

Case 13: Can the crew cut waste before it reaches the bin?

The last Common Room screening used about 120 cups the city won't recycle, and a box of parts arrived half full of packaging.

On your own Read What happened. Underline the number of cups and what the city list says about them. About 5 minutes.



Anika, Dec and Sami react to a round of their tabletop game.

Your role: You're the one who counts the cups before and after the change. **New skill:** Count a starting point before you claim a change works.

What happened

It is Tuesday in the theater shop. Dec opens a box of replacement parts. Three separate orders of small LED connectors and switches, placed over one week, arrived together. About half of the box is plastic air pillows and foam.

The supply list from last Friday's screening at the Common Room shows a second problem. The crew used about 120 single-use cups. The cups are plastic-lined paper and labeled "recyclable." But the city's recycling list does not take plastic-lined paper cups.

Dec wants to fix how they order parts before anyone redoes the recycling sign. Anika tracks the parts and the budget. She agrees with Dec, but she wants numbers before anyone says a change saves money. Some people need a disposable cup or a straw, so any plan has to work for them too.

Your question: What could the crew change before the next screening, and how would they know it worked?

Key terms

On your own Read each key term and its example. Then write your first guess in the box. About 5 minutes.

Source reduction Source reduction is preventing waste before it is created, for example by buying less packaging.

En español: reducción en la fuente

In this case: Dec wants to combine the parts orders so less packaging arrives in the first place.

Reuse Reuse is using an item again instead of throwing it away after one use.

En español: reutilización

In this case: Borrowing washable cups from the bookshop is reuse. Washing uses water and someone's time.

Local acceptance Local acceptance is the list of materials that your own city's recycling or compost program actually takes.

En español: materiales aceptados en tu ciudad

In this case: The cups say “recyclable,” but the crew's city does not accept plastic-lined paper cups.

Who is involved



Dec

Opened the parts order

“Three orders of tiny connectors in one week. One big box, and half of it's packaging.”



Anika

Tracks the parts and the budget

“I'm in. But if anyone says it saves money, I want the numbers. Right now we have one box and a guess.”

Before you look at the evidence, what is the best way for the crew to cut waste?

[illegible]

Reading passage

Half a box of air

On your own Read the passage. At each Stop and think box, pause and answer the question in your head or with a partner. About 4 minutes.

Words to know

- **Source reduction:** Source reduction is preventing waste before it is created, for example by buying less packaging.
- **Reuse:** Reuse is using an item again instead of throwing it away after one use.
- **Local acceptance:** Local acceptance is the list of materials that your own city's recycling or compost program actually takes.
- **Proposal:** A proposal is a change that someone suggests and that has not been approved yet.
- **Trade-off:** A trade-off is a choice where getting one benefit means accepting a cost or giving something up.

The story: Air pillows and 120 cups

It is Tuesday in the theater shop. Dec opens a box of replacement parts. Three small orders of LED connectors and switches came together in one big box. About half of the box is plastic air pillows and foam. “Three tiny orders,” Dec says. “One giant box.”

There is a second problem. The supply list from last Friday’s screening at the Common Room shows the crew used about 120 single-use cups. The cups say “recyclable.” But the city’s recycling list does not take plastic-lined paper cups.

Dec wants to fix how they order parts before anyone redoes the recycling sign. Anika tracks the parts and the budget. She agrees with Dec, but she wants numbers before anyone says a change saves money. Some people need a disposable cup or a straw, so any plan has to work for them too.

Your role is to count the cups before and after the change.

 **Stop and think.** Why does Dec want to fix the order form before the recycling sign?

Stopping waste before the bin

Source reduction is preventing waste before it is created, for example by buying less packaging. Dec’s idea is source reduction: order the parts together, not every time one breaks, and ask the supplier about packaging.

Stopping waste before the bin, continued

Reuse is using an item again instead of throwing it away after one use. The bookshop has washable cups the crew could borrow. But reuse has costs too. Washing takes water and someone's time.

A “recyclable” label does not tell you where a cup will go. **Local acceptance** is the list of materials that your own city's recycling or compost program actually takes. In Case 9, you learned to check an official source for your own area. Here, that source is the city's list. It does not take plastic-lined cups, and it does not take items labeled compostable either.

