

THE GREAT BAG DEBATE

introduction

Americans throw away an estimated 100 billion plastic bags annually. Because a single bag can take over 1,000 years to break down, that means a lot of used space in **landfills** or the ocean.¹ Plastics can also act as a sponge for toxic chemicals in marine ecosystems, harming and sometimes killing animals that eat them. Even **biodegradable** plastic bags, which are made of different polymers, present challenges. As they break down they can use up oxygen in marine ecosystems which leads to algal blooms. In addition, people may see their compostable status as permission to litter, even though most take at least 18 months to break down.

In 2014, California was the first state to pass legislation banning the use of non-compostable plastic bags. At the same time, they implemented a 10-cent tax on compostable plastic bags at checkouts. Since then, other state legislatures have passed laws concerning plastic bags. In some cases, states have tried to implement bans or taxes like those in California; in others, states have actually moved to prohibit cities from creating these bans.² The United States isn't the only country to approach this issue with legislation. Over 40 countries have implemented taxes or bans on plastic bags. In 2017, Kenya passed the harshest of these laws, with makers, sellers, and importers of plastic bags facing up to four years in prison if caught.³

Critics of plastic bag bans and taxes cite concerns about consumer choice, grocery stores receiving the fees as profit, increased cost of alternative bags, and the unfairly distributed burden of bag taxes on poor consumers. Others express concern that these laws do not do enough to decrease the use of plastic bags, and believe that bag fees should be abolished and bans should be made more stringent. In the case of Kenya, some have noted that plastic bags are used as a makeshift toilet in areas without access to running water, especially in informal urban settlements. Their ban may lead to decreased health conditions and an increase in open defecation.

While evidence shows that the use of all kinds of plastic bags has detrimental effects on our environment, it is difficult to determine the best way to decrease their use. As our population grows, along with our demand for resources, it is important that we think critically about plastic bag policies and their impacts.

Vocabulary: biodegradable, landfill



Studies For Our Global Future

concept

When policymakers attempt to solve complex environmental issues with a particular law or approach, they must weigh the benefits and challenges of each possible course of action. Critical thinking skills are essential in determining which practices are the most environmentally sound, cost effective, and socially responsible.

objectives

Students will be able to:

- Present and defend an argument during a debate about plastic bag use.
- Discern the relative costs and benefits of a plastic bag policy that affects the environment and people's lifestyles, and determine the best solution.

subjects

Environmental Science (General and AP), Government, English Language Arts

skills

Researching, debating, public speaking, defending a position using evidence

method

Students conduct research either in favor of or against plastic bag bans and taxes, then debate their assigned stance.

