



The
Paradox
of Progress

How **Creative Destruction** Works for **You**



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Video Page



The Paradox of Progress

Teacher's Guide

This Teacher's Guide includes the following:

- Suggested Lesson Plan
- Preview Questions
- Key Terms
- Viewing Guide
- Discussion Questions
- Activity
- Quiz
- Enrichment Activities
- Answer Key

Suggested Lesson Plan

These materials may be used in a variety of ways. For maximum benefit, we suggest the following lesson plan:

- As a class, discuss the Preview Questions and Key Terms.
- Distribute copies of the Viewing Guide for students to use as a note-taking tool during the video.
- Play the video, pausing if needed to facilitate understanding and note-taking.
- Review and discuss answers to the Viewing Guide using the Answer Key as a guide.
- Use the Discussion Questions to spark class discussion, or assign these questions as homework.
- Use the Activity for class discussion, as a small group exercise, or as an individual writing assignment.
- Replay the video as preparation for the Quiz.
- Administer and grade the Quiz using the Answer Key as a guide.
- Optional: Assign one or more of the Enrichment Activities as homework.

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Preview Questions

(These are meant to be read aloud by the teacher.)

1. What is a typewriter? Do you know anyone who has one?
2. Here is an example of a paradox (a statement or idea that seems self-contradictory): “I must be cruel to be kind.”—William Shakespeare, *Hamlet*. Can you think of another example?
3. What is progress?
4. What do you think “creative destruction” means? What does it mean to create or be creative? What does it mean to destroy or be destructive?

Key Terms and Definitions

Creative destruction – the process of existing products, professions, companies and even entire industries becoming obsolete and dying out as a result of technological advances, including the development of new or improved products

Entrepreneur – a decision maker who assumes the risk of trying innovative approaches and products and pursuing projects in the expectation of realizing profits. A successful entrepreneur’s actions will increase the value of resources.

Obsolete – no longer in general use; out of date

Paradox – an apparently self-contradictory (even absurd) statement which, on closer inspection, is found to contain a truth reconciling the conflicting opposites

Progress – advancement; the development of an individual or society in a direction considered more beneficial than and superior to the previous level

Name: _____

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The Paradox of Progress Viewing Guide

1. _____ happens when businesses find ways to do things better or cheaper—and put others out of business.
2. When the _____ replaced the typewriter, the millions of people who made them, used them or repaired them lost their jobs.
3. Countries that have allowed new business to replace old ones have grown more _____.
4. People see the benefits of new and better products, shorter work weeks, better jobs, and _____—all caused by creative destruction.
5. Today, FedEx is the largest single employer at its headquarters in _____.
6. With over 650 aircraft, FedEx operates the largest _____ in the world.
7. “When you’re dealing with something this large, if you don’t have _____, it’s gonna fall apart.”
8. “Employees out there are what we consider _____.”
9. In just _____, cargo from every plane is completely unloaded, sorted, reloaded and sent back into the night.
10. In the Global Operations Center, specialists manage one of the largest civilian networks of _____ on the planet.
11. FedEx is driven by _____.
12. FedEx crews load more than 130 planes in just over _____.
13. Creative destruction isn’t about losing jobs...it’s about trading old ones for _____.

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Discussion Questions

1. Is the phrase “creative destruction” a paradox? Explain.
2. What products have been invented since you were born? What products or services have become obsolete since you were born? What products or services do you think will become obsolete in your lifetime?
3. Who is Fred Smith? What was his “wacko” idea?
4. Was FedEx a guaranteed success? What if Fred Smith had been wrong? What if no one had wanted the service FedEx was providing?
5. What other inventions had to come first, in order to make overnight air freight possible?
6. What do people mean by “thinking outside the box”? How is Fred Smith’s idea for FedEx an example of this?
7. What do you think motivated Fred Smith to come up with the idea for FedEx?
8. If Fred Smith hadn’t come up with the idea for FedEx do you think someone else would have? Would we have overnight air freight delivery today? If yes, what makes you so sure?
9. Have you or your parents ever used FedEx? Why?
10. What do you think are the critical factors in FedEx’s ability to unload, sort, reload and deliver such a huge volume of packages in such a short turnaround time?
11. At the FedEx Super Hub, what is “the matrix”?
12. Would you enjoy working at FedEx headquarters? Why or why not?
13. “FedEx is driven by information.” What does this mean?
14. Who lost jobs as a result of FedEx? What kind of jobs? What types of jobs were gained? Does anyone else gain? Who? Why?
15. What is creative destruction? What are some examples of creative destruction?
16. What happens to the people who were employed in obsolete businesses?

The Paradox of Progress **Discussion Questions, continued**

17. How does new technology benefit you?
18. Do the benefits to consumers outweigh the negative results of creative destruction?
19. Does creative destruction make us better off or worse off? Explain.
20. Would you be willing to give up some modern technology if it meant keeping existing companies in business? If so, what would you give up? If not, why not?
21. What role, if any, do you think government should play in the process of creative destruction?
22. Should the government have banned the computer to protect jobs in the typewriter industry? What if you had been employed in that industry—wouldn't you have wanted the government to protect your job? What would have happened—what would life be like today—if government had protected those jobs in the typewriter industry? What might have been the unintended consequences of government protecting those jobs?
23. If government tries to protect producers, what happens to consumers?
24. What jobs were lost as a result of the availability of digital cameras? What jobs are being lost as a result of the development and use of GPS?
25. Do you think government should limit what we can do on our smart phones—to protect digital camera makers and GPS manufacturers? Explain.
26. When, if ever, would it be appropriate for government to step in to prevent job losses due to creative destruction?
27. Can anyone accurately predict what innovations and inventions will happen in the future? Can government do this? Should government act on those predictions? Why/why not?
28. Should government try to predict which innovations will create more jobs than they cost? How would anyone be able to determine that without knowing what consumers would prefer? How else could that be determined? How is it usually determined now?
29. Should government be in the business of deciding what businesses should stay and which should go? Should it predict which technology, products, or services consumers will want, or is that the role of the free market? Explain.

