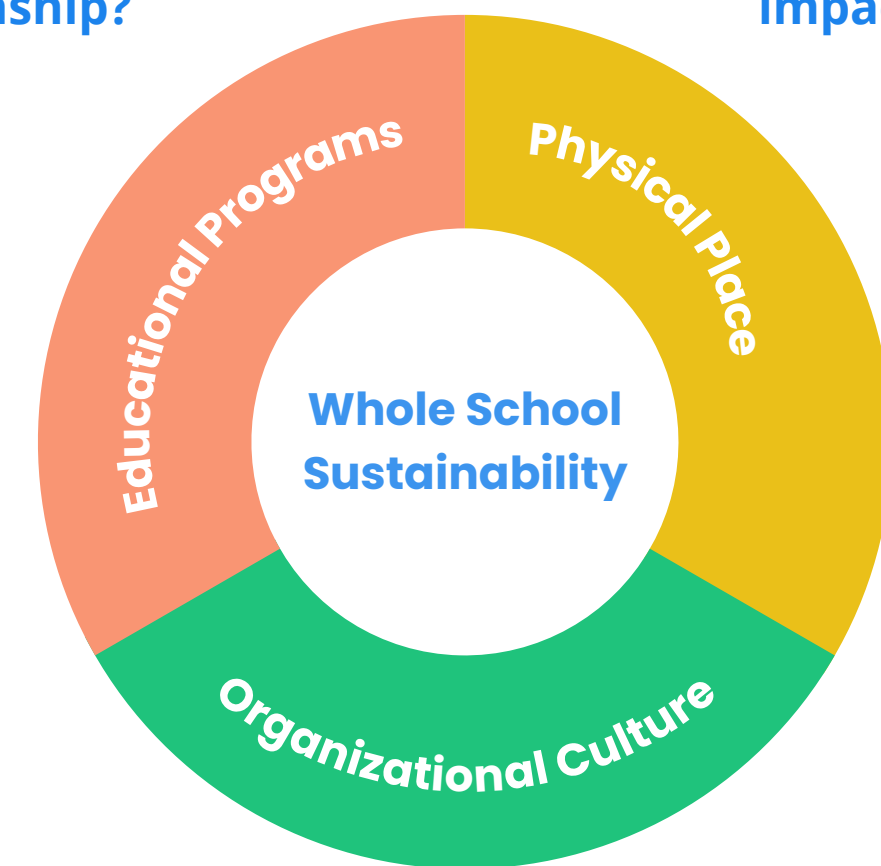
START's framework is rooted in The Whole School Sustainability Framework, a research-study performed by the Institute for the Built Environment at Colorado State University (adopted by the U.S. Center for Green Schools).

The research shows that, in order to be successful, schools must adopt a whole-system approach that integrates sustainability into all aspects of a school organization, specifically its:

- Educational Programs
- Organizational Culture
- Physical Place

Are students empowered and prepared for active citizenship?

Is your school minimizing its environmental impact?



Is sustainability practiced and promoted in daily school operations?

START Breaks up 'Whole School Sustainability' into **53 actionable metrics**

Educational Programs metrics address:

- Curriculum
- Co-curricular activities
- Teacher-training

Physical Place metrics address:

- Air & Climate
- Buildings & grounds
- Energy
- Food service
- Transportation
- Waste management
- Water

Organizational Culture metrics address:

- Sustainability coordination
- Purchasing & planning
- Community engagement
- Diversity & affordability
- Employee training
- Health & Wellness



Who should be involved

in our school's sustainability journey?

Ideally, the Whole School.

From students to teachers, administrators, facilities managers, office staff, custodial staff, cafeteria staff, and even parents -- the whole school community should be involved in moving the needle towards Whole School Sustainability.

"In order to be successful, sustainability requires **a whole-system approach**.

A Whole-School Sustainability approach requires **individuals from across an organization to work together**—it cannot be accomplished in a silo."

[The Whole School Sustainability Framework](#)



There are *many* different & overlapping ways that school-members can contribute to our school's sustainability journey. Here are just a few to start!

How can I contribute as a...

