

TEACHING SUSTAINABILITY

AT RYE MIDDLE SCHOOL
John Borchert, Life Science Educator

My Goals in Teaching Sustainability

Practical application of science knowledge.

“Why do we have to learn this?”

Develop critical thinking skills.

Actions have consequences.

Small actions can add up to large effects.

Big issues may be accomplished a little at a time.

OVERVIEW OF PROGRAM

7th Grade Life Science is taken by all students.

Curriculum is guided by NYS Science Standards (soon to be Next Generation Science Standards).

Cellular Biology

Heredity and Genetics

Evolution

Parade of Life (Exploring the Six Kingdoms of Life)

Ecology

OVERVIEW OF PROGRAM (cont'd)

RMS A.L.I.V.E. is an elective class about sustainability.

Always **L**ooking **I**nto **V**ital **E**cology

Oversees the school's recycling efforts.

Students are constantly looking for ways to make the school more eco-friendly.

Plants, maintains, and harvests the school garden.

Collecting returnable bottles supports garden and other projects.

Sustainability in Life Science Curriculum

Evolution and Adaptation

How does nature solve problems?

Can we copy this? Biomimicry uses natural design.

Parade of Life

Useful aspects of species.

Biological pest control. Bioremediation.

Sustainability in Life Science Curriculum

Ecology and Interconnectedness

Impact of habitat degradation by urban sprawl and pollution.

Biomagnification of toxic chemicals and microplastics.

RMS A.L.I.V.E. is all about Sustainability

Inspired by the CELF Summer Institute

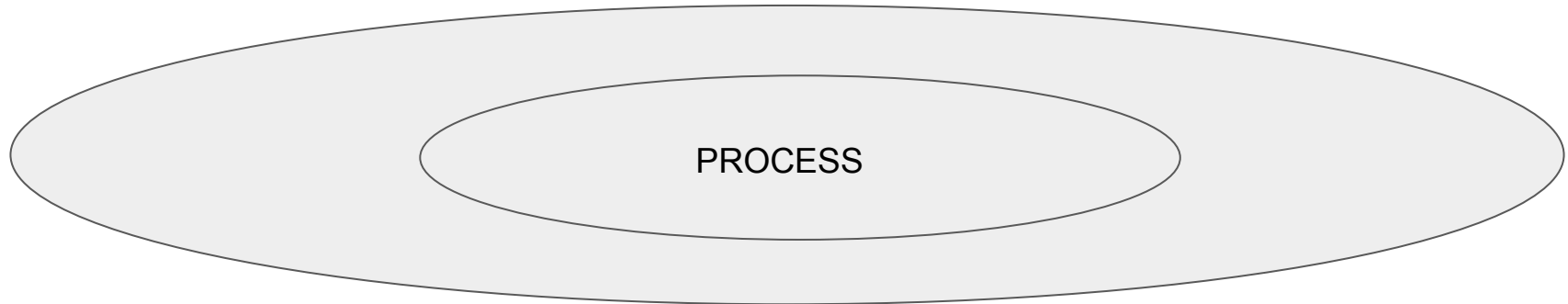
Systems Diagrams - There is no “away”

What goes into

making a product

What is produced by

making this product



RMS A.L.I.V.E

Nickels can add up to dollars.

If we can improve our little corner, we may eventually connect with other peoples' improved corners.

School Garden and Compost.

Final Message Going Forward

The Best Way to Solve a Problem
is Not to Cause it in the First Place

So,

REDUCE, REUSE, RECYCLE