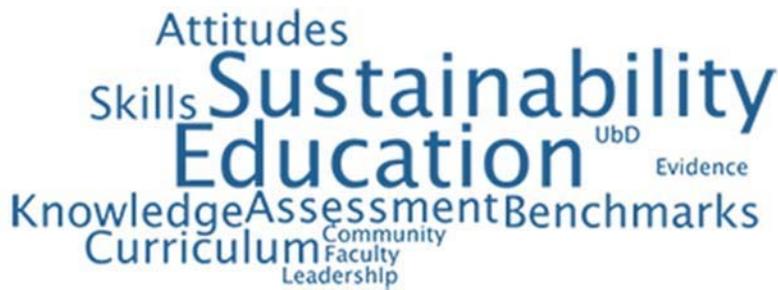


# Excerpts from The Lovett School's Classroom Sustainability Initiatives 2014-2015



**Lovett Administration:** One of the Strategic Plan Goals is to track K-12 classroom projects, lesson plans, and units that address sustainability. Though this has been a stated goal for the past several years, we have yet to effectively document the work that is being done.

*Jaimie Cloud: I would love to see and audit the lesson plans and units.*

**Lovett Administration:** By the end of the year, I would like for us to create a curriculum document that traces the sustainability lessons K-12. This will help us to see what is and isn't being done and how to identify goals for ensuring strong education in sustainability and filling in gaps.

*JC: This is a great start. Now we need to see the lessons, units, assessments, performance criteria and student work as evidence.*

## **Lovett Faculty Members: LOWER SCHOOL**

K/1- being taught about composting. Teacher is taking Kindergarten students outside to learn about worms and soil.

*JC: What do students know and what are they able to do with respect to compost, soil and worms? How do you measure success?*

*Compost is an excellent topic with which to educate for sustainability.*

*If you teach composting to:*

*Remind students that materials cycle on our spaceship Earth—creating value as they move through the biological cycle —*

*...and that there is no such place as away, so that is why we need to take responsibility for our role in the materials cycle....*

*...and if students were prepared to teach their parents and others how and why to compost, that would be educating for sustainability through composting.*

We have a beekeeper coming in and a storyteller will be teaching about the importance of pollinators leading up to Earth Day at each grade level in the lower school. We will be following the same structure as last year - 3 rotations.

*JC: What will students know and be able to do? Will they be asked to take an action regarding the bees? Is there garden pollinator friendly? Is the campus? Do they know that? Do they maintain the "Bee friendliness"? Do they share what they know with other students or their family and/or community? If the answers are yes, then this an example of educating for sustainability with the help of Bees.*

## **Lovett Faculty Members: MIDDLE SCHOOL**

### 6<sup>th</sup> Grade MATH

Hybrid value car vs. standard gas car

*JC: Full cost accounting or retail? The full cost of gasoline is approx. \$18 per gallon...full cost and life cycle assessment/ analysis of cars/ pollution, energy materials, would make it EfS*

### 7<sup>th</sup> Grade SCIENCE

Biomimicry- students study the way nature cycles materials and learn how to mimic nature's circular system (to eliminate waste)

*Biomimicry is an excellent way to educate for sustainability. Once they mimic nature in terms of materials cycles, it would be powerful to ask them to transfer their knowledge about how to mimic nature to solve a different design challenge of their own choosing (transference is an importance attribute of EfS).*

### 7<sup>th</sup> Grade ENGLISH

The Boy Who Harnessed the Wind

Long Walk to Water

*JC: 7<sup>th</sup> grade Humanities/Math/Science looks like it could be exemplary from where I am sitting—because it is interdisciplinary, and addresses many key themes of EfS including env, econ, soc, sustainable business models, renewable energy, water cycles, biomimicry, cultural traditions, environmental justice, practicing cycling materials in theater I still need to know what students know and what they are able to do and what they are doing as a result.*

### 8<sup>th</sup> Grade MATH

Mpg for hybrid vehicle cost of purchase vs fuel savings; ratio and rates; how long to hold on to recoup purchase price

*EfS would require full cost accounting and life cycle analysis AND at this point after three years of looking at the current reality of the way we make cars, it would include an interdisciplinary connection to a design*

*challenge with a better idea—possibly using biomimicry principles—maybe with another discipline—maybe Art? Science? Both?*

## 8th Grade SOCIAL STUDIES

Social issue depending on student choice (alternative energy sources) GMO's

*JC: 8th grade Humanities is showing some interdisciplinary work—A visioning process—(Utopia), studying issues in SS –which, if it is done through the lens of EfS would involve the vision, upstream problem identification, systems thinking, solutions that solve more than one problem at a time and minimize the creation of new problems and action steps toward the solutions.*

## **Lovett Faculty Members: HIGH SCHOOL**

### 11th and 12th Grade PHYSICS

Alternative Assessment, Design/build/implement sensors that measure air pollution to gain better understanding of rates of pollution at different times of day on Lovett's campus, link to health risks/concerns, educate about health/environmental risks, set goals to change behaviors (increase number of parents who turn off their engines during carpool)

*JC: This is an EfS type of activity - authentic, academically rigorous, measuring real data—designing real interventions. It would be even more EfS if you set a clean air target for the campus and then worked toward it, and maintained or improved it over time.*

### 10th Grade ENGLISH (World Literature)

World Literature

Purple Hibiscus--preserving one's culture in a post-imperialist society

*JC: Cultures are always changing... if this was a discussion about cultural preservation and transformation it could be EfS.*

House on Mango Street--maintaining one's identity, individuality in a blend of cultures.

*JC: Depending on student learning outcomes, this could be a great example of a contribution to EfS.*

Life of Pi. Survival. Respect for nature, animals, and life.

*JC: This could be a great contribution to EfS—I would need to see student learning outcomes and student work as a result.*

Tale of Two Cities: The French one percent get their due; scenes of the land being despoiled; revolution; great satirical passages about those in power building their wealth on the backs of others and attempting to solve their problems with empty strategies

*JC: This a great example of education about un-sustainability—and all the things that undermine our ability to thrive over time. Making comparisons and analogies to our current reality—could contribute to EfS.*

Things Fall Apart: Issues related to “cultural sustainability” - additionally short stories out of African conflict and colonialism.

*JC: Another great opportunity for cultural preservation and transformation—in order to thrive over time, what do they (and eventually transferred to we) need to preserve? What has to change?*

Teach a great poem called “Greeks” - connected to Oedipus. About ephemeral nature of civilizations. (Though the point there might be that we, like the Greeks, are doomed.)

*JC: If taught as described it is education about un-sustainability NOT education for a sustainable future. Collapse and all the other stories about collapsed civilizations should teach us what to and NOT to do—so that we can thrive instead of crash—if we teach kids we are doomed—what is the point of doing anything? This breeds the “titanic” syndrome and the “bummer” mental model—which trigger unsustainable behavior—for obvious reasons. Of course Greece and the Greeks are still there...*