Principal or Administrator → vision, support & strategic planning

Teacher → create opportunities for sustainability learning, innovation & critical thinking; sustainable classroom practices

Facilities Manager → engage sustainability teams & coordinate our building sustainability & efficiency efforts

Procurement Officer → help our school transition to more sustainable products & services

Student → Initiate and participate in sustainability projects & teams

Communications Coordinator → Promote & celebrate sustainability goals & initiatives

All Staff → support our school's vision for sustainability in words & action;
join, lead or contribute to a sustainability team or initiative;



But wait, that sounds complicated...

The START Program can help us get there!

- START breaks up 'Whole School Sustainability' into **smaller, more manageable steps**. (53 metrics)
- We can set **our own goals** and move at **our own pace**.
- We can **integrate** sustainability into our **existing programs**.
- We can find resources, 'how to' guides, templates, student activities and curriculum-aligned resources in the START **Resource Library**.
- We can **collaborate and plan**. (Through teams, "many hands make light work!")
- We can create detailed **sustainability reports**.
- We can connect with and learn from other schools in the **GSA Community**.
- We can use the **Sustainability Ignition Toolkit** to lay the foundations for a lasting and robust sustainability program!

"The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and starting on the first one."

– Mark Twain



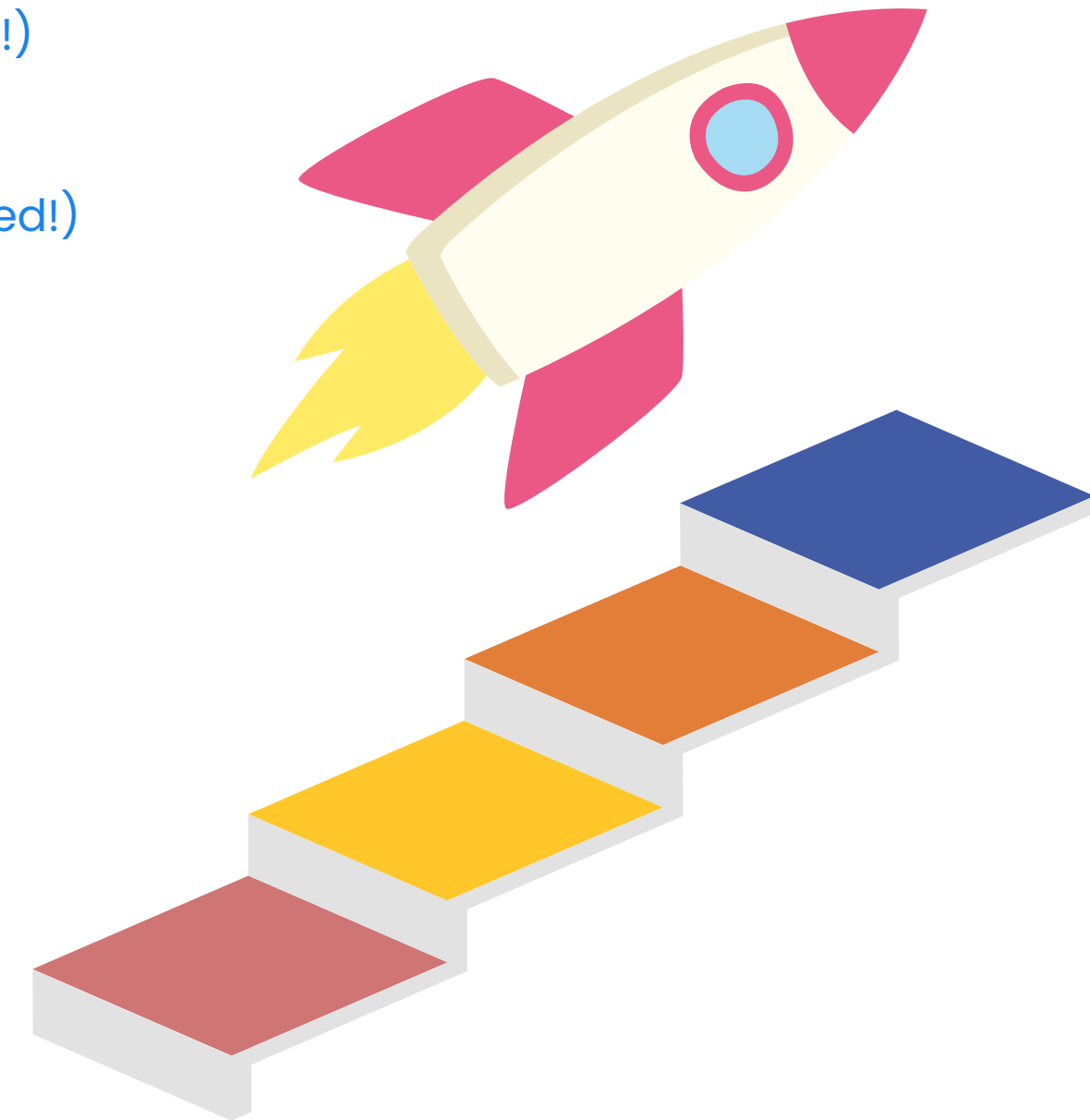
What does launching a successful START program look like?

