

DESIGNING Green Communities



Design Thinking

for a Better World



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Contents

What is Design Thinking?	4
The Design-Thinking Process	6
Empathize	8
Define	10
Ideate	12
Prototype	14
Test	16
Reflect	18
PROJECT Increasing Pollution	20
CASE Effects of Marine Debris on Leatherback Sea Turtles	22
CASE Treating Birds Impacted by Oil Spills	23
CASE Effects of Climate Change on Family Fisheries	24
DESIGN THINKING IN PRACTICE Reducing Pollution	26
PROJECT Impact of Non-renewable Energy	28
CASE Effects of Burning Coal on Air Quality	30
CASE Effects of Oil Sand Tailings Ponds on Migrating Ducks	31
CASE The Dakota Access Pipeline and the Standing Rock Sioux Reservation	32
DESIGN THINKING IN PRACTICE Promoting Renewable Energy	34
PROJECT Large Ecological Footprints	36
CASE Effects of Urbanization on Birds	38
CASE Deforestation and Habitat Loss	39
CASE Increasing Waste in Communities	40
DESIGN THINKING IN PRACTICE Reducing Our Ecological Footprint	42
What's Next for Design Thinking?	44
Learning More	45
Source Links	45
Glossary	47
Index	48
About the Author	48

What is Design Thinking?



Do you want to improve the world around you? Design thinking can help you to become a change maker!

Design thinking is a step-by-step process to solve real problems faced by real people. It starts with empathy. Empathy means understanding the feelings and perspectives of others. Empathy helps you focus on people's unique problems and develop solutions for them.

Green communities are environmentally friendly and have **green spaces**, or spaces with plants and trees. You can increase the amount of green space in your community by planting trees.

Focus on the User

The user is the person, group, or community who is facing a problem. A solution focused on the user is more likely to succeed. Design thinkers may fail on their first attempt to solve a user's problem—that's okay! Use what you learned to improve the next version of the design solution. This is called **failing forward**.

We are all responsible for protecting the global environment.



Where Did Design Thinking Come From?

Problem solvers have used design thinking for many years, though they called it different names. Today people of all ages and backgrounds use design thinking as a guide to becoming change makers in their communities.

Community Connections

Everyone is part of a community. A community is a place where people live, work, and play. A community can be small, like your neighborhood, or large, like your country or even the world! This book is about green communities, so you will learn how to use design thinking to come up with solutions that help communities be environmentally friendly.

Green community members “think globally” and “act locally.” This means that they think about the health of the entire planet and take action in their own communities to fix environmental issues. People in green communities try to live in ways that minimize, or lessen, their impact on the environment. People in green communities improve and protect the environment closest to them. In turn, this helps protect the global environment that we all share.

Simon Jackson - Saving the Spirit Bear

Meet a
**CHANGE
MAKER**



Design Thinking in the Real World

Simon Jackson saw his first bear while camping at the age of 7. He learned that one type of bear, the spirit bear, was threatened with **extinction**. People hunted them for sport, and their habitat was being destroyed by activities such as **deforestation**. He studied the problem facing the bears and realized that they needed a habitat safe from hunting and logging.

When he was 13, Simon started the Spirit Bear Youth Coalition. He talked to students, politicians, and environmentalists to raise awareness about the problem that the spirit bears were facing. His campaign connected with more than six million people in 87 countries!

He asked people to protect the bears from hunting and habitat destruction. As a result of his work more than two-thirds of the spirit bear's habitat in British Columbia, Canada, is now protected.

The spirit bear is white, but isn't a polar bear! It is a black bear that has a rare **genetic** trait that makes it white instead of black.



The Design-Thinking Process

Design-Thinking Steps

The design-thinking process is a set of steps that guides problem solving. There are different versions of the process, but they all begin with empathy and put the user's needs first.



Observing or interacting with animals can help you develop empathy for them.



After completing all 6 steps, go back to the beginning and use what you learned to improve the next version of your prototype.

These steps are **iterative**, which means any of the steps can be repeated as you learn more about what works for the user. At each step, make improvements to your solution.

This book will guide you through the steps of the design-thinking process. We will review real-world case studies and introduce real change makers who are helping to protect the environment. Then you will design your own user-centered solutions to make your community greener.



Design thinking is a collaborative process. By working with others, you can approach a problem from many different perspectives, or points of view.



Mindset Tips

Listen up

Remember that the user has a story to tell, so listen closely.

Dig deeper

If you don't understand something, ask questions.

Take turns

Let everyone have a chance to voice ideas and ask questions.

Get distracted

Creative ideas often come when you least expect, such as on a walk, during a game, or when you're daydreaming.