Anika's plan is a test. At one screening, the crew borrows washable cups. They count what they use and compare it with 120. Water and washing time go on the sheet too. That makes it a fair **proposal**, a word from Case 4. A proposal is a change that someone suggests and that has not been approved yet. It is also a **trade-off**: fewer cups in the trash, but more washing. The crew will keep some disposable cups and straws for people who ask.

❓ **Stop and think.** Why is the word “recyclable” on the cups not enough?

Real companies, real straws

In 2018, Starbucks said it would phase out plastic straws in its stores by 2020 (NPR, July 9, 2018). Two days later, NPR reported that some people with disabilities need flexible plastic straws to drink (NPR, July 11, 2018). Cutting waste works best when it still works for everyone.

❓ **Stop and think.** What would the crew need to count to know if washable cups worked?

Sources

Real source | NPR | July 9, 2018

Starbucks To Eliminate Plastic Straws In Its Stores By 2020

Real source | NPR | July 11, 2018

Why People With Disabilities Want Bans On Plastic Straws To Be More Flexible

Look at the evidence

On your own Read each document. For each one, fill in both boxes. About 10 minutes.

Evidence A | Supply list

Screening supply list, last Friday

Single-use cups (plastic-lined paper, labeled “recyclable”): about 120. Paper plates: 80. Printed flyers: 150. Paper straws, on request: 40. Folding chairs: borrowed from the bookshop.

Look closely: Which item did the crew use the most? Could it be reused?

What it shows

One question I still have

Evidence B | Delivery

The parts order

Delivered Tuesday to the theater shop. Three separate orders of small LED connectors and switches, placed over one week, arrived together. They came in one full box, about half of it plastic air pillows and foam around tiny parts.

Look closely: How many orders came in this one box? Why does that matter?

What it shows

One question I still have

Look at the evidence, continued

Evidence C | Sanitation guide

City recycling list

Accepted in recycling: metal cans, glass bottles and jars, rigid plastic bottles and containers, flattened cardboard. Not accepted: plastic-lined paper cups, plastic bags and film, foam, items labeled compostable.

Look closely: Find the plastic-lined paper cups. Which list are they on?

What it shows

One question I still have

What is still missing from the evidence?

Notes

Key idea: source reduction

On your own Read the key idea and the Professional standards card. Then answer the question in the box. About 6 minutes.

Source reduction is preventing waste before it is created, for example by buying less packaging. The Environmental Protection Agency (EPA) ranks ways to handle waste. Source reduction and reuse come first. Recycling and composting come next, then energy recovery, then treatment and disposal. The EPA also notes that no single approach fits every item or situation.

Reuse is using an item again instead of throwing it away after one use. Borrowing washable cups from the bookshop is one example. Reuse has costs too. Washing takes water and someone's time, so a fair comparison counts those costs along with the cups.

A “recyclable” label does not tell you where an item will go. **Local acceptance** is the list of materials that your own city's recycling or compost program actually takes. The crew's cups say “recyclable,” but their city's list does not take plastic-lined paper cups. The list does not take items labeled compostable either. So the crew has to check the list before choosing any new cup.

Professional standards

Real source | Law or regulation | Federal Trade Commission (FTC)

FTC Green Guides (16 CFR Part 260): § 260.12 Recyclable claims

“A product or package should not be marketed as recyclable unless it can be collected, separated, or otherwise recovered from the waste stream through an established recycling program”

In plain words: FTC guidance says a company should call a product recyclable only when recycling programs can collect and process it.

Question: The crew's city rejects plastic-lined paper cups. What else must you know before saying the “recyclable” label breaks the guide?

Your answer

I would need to know ____.

A throwback to a company cutting waste at the counter, before anything reached a bin.



Investigation finding less than 10% of plastic has ever been recycled, which is why reduction comes first.

[illegible]

Sort the evidence

On your own Follow each choice to its consequences in the diagram. Then name one view that is missing. About 8 minutes.

Follow each choice to its consequences, including new costs. Which consequence would you measure first, and what would count as success?

Keep buying “recyclable” single-use cups

About 120 cups go to the trash because the city does not accept them

Who is affected

Borrow washable cups and run a wash station

Fewer cups in the trash, if people use the washable ones

Who is affected

Check: Count cups and bags after the next event and compare with last time

New costs: water, washing time and volunteers

Who is affected

Check: Count cups and bags after the next event and compare with last time

Combine parts orders into one shipment

Less packaging arrives before anything reaches a bin

Who is affected

Notes

Whose view is missing from these documents? What would you ask them?