Phase 1:

1. **Garner support** from school administrators/ decision-makers
2. Find **allies** and create a **core START Team**
3. **Collect school information & documentation** for each sustainability metric (can be student-led!)
4. **Analyze data & answer the START survey**
5. Use START Snapshot Forms to **create a sustainability baseline report** (optional but recommended!)
6. **Present** findings & recommendations to school decision-makers
7. **Create a sustainable vision** for our school

Phase 2:

1. Collaborate with stakeholders to **set goals** for each START metric
2. **Communicate** our vision & goals with our school community
3. **Delegate!** Create teams to tackle specific sustainability metrics.
4. Use the START resource library, discussion forums and collaboration spaces to **take action**.
5. **Track, visualize & communicate our progress** through our START Scorecard.
6. **Celebrate successes and share** with other schools!



Be the change-maker that helps your school plant the seeds for a more sustainable future!

First Steps

Create your School's START Account

- Contact start@greenschoolsalliance.org to request a START account or demo.
- START costs **\$50/month** OR **\$500/year** per school.
 - If cost is a barrier to participation, apply for a 'START Scholarship'.
- START requires at least **1 adult point-person to be the 'Primary User'**.
 - Thereafter, you can **add as many users as you want!** (at no additional cost)
- Schedule a **START Walkthrough** with a member of the Green Schools Alliance team.
 - This is a Zoom-session introduction to setting up a sustainability program and to show your team how to use dashboard.
- Join the **GSA Community**
 - www.greenschoolsalliance.org/community
 - Find resources and the START Toolkit, and connect with peers from other schools!



"START will enable schools to create quantifiable change in the areas of climate and sustainability, health and wellness, equity and inclusion, and economic efficiency."
- RobWatson, Founder of LEED™

"START brings people, planning, and tracking of sustainability initiatives across a school system together into one place."
Hope Gribble, Missouri Gateway Green Building Council

We have really enjoyed using the START platform and it has proven to be an invaluable tool in assessing and steering our whole-school sustainability goals."
Tim Clare, The Hewitt School in New York City

"We have been using the START tool to bring together teachers in our school and across our district... With START, we have now included sustainability in our new strategic plan and this will be the perfect tool to help us measure our growth and progress... The perfect tool for us at just the right time."
Margo Murphy, Fivetowns Community School District

Summary

- Designed by schools, for schools, and rooted in academic research, START is an interactive sustainability **dashboard**.
- START can help us embed sustainability into our Educational Programs, Organizational Culture, and Physical Place (**Whole School Sustainability**).
- START breaks up Whole School Sustainability into smaller, more manageable steps across **53 metrics (+ Beginner, Intermediate & Advanced tiers)**.
- START can help us **benchmark, plan, track, document, organize and report** our sustainability progress.
- Our school can set its **own goals** and move through the metrics at its **own pace**.
- We can find carefully-selected '**how to**' **guides** and additional **resources** for each metric, as well as hands-on and **curriculum-aligned resources** for *teaching* sustainability.
- We can have a primary 'START Coordinator', but will be more effective with a '**Core START Team**' that includes diverse stakeholders.
- We can **add as many users as we want** to our START Dashboard, with editing or view-only permissions. (We can even add students to use it as a teaching tool!)
- START V1 is currently best suited to US-based schools, but can be used by non-US schools too!
- The spirit of START is **collaborative**. As a peer-to-peer network of schools, we can connect with other schools to **share** our resources, questions, success stories and best practices in the **GSA Community**.