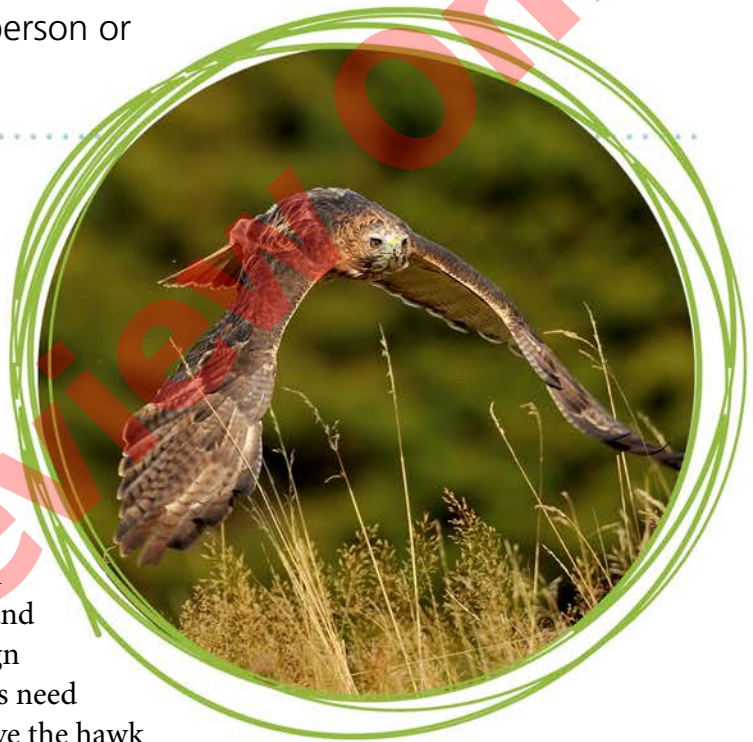
Be brave

Don't let shyness prevent you from contributing your ideas.

What Is Empathy?

Empathy is the ability to understand the feelings and perspectives of others. To do this, you need to gather information about someone's feelings, beliefs, values, experiences, viewpoints, and needs. Empathy is sometimes called "need finding." A need is any requirement—physical, cultural, or social—that a person or group has.

What is an example of a need related to green communities? In order to survive, hawks need mature trees and open fields. Hawks help **urban** environments by eating rodents. Often as cities expand, trees are cut down and open fields become neighborhoods. A design thinker might do research to learn about the hawks' needs and the problems they face. The design thinker might identify that hawks need a safe habitat and work to preserve the hawk habitats in their community.



Hawks depend on trees and fields to hunt for food.

Why Is Empathy Important?

Empathy is important because it helps you focus on finding solutions that meet the specific needs of your user. Empathy helps the design thinker to see the problem from the user's point of view. The best solutions result from truly understanding the user's perspective.

Sometimes users have a problem but aren't able to think of a solution. Other times, people know the solution they need, but they aren't being heard by the people who create the solutions. In either case, empathy helps you identify their needs.

How to Empathize

Develop empathy for your users by learning about them.

Immerse yourself in their lives, **engage** with them, and **observe** their lives in action. For example, Sean could spend time with fishers on their boats to see how they work with fishing line, and ask them questions about the challenge they face. He could read or watch information about risks to marine animals or volunteer at a rescue organization that helps marine animals injured by fishing line. You can use more than just words to learn about your user. You or the user can make drawings, take photos, record quotes, tell stories, draw maps and other images, and visit special locations in the community.

These nets were abandoned and now present a risk to birds and animals.



Sean Russell - The Stow It-Don't Throw It Project

Empathy in the Real World

When Sean Russell was 16 years old, he worked at a marine laboratory near his home in Florida. He saw how dolphins and other ocean wildlife were hurt when people throw their fishing line into the ocean. As a result of his empathy for marine wildlife, Sean started the Stow It-Don't Throw It project.



Sean Russell works to prevent marine mammal injury by fishing line.



This dolphin was caught in fishing line and has almost lost its tail.

Sean learned that fishing line takes up to 600 years to decompose and that individual fishers had no way to dispose of it on their boats. As a result, fishers were throwing the nets into the ocean, instead of bringing them to shore for disposal. To help solve this problem, he designed a fishing line recycling bin out of recycled tennis ball containers so fishers could safely get rid of fishing line. Through this program, Sean inspires youth to give out fishing line recycling bins and start their own marine conservation projects.

Sean's empathy for the marine environment and for fishers led him to create a unique solution that addressed a problem in his community.

Sean Russell's innovative solution



Meet a
**CHANGE
MAKER**

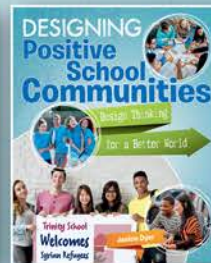


Become a change maker in your community through design thinking! Design thinkers are problem solvers who try to understand a problem from the perspective of the person experiencing it. This guiding principle leads to solutions that fit the user best, not the designer. The design-thinking process inspires empathy, collaboration, and innovative thinking. Each title in this unique series features case studies related to social change and engaging hands-on learning.

Designing Green Communities

People in green communities try to lessen the impact they have on the environment where they live. The combined efforts of green communities help protect the global environment we all share. This introduction to the design-thinking process shows how to create environmentally sustainable practices in your community. Finding ways to make these options accessible to everyone can also lead to solutions to big issues—such as limiting the use of non-renewable energy.

TITLES IN THIS SERIES



Guided Reading: W



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