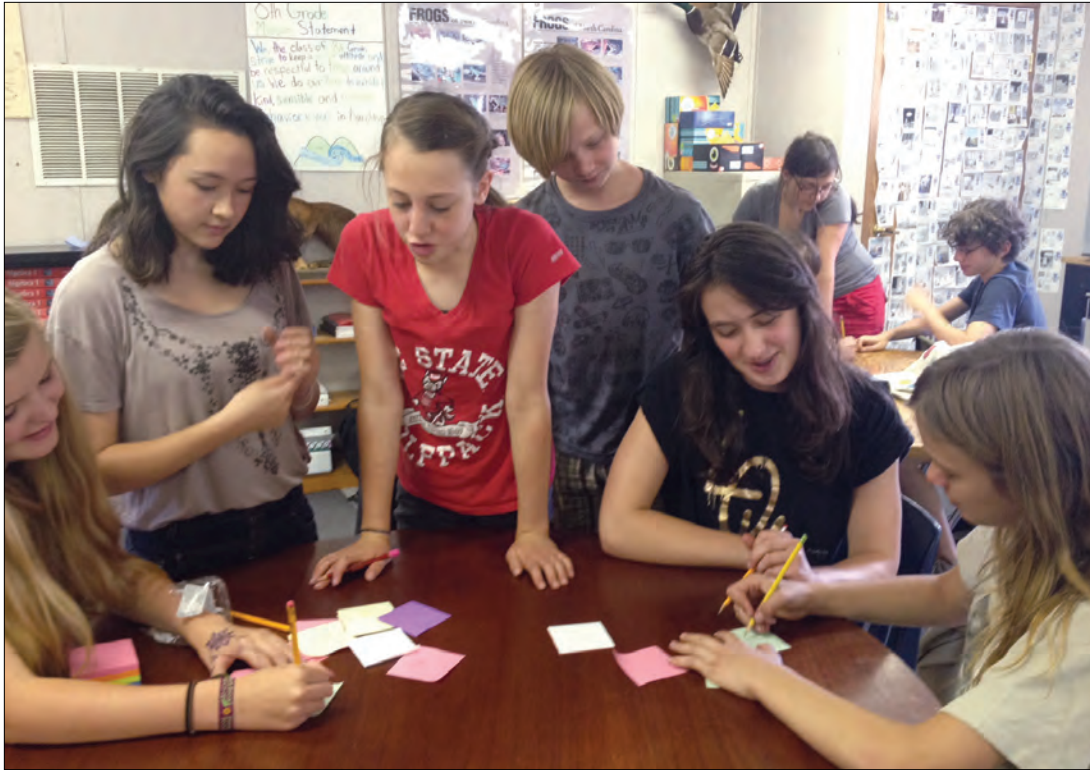


Sustainability with Post-it Notes

A mosaic of rainbow paper squares in a middle school classroom displays ideas rethinking what a sustainable future could look like



By **Elissa Brown**

“**R**AISE YOUR HAND IF you have reduced, recycled or reused something in the past week,” I prompted. Hands shot up. “That’s good,” I said. “But is it good enough?” I wrote a word on the whiteboard, in large letters: RETHINK. I asked, “What does that mean to you, to ‘Rethink’ our world and the way we live in it?”

Most students can rattle off the three classic environmental R’s: Reduce, Reuse and Recycle. However, there is another important R: Rethink. This means thinking outside the box to completely reinvent our systems, products and norms. When my middle school team decided to teach an interdisciplinary sustainability unit, I wanted to avoid the typical doom-and-gloom forecasts in favour of emphasizing the positive, empowering aspects of sustainability. Thus, the Rethink Challenge was born.

The goal of the Rethink Challenge was to generate as many ideas as possible of what a sustainable future could look like. We wrote or sketched them on Post-it notes, compiling a diverse collection of descriptions and images that spanned the realm of possibility. Over time, the classroom wall turned into a patchwork rainbow mosaic, each square containing a vision for a sustainable future. Some described inventions, others illustrated street layouts, and still others explained large-scale

shifts in norms. This project took a small portion of most days for a span of two months, but we continued with general curriculum simultaneously. I taught grades six to eight, but this can be adapted to fit any grade level.

“The thing about rethinking,” I told the class, “is that you have to be imaginative. Anybody can throw a soda can in the recycling bin, but it takes creativity to rethink systems. We’ll need creativity to shape a future we want to live in. We’ll need to be inventive, wise and maybe even a little crazy.”

To introduce the Rethink Challenge, I held up some props: an empty chips bag, Styrofoam plate and granola bar wrapper. “Look at all my food packaging garbage,” I announced. “I can’t recycle these. I don’t really want to reuse them”—here I waggled the spaghetti-encrusted plate—“and this is just the smallest bit of what our school throws out on a daily basis. I guess I could have reduced my waste if I had bought more food with less packaging in the first place, but what about moving earlier back in the production process? What about rethinking food packaging?” I paused.

“For example, what if packaging just *didn’t exist*—if the norm were to bring reusable containers and buy snacks in bulk? Or what if all packaging were easily compostable, or even had little seeds embedded in it? Or were made out of a material you could easily rinse out and then fold into a crafts project? These are just some ways of rethinking food packaging. What else can you think of?” Students discussed in pairs

and then a few shared with the class.

Most of the group was familiar with the concept of sustainability, but I still wanted to ensure common ground before beginning the challenge. As a warm-up, students individually listed all words they associated with sustainability. Then, in small groups, they crafted a definition, and finally we developed them all into a class definition. According to the U.S. Environmental Protection Agency; "Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations."¹ Our definition captured this basic gist, but since the students wrote it themselves, they were already more invested.