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Activity:

Who chooses? Who benefits? Who pays? What's fair?

[These four questions can be a useful tool for evaluating any policy or system. Posing the questions is a great way to stimulate critical thinking.]

Use the following questions as a springboard for class discussion, a small group exercise, or an individual writing assignment.

When creative destruction happens--

- Who chooses which businesses succeed and which fail?
- Who benefits from creative destruction?
- Who pays for innovation? (Pays should be interpreted broadly to include any costs/harm.)
- Is creative destruction fair?

When government interferes with creative destruction in an effort to save jobs—

- Who chooses which businesses succeed and which fail?
- Who benefits when creative destruction doesn't happen?
- Who pays for innovation that doesn't happen? (Pays should be interpreted broadly to include any costs/harm.)
- Is government blocking creative destruction fair?

Name: _____

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The Paradox of Progress Quiz, page 1

1. A seemingly absurd or self-contradictory statement or proposition that is or may be true is:

- A) Obsolete
- B) A paradox
- C) An entrepreneur
- D) Progress

2. Which of the following is a benefit of creative destruction?

- A) New and better products
- B) Better jobs
- C) Higher living standards
- D) All of the above

3. Most creative destruction was caused by _____.

- A) Inventors and entrepreneurs
- B) Government agencies
- C) Scientists
- D) Natural disasters

4. Fred Smith is the founder of _____.

- A) FedEx
- B) UPS
- C) Boeing
- D) Amazon

5. FedEx has over _____ cargo aircraft in its fleet.

- A) 14
- B) 90
- C) 130
- D) 650

Name: _____

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The Paradox of Progress Quiz, page 2

6. The FedEx Super Hub is in _____.
- A) Atlanta, Georgia
 - B) Houston, Texas
 - C) Memphis, Tennessee
 - D) Little Rock, Arkansas
7. The system that sorts packages in the FedEx Super Hub is called _____.
- A) The matrix
 - B) The cargo
 - C) The controller
 - D) The terminal
8. In just _____, cargo from every plane is completely unloaded, sorted, reloaded and sent back into the night.
- A) 90 minutes
 - B) 6 hours
 - C) 12 hours
 - D) 24 hours
9. FedEx changed _____ from a rare event to an everyday occurrence.
- A) Passenger air travel
 - B) Progress
 - C) Air freight
 - D) Typewriter usage
10. A decision maker who assumes the risk of trying innovative approaches and products and pursuing projects in the expectation of realizing profits is:
- A) An entrepreneur
 - B) Guaranteed to succeed
 - C) Afraid of failure
 - D) None of the above

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Enrichment Activities, page 1

1. *Research/Report:* Think of a business that was started during your lifetime. Research and report on the company. Include the following in your report: Who benefited from the new business? Did it offer a product or service that was significantly different from what had been available? How profitable is the business? How many people does it employ? Did it cause any older companies or occupations to decline or become obsolete? If so, what were they? Present your findings as an oral or written report. Be sure to cite your sources.
2. *Essay/Discussion/Debate:* Is creative destruction good?
People whose jobs have become obsolete have the same intentions and goals as people who happen to work in rising industries. Should money be a reward for good intentions, or should it be a method of signaling to people which products are desired and which methods of production and uses of resources are most efficient? If it's the former, who would have to judge people's intentions, and how would that be done? In a market economy, who is the judge of whether a product is helpful or no longer helpful, and on what basis?
3. *Think/Pair/Share:* Rather than trying to hold back progress, what are some ways we could help people who lose their jobs as a result of creative destruction? Discuss ideas within your group and select the three best ideas to share with the class.
4. Create a timeline of products or services that have replaced other products through creative destruction. Some areas you might want to explore are communication, transportation, or entertainment.
5. Research Fred Smith, the founder of FedEx, and write a biography of him.
6. Research the origin of the term creative destruction and report your findings to the class.

The Paradox of Progress **Enrichment Activities, page 2**

7. Survey students in your school to find out if they would be willing to forego new technology, jobs, and services that lead to the loss of existing jobs. Then conduct the survey again (with different students), this time explaining creative destruction before asking the question. What did you find? Report your findings to the class.
8. Draw a political cartoon about creative destruction.
9. Develop a slideshow you or your teacher could use to teach other students about creative destruction. Be sure to include the positives and negatives, and to use examples.
10. Conduct a classroom debate on the topic of creative destruction. Begin by having students choose whether they want to argue on the side in favor of or against the following proposition:
Government should limit creative destruction in order to save jobs.

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Viewing Guide Answer Key

1. Creative destruction
2. personal computer
3. productive and richer
4. higher living standards
5. Memphis, Tennessee
6. cargo airline
7. teamwork
8. industrial athletes
9. six hours
10. satellites and computers
11. information
12. 90 minutes
13. new ones

Quiz Answer Key

1. B) A paradox
2. D) All of the above
3. A) Inventors and entrepreneurs
4. A) FedEx
5. D) 650
6. C) Memphis, Tennessee
7. A) The matrix
8. B) 6 hours
9. C) Air freight
10. A) An entrepreneur

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