materials

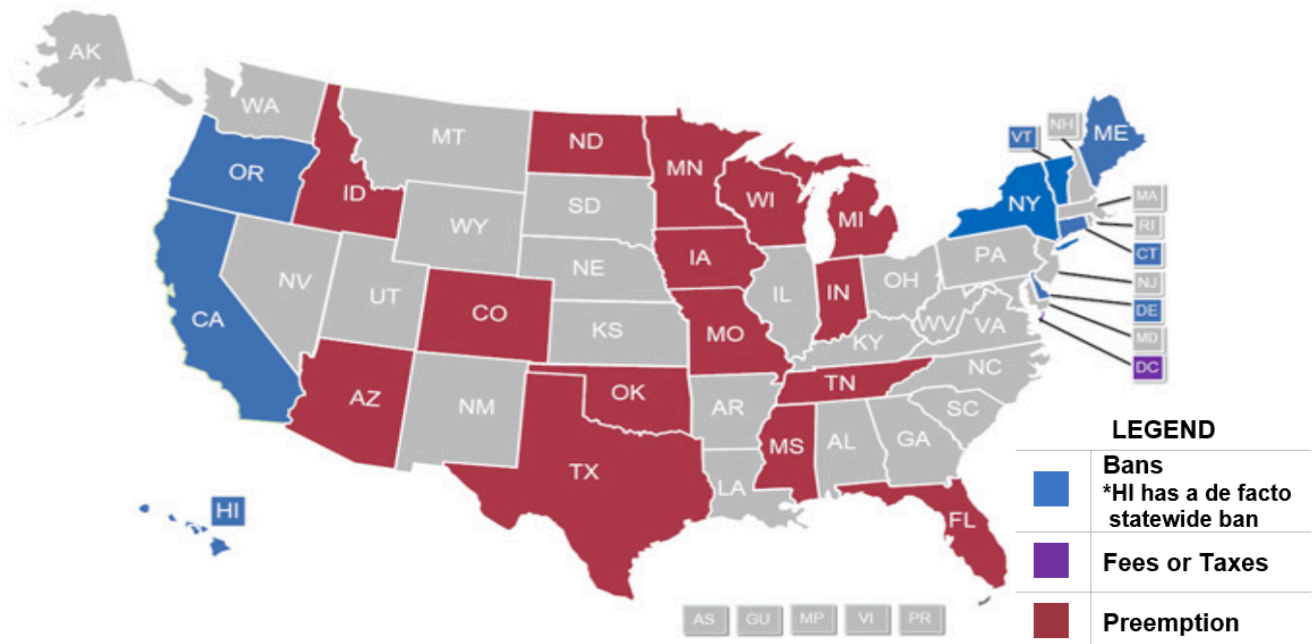
- None

procedure

1. Ask students to identify possible problems with using plastic bags.

Answer: Student ideas will likely include plastic on the ground and in waterways, taking up space in landfills for long periods of time, floating trash in the ocean, and animals becoming sick or entrapped by plastic in their habitats. If students don't volunteer it, remind them to also consider the energy costs of making and shipping plastic bags, which contribute to climate change.

2. Explain that because of the problems they brainstormed, many states have decided to make laws that aim to decrease the use of plastic bags. Display the following visual from the National Conference of State Legislatures (NCSL) that shows the bag legislation enacted by states as of the end of 2019.

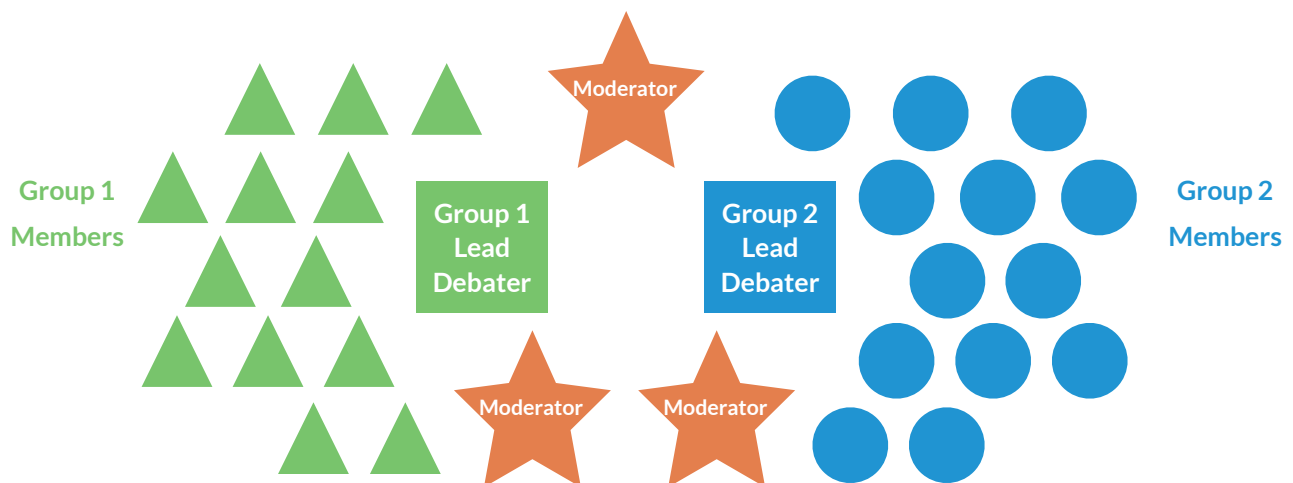


Source: National Conference of State Legislatures, State Plastic and Paper Bag Legislation

Note: Hawai'i's de facto ban is the result of individual counties enacting their own bans on non-biodegradable plastic bags at checkout, with slightly different wording and regulations.

To research this in more detail or see information about your own state's bills or laws, you can explore the NCSL site further (<https://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx>).

