

CASE STUDY

CHALLENGE

Whether it be a single school or a district with many sites, new waste reduction and diversion programs come with multiple challenges. Infrastructure, adequate container capacity, training and buy-in of students and staff, all play into the success or failure of the new system, which may be different from the recycling process participants use at home, if any.

SOLUTION

Consistency in waste stations and good signage is the key to a successful program over the long-term. Giving students the authority to champion the program and police recycling efforts in their classrooms, is another important strategy.



Overview

Lincoln Public Schools is the second largest public school district in Nebraska, located in the heart of the plains, renowned for its long-standing legacy of educational excellence and tradition of rigorous academic achievement. The school district is growing and thriving, serving over 40,000 students in more than 60 schools and programs.

All school sites and support buildings have participated in the LPS Recycling Program since 2002. Materials collected include cardboard, office paper, magazines, newspaper, tin, plastic and aluminum. In addition to the standard recycled material, the district also recycles fluorescent lamps, batteries, pallets, scrap metal and various electronic waste. Twenty-nine schools (and growing!) also participate in the LPS Compost Program that was recently introduced.

Waste Reduction Program Results

Waste diversion percentage:	41%
Waste diverted from landfill:	1.3 million lbs./year
Composting diverted from landfill:	490,000 lbs./ year

Key Program Elements

Benchmarking & Establishing Goals

The district has had a longstanding goal of 25% diversion through the recycling program as a district average and by individual school. 50% diversion is the undeclared goal for schools participating in the compost program. Custodians measure trash destined for the landfill in cubic yards, and the recycling hauler provides weights of all recycling. A district-wide management report with data from all buildings is generated monthly.

The data helps the district implement programs that will significantly reduce their environmental impact. Without the measurements of the waste, it is not possible to know if the program is successful or not. It also allows each school to see how their program compares with other schools in the district, and creates a competitive environment that challenges each one to do better. It also provides qualitative and quantitative information for grant funding and reporting.



CASE STUDY

LESSONS LEARNED

- Custodial support is one of the most important components of a successful waste management program. Get their input and feedback often!
- Connecting the programs to curriculum is a key strategy for embedding the program into the school and district long-term.
- Cafeteria supervisors (those standing in the cafeteria everyday) need to be champions, and know what is recyclable and what is not.
- Messaging is more effective if it is from the students and engaging.
- Use recognition programs to keep the program moving forward.
- Share success stories with the community and within the schools.



Implementation

A Step-by-step Approach to Implementing a School Recycling Program

1. *Create a green team*—By creating a green team in each of your districts buildings, you allow individual buildings to address different sustainability issues and implement recycling in an environment they are familiar with. Green teams are usually composed of staff, faculty and students.
2. *Find out what's in your trash* - Visit all areas of your building and make a list of recyclables, organics and landfill items generated. Look for ways your school could be reducing waste or reusing materials.
3. *Determine indoor container and labeling needs* - Inventory your current containers and evaluate their usefulness. Every landfill container should have a recycling container next to it and each container should be labeled. Color-coded containers work best, making it easier for participants to quickly identify the right bin for their discards.
4. *Look for grant funding*— Apply for local and state grants to help with funding your new program, including containers and labeling.
5. *Purchase labels and containers* - Purchase the appropriate containers and labels for the newly created program. Labels for the outdoor containers should be purchased too. Recycle Across America provides free labels for public schools.
6. *Educate and promote*— The entire school will need information on how and what to recycle.
7. *Measuring* - Measuring results are vital for not only grant reporting, but also for promoting and adjusting your program. Work with your custodial staff and hauler to obtain measurements.
8. *Make adjustments as needed* - If there are problems with contamination, access, or if you want to expand the program, work with all stakeholders to come up with new ideas and possible solutions.

Training

Contamination is one of the biggest problems in the recycling industry. The two most effective ways to combat contamination are ongoing staff/student training and labeling of containers. Good labels will identify where to place specific materials. The most effective labels have photo-images of acceptable materials, and are color-coded (blue=recycle, black=landfill, green=organics).

Training can be done through videos, school assemblies, classroom instruction, curriculum units and presentations. During the first few weeks of the program provide additional hands-on assistance in the cafeteria. LPS uses table tents to assist their students in sorting before they leave the table.



CASE STUDY

GRANT OPPORTUNITIES

- Lowe's
www.toolboxforeduction.com
- Coca Cola
www.bingrant.org
- Nebraska Department of Environmental Quality
www.deq.state.ne.us
- Waste Management and Keep America Beautiful
www.kab.org
- Captain Planet Foundation
www.captainplanetfoundation.org
- Nebraska Recycling Council
www.nrcne.org
- Project Learning Tree
www.plt.org



Resources

How to start a green team and techniques for success:

[OPS Green Team Toolkit](#)

Lincoln Public Schools sustainability website:

[Sustainability at LPS](#)

Environmental Protection Agency lesson plans:

[Lesson Plans, Teacher Guides and Online Resources for Educators—EPA](#)

Recycle Across America label donation program for schools:

<http://www.recycleacrossamerica.org>

LPS green schools recognition program:

<http://home.lps.org/recycling/2016/08/10/green-schools-recognition-program/>

Omaha Public Schools Green Schools Initiative:

<http://district.ops.org/DEPARTMENTS/DistrictOperationalServices/GreenSchoolsInitiative.aspx>

Nebraska Recycling Council

Nebraska Recycling Council is a statewide, member-based, charitable non-profit supporting collaboration between communities, businesses, solid waste and recycling industries to improve recycling collection and infrastructure. Our mission is to maximize the economic and environmental benefits of resource recovery in Nebraska.

NRC provides an online statewide recycling guide, recycling equipment grants, education and training, community and business waste assessments, green team training, and networking events. Our Annual Awards Luncheon and Workshops provide statewide recognition for model resource recovery programs, plus learning and networking opportunities. Visit www.nrcne.org or call 402-436-2384 for more information.



Lincoln Public Schools, Brittney Albin

balbin@lps.org

402-436-1072 x 82007