This image shows a single sheet of white paper with horizontal blue lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Practice: choose a response

On your own Choose the plan the crew should try and explain why. Then fix the two marked lines.
About 6 minutes.

The last screening used about 120 single-use cups, and the city’s recycling list does not take that type. Which plan should the crew try for the next screening?

☐ **A** Compare a washable-cup option, washing time, cost, access and the city list, then test one change.

☐ **B** Buy a different cup labeled “recyclable” and put up a clearer recycling sign.

☐ **C** Stop offering disposable cups and straws, and ask everyone to bring their own.

Why I chose it

Improve a draft

A student’s first draft

We should make the screening zero waste. Everyone should bring their own cup and we’ll **1** ban all plastic. We can also put up posters that say “save the planet” so people remember to recycle. Recycling is the best thing you can do for the environment. This will be easy and **2** it will save money too. Last screening there were cups everywhere and the bins were overflowing by the end of the night. People will love it once they get used to it. Let’s start next week!

Rewrite each marked phrase so it says only what the evidence supports.

Rewrite phrase 1

Rewrite phrase 2

Grades 6—8

Your task

On your own Read the steps. Fill in the planner boxes before you start your draft.

Make a materials sheet for the next Common Room screening and pick one change to try.

Use: The EPA hierarchy graphic and the supply list.

You'll make: Materials sheet plus 3—4 sentences

Time: 45 minutes

- 1 Count the items on the supply list in Evidence A. Write the number for each.
- 2 Place each item on the hierarchy: reduce, reuse, recycle or throw away.
- 3 Check the city list in Evidence C. Does it accept the cups?
- 4 Pick one change for the next screening.
- 5 Write 3 or 4 sentences in the Your draft box. Say how you would count whether it worked.

Show it your way

Write it: Write 3—4 sentences with the frame “We use __. We could __. A problem might be __.”

Say it: Explain to your group which item you would change, what you would do instead and one problem your change might cause.

Show it: Draw the waste hierarchy as a staircase and place each item from the supply list on the step where it is now and the step it could move to.



Prefer typing? Scan to open the online workspace.

Your task, continued

Item I will change, and how many were used

Where it is on the hierarchy now

My change

Your draft

Your sentences

We use _____. We could _____. A problem might be _____.

Notes

Check your work

On your own Answer the Check your work questions and mark your level in each rubric row. Then write one change you made. About 5 minutes.

Does your sheet list the items and how many were used?	☐ Yes ☐ No
Did you pick a reduce or reuse change?	☐ Yes ☐ No
Did you name a problem the change could cause?	☐ Yes ☐ No
Did you say how you would count whether it worked?	☐ Yes ☐ No

How your work is scored

Mark one box in each row.

Skill	Beginning	Developing	Proficient	Advanced
Evidence	☐ No data.	☐ General claims about recycling.	☐ Uses quantities and local rules.	☐ Uses quantities, local rules and a before/after plan.
Reasoning	☐ Treats one fix as solving everything.	☐ Ignores trade-offs.	☐ Applies the hierarchy and names a trade-off.	☐ Weighs trade-offs including access and cost with a measurement boundary.
Audience & purpose	☐ Commands people.	☐ Relies on slogans.	☐ Specific change organizers can do.	☐ Specific, inclusive change with roles assigned.
Revision	☐ No change.	☐ Wording only.	☐ Narrows to a measurable change.	☐ Explains how narrowing makes success testable.

One change I made

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Questions to discuss

On your own Write a short answer to each question. Then complete each sentence frame below the questions. About 8 minutes.

- 1** Could a change that reduces waste create an access problem for someone, and how would you find out?

- 2** How does “add more bins” define the problem differently from “order less packaging”?

- 3** What would the crew need to count before saying a change saves money?

My take

I think the crew should ___ because ___.

The evidence that changed my first guess is ___.

One question I still have is ___.

[illegible]

Talk about this case at home

Case 13: Can the crew cut waste before it reaches the bin?

In this case, a group of friends learns that the cups from their movie night can't be recycled in their city. Your student planned one change to cut waste before the next event and a way to count whether it worked.

Questions to talk about

- 1 How could someone find out what their city or town recycles?
- 2 What is one item people often throw away after a party or event?
- 3 Why might a rule to cut waste need an exception for some people?

Nobody needs to share personal stories or private information to talk about this case.



See the case online.