- From the information on the map, ask students to identify the different laws and programs states have enacted to reduce the use of plastic bags. As students identify them, explain any details about what is meant by the following:
 - Ban** – Stores are not allowed to provide plastic bags at checkout. This usually applies only to certain kinds of plastic bags, such as non-biodegradable or non-recyclable.
 - Fees/taxes** – The government collects a tax or stores are required to charge a fee for the use of plastic bags at checkout. While this fee is usually small (5-10 cents) it discourages customers from using plastic bags.
 - Labeling, recycling, or reuse programs** – These laws vary widely but usually include a requirement that plastic bags have a recycling message printed on them or that stores provide places for customers to drop off plastic bags for reuse/recycling.
 - Preemption** – The state legislature passed a law preventing local governments (such as cities or municipalities) within the state from making plastic bag laws such as those described above. It’s essentially a “ban on bans.”
- Assign 2-3 students to be Debate Moderators. Divide the rest of the class in two equal groups. Group #1 will present arguments in favor of bag bans and bag taxes/fees. Group #2 will argue against bans and taxes, and in favor of other solutions such as mandatory labeling, recycling, and reuse, or in favor of other policies they determine. Group #2 should plan to propose alternate solutions as part of their argument (rather than denying the problems posed by plastic bags, which are scientifically evident). The Moderators will be responsible for asking questions and deciding which group’s policy makes the most sense.
- The class will be conducting a fishbowl debate but first, Groups #1 and #2 will need facts and evidence to present convincing arguments for their sides of this issue. For their research, they should contact individuals and organizations representing each side of the issue. Students might seek out local waste management experts, grocers, consumers, and environmentalists in their area. Moderators will research both sides so they can make sure all evidence used is accurate, and they will write probing questions that push both sides to defend their arguments further during the course of debate. A list of Suggested Resources is provided at the end of the lesson plan.
- Set up the room for a fishbowl debate with two single chairs in the center of the room, facing each other. Group #1 and Group #2 should each send one student that will conduct the opening statement to sit in the chairs facing each other. The remaining members of Groups #1 and #2 can either stand or sit in a semi-circle behind the lead debater for their team. This will create a fishbowl effect around the two chairs in the center. The Moderators should stand in the circle so they can easily announce new questions or call time as needed.



7. Conduct the debate.

- a. Groups #1 and #2 will flip a coin to see which will be the first to present its argument. A representative from each group will then have a set time (one to two minutes) to make an opening statement. The maximum time that each person from each group can spend in the fishbowl is three minutes. The teacher should act as timekeeper (choose a sign that indicates when time is up) to make sure that no one goes over the allotted time.
 - b. Explain that for each round of the debate, every person in Group #1 and Group #2 has to speak at least once (for no less than one minute) before someone who already spoke can speak again. Once someone has spoken for the minimum of one minute or the maximum of three minutes, they have to be tapped out (a group member will tap that person on the shoulder to indicate that he or she would like to enter the fishbowl to debate). Any speaker in either of the debating groups can tap out another, as long as that person is not going twice before every group member has had a chance to speak.
 - c. Moderators may ask questions in response to facts presented in the opening arguments or during the course of the debate. Since the debate should be ongoing, if a Moderator has a question to pose to either group, they can share it. Once the question is answered, if the other group wishes to give a rebuttal, one of their representatives may do so. The person in the fishbowl can make the rebuttal, or that person can be tapped out by a group member who would like to make the rebuttal. A one-minute limit is recommended for answers and rebuttals. In order to involve as many students as possible, students in each group should take turns asking, answering, and rebutting questions.
 - d. You may want to limit the questions to ten or fewer. Moderators should take notes on the answers they receive and on the persuasiveness of the arguments. It might be helpful for them to divide lined paper into two columns to list points and counterpoints.
8. After the debate, Moderators should convene to decide which policy decision is the most sound. Their decision should be based more on the facts and strength of the arguments than on the oratorical skills of their classmates. Once a decision has been reached, Moderators should report this to the class, including a summary of the reasoning on which they based their decision.

Suggested Resources:

The following sites can provide students with evidence to support their proposed policy. Remind students to note the author of each piece and identify any potential bias they may have.