How to do it

In the beginning, set a goal number for the number of Rethinks your school will produce; our middle school chose 500, which seemed sufficiently impressive, even though it was only around 10 ideas per person. Several days a week, begin class by providing designated time to rethink, around 5-10 minutes, replacing a usual opening activity. On these days, everyone is expected to generate a Post-it idea – the teacher, too.

Display Post-its in a special location with a clear title and description followed by a short project blurb. Ours was "The Rethink Challenge: ideas, visions and inventions for a sustainable future." Hallways are great if you have them, but we simply used a corner of the classroom. Part of the challenge revolves around this communal aspect. Students enjoy viewing others' Rethinks and seeing their own ideas as part of a vast collection. Allow class time for browsing and commentary. For us, the exhibit prompted continual discussions and debates, from the logistics of harnessing hamster wheel power to what smart car technology already existed. Often, a snowball effect emerged, with ideas building upon and inspiring other ideas.

As a bonus, students can also choose to enlist in the One-A-Day Challenge, in which they commit to generating



at least one idea every day of school until a predetermined end point. Our challengees did 50 school days, but one school month is also a good, confined length. Ideas are expected even on days without designated class time. I found that the self-imposed nature of generating one idea per day gave the enlists a special type of motivation; they would arrive at my room eager to scribble a Rethink during free moments.

Around once a week, provide students with a prompt focused on rethinking a specific aspect of the future, such as houses or transportation (see sidebar). These can spring from a short TED talk or an image:

from living houses made of grafted trees to pedal-powered school buses. At these times, allow more time to think, draw, and share with small groups or the class before posting.

The Rethink Challenge connects well to other subjects or specific topics of study. For instance, each student could create posters for sustainable actions to be taken around school, design maps of what a sustainable city might look like, calculate energy savings related to sustainable practices, brainstorm top five sustainable lifestyle changes and then choose one to adopt for the rest of the year, and so on. Rethinks could serve as a topic for a longer persuasive essay, debate, or letter to the editor. This project could also integrate an ecological footprint exercise.² You may decide to incorporate a social action component – after all, the challenge is not just about designing futuristic contraptions, it is also about envisioning how community norms can shift, and how students can instigate this. A writing prompt like "How can our school become more sustainable?" can lead to reflection followed by actual change.

In all subjects, you can continue to teach the core curriculum, but with sustainability-themed extensions. Current events can prompt Rethink topics, or else students can bring in articles relating to actual Rethinks. For instance, my class read an article about test tube meat,³ and students wrote response papers relating to their views on the topic. Was lab-grown meat a great step forward for sustainability, was it promising but just too weird to fathom eating? This led to a class debate, and then a larger discussion on food-related sustainability issues.

The Rethink Challenge also provides opportunity for community engagement. Students can create a sustainability presentation for other grades and solicit Rethinks to add to the collection. They can interview family or community members about their visions for a sustainable future, or ask about how the world has changed over the last decades.

Keep generating Rethinks until you reach your goal number. You can track progress on an accompanying chart and report weekly updates in assemblies or newsletters. When you finally reach the target, hold a sustainability-themed celebration.

Ultimately, this is a hopeful exercise that can generate wild creativity. Most meaningful learning experiences focus

Ideas for Warm-ups

Students write or discuss how they interpret the following quote: "We do not inherit this land from our ancestors, we borrow it from our children." —Traditional Haida proverb

Play an interactive sustainable resource use game. Our class did a simulation called Fishing for the Future, using M&M's and Goldfish crackers to simulate overfishing and sustainable use of the world's oceans.⁴

Students write about or discuss the following guided imagery. "Imagine that you use a time machine to travel 50 years into the future. What do you see? Is it a better place to live than today, or worse? Why?"

on depth, but this one differs in its attention to quantity. The challenge is not just thinking of one amazing idea, but being able to consistently generate novel ideas. It shifts student mentality toward positive, outside-the-box thinking for the future. One key step toward sustainability is simply being able to envision a better world.

I found that this project changed the dynamic of our class: students were enthusiastic to come each day and Rethink, and they were excited about *ideas*—sharing theirs, reading others, collaborating and seeing the large-scale display. It was exciting and inspiring to watch our colorful Post-it mosaic grow each day. Youth will shape the future, and the Rethink Challenge is the kind of project that gets the necessary creative ideas flowing.

Elissa Brown launched the Rethink Challenge with her middle school science students at Two Rivers Community School, an expeditionary learning public charter school in Boone, North Carolina.

Endnotes

1. "What is Sustainability?" United States Environmental Protection Agency, <www.epa.gov/sustainability/basicinfo.htm>, Accessed March 8, 2014.
2. "Ecological Footprint Quiz," Center for Sustainable Economy, <www.myfootprint.org>, Accessed March 13, 2014.
3. Ornes, S. "Meat from Scratch," *Science News for Students*. 12 April, 2012, <<https://student.societyforscience.org/article/meat-scratch>>, Accessed February 18, 2014
4. "Fishing for the Future," Ocean Portal, Smithsonian National Museum of Natural History, 2013, <<http://ocean.si.edu/for-educators/lessons/fishing-future>>, Accessed March 13, 2014.



Sample Rethink Topics:

"What would _____ look like in a sustainable future?"

- Food (production, distribution, packaging, etc.)
- Waste management
- Energy
- Water systems
- Homes
- Education
- Transportation
- Streets
- Cities

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