“Loophole in NY Plastic Bag Ban Could Let Stores Hand Out Thicker Plastic Bags”

<https://gothamist.com/news/loophole-ny-plastic-bag-ban-could-let-stores-hand-out-thicker-plastic-bags>

“Heavy-handed legislation not a way to reduce plastic-bag litter” *Letter to the editor

<https://www.islandpacket.com/opinion/letters-to-the-editor/article151899567.html>

“South Carolina Bill to Prohibit Citywide Plastic Bag Bans Advances”

<https://www.charlestoncitypaper.com/TheBattery/archives/2017/02/02/south-carolina-bill-to-prohibit-citywide-plastic-bag-bans-advances>

“Plastics in the time of pandemic”

<https://www.politico.com/newsletters/the-long-game/2020/05/26/plastics-in-the-time-of-pandemic-489320>

“State lawmakers block plastic bag bans, like Philadelphia’s, in move one representative calls ‘huge abuse of power”

<https://stateimpact.npr.org/pennsylvania/2020/06/01/state-lawmakers-block-plastic-bag-bans-like-philadelphias-in-move-one-representative-calls-huge-abuse-of-power/>

“Finally, A Real Plastic Bag Ban for Honolulu”

<https://www.civilbeat.org/2019/12/finally-a-real-plastic-bag-ban-for-honolulu>

“In Kenya, Selling or Importing Plastic Bags Will Cost You \$19,000 – or Jail”

<https://www.nytimes.com/2017/08/28/world/africa/kenya-plastic-bags-ban.html>

American Recyclable Plastic Bag Alliance

<https://bagalliance.org/>

“War on waste: NT environmental groups claim plastic bag ban has failed” (Australia)

<https://www.abc.net.au/news/2017-05-24/war-on-waste-nt-plastic-bag-ban-fails-say-environment-groups/8553614>

“Plastic bag bans are spreading. But are they truly effective?”

<https://www.nationalgeographic.com/environment/2019/04/plastic-bag-bans-kenya-to-us-reduce-pollution/>

“127 Countries Now Regulate Plastic Bags. Why Aren’t We Seeing Less Pollution?”

<https://www.wri.org/blog/2019/03/127-countries-now-regulate-plastic-bags-why-arent-we-seeing-less-pollution>

“Plastic bag bans can help reduce toxic fumes”

<https://www.unenvironment.org/news-and-stories/story/plastic-bag-bans-can-help-reduce-toxic-fumes>

discussion questions

1. Which pieces of supporting evidence from the research do you believe had the strongest impact on the decision made? Why?

Answers will vary.

2. Was the decision reached by the Moderators fair in your opinion?

Answers will vary.

3. Do you believe that the policy on plastic bag use should be the same across the state, country or even worldwide? Or should it be different based on place? Explain.

Answers will vary. Some students might argue that a policy is only “fair” if it is the same everywhere. Others might take outlying factors into consideration and argue that policies work better when created and enforced at the local level.

assessment

Students complete a written reflection after the debate describing why they believe their policy was accepted or rejected by the Moderators, and what they would do differently to make their argument in the future. Alternately, individual student verbal contributions to the debate can be assessed for how complete, compelling, and accurate they are.

follow-up activities

1. Have students research a current bill or law in their own state or city that relates to plastic bags. A full list of all such bills can be found here: <http://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx>. After researching the bill, have students write to their legislators on the state or local level encouraging action on the bill one way or the other, using the research they compiled during the debate. If no plastic bag legislation is currently in progress in their local or state government, students should make a suggestion for such a bill.
2. Invite students to conduct a survey, collecting data from local stores as to how many customers choose plastic bags, how many choose paper, and how many bring their own reusable bags. Then, using population data from their city or state, they compute the number of bags used each day or week. If your state has enacted bag-related legislation, students could interview locals about whether the policy impacts their behavior and decisions about getting a bag when they shop.
3. Students can devise a plan to increase the use of reusable bags, involving both the grocer and the consumer, and present the plan to a local grocery store.

¹Plumer, B. (2019, March 29). Plastic Bags, or Paper? Here's What to Consider When You Hit the Grocery Store. *New York Times*. Retrieved from <https://www.nytimes.com/2019/03/29/climate/plastic-paper-shopping-bags.html>

²National Conference of State Legislatures. (2017, July 5). Fees, Taxes and Bans, Recycling and Reuse [Web log post]. Retrieved from <https://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx#Bans>

³de Freytas-Tamura, K. (2017, August 28). In Kenya, Selling or Importing Plastic Bags Will Cost You \$19,000 – or Jail. *New York Times*. Retrieved from <https://www.nytimes.com/2017/08/28/world/africa/kenya-plastic-bags-ban.html>