



**Special  
Olympics**  
Washington



# Empowering Young Learners Through STEM, Literacy, and Sport



# About the Partnership

Special Olympics Washington and Kid Spark Education have teamed up to create a joyful, hands-on curriculum for Pre-K–1st Grade learners that helps children build STEM and literacy skills, explore inclusive sport, and develop empathy through invention and play.

## Missions:

**Special  
Olympics**  
Washington



### Special Olympics Washington

Empowering individuals with intellectual disabilities through sport, friendship, and community.



**KIDSPARK**  
E D U C A T I O N




### Kid Spark Education

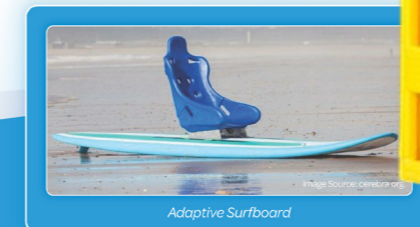
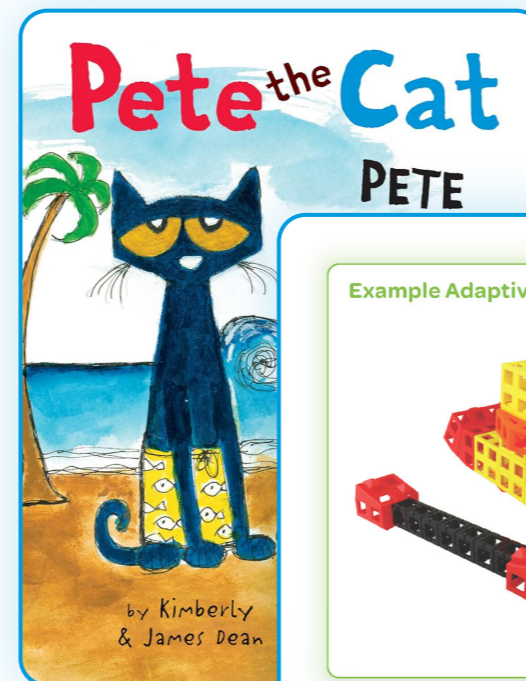
Helping all children, especially those from underserved communities, to learn and love STEM.

# An Inclusive Approach to Early STEM & Literacy

Grounded in **Universal Design for Learning (UDL)**, the curriculum ensures every child has multiple ways to learn, communicate, and participate. Lessons are adaptable, developmentally appropriate, and inclusive of diverse learning styles and settings.

## UDL Promotes:

-  **Engagement** - motivating and sustaining interest.
-  **Representation** - presenting content in varied ways.
-  **Action & Expression** - offering options to demonstrate understanding.



STORYTIME INVENTING  
**Invent an Adaptive Surfboard**  

PRE-K ACTIVITY GUIDE

**STEP 01: READ**  
*Pete the Cat: Pete at the Beach*  
by Eric Litwin



**Literacy Focus**

**VOCABULARY**  
A wave is water that moves in the ocean. It gets tall, curls over, and splashes on the beach.

**SOUND AWARENESS**  
Wave has a silent e.  
The "e" makes "a" say /ā/.  
Notice the words below that have a silent e.  
Say each one aloud.

 RAKE  TAPE

**STEP 02: LEARN & EXPLORE**  
An adaptive surfboard is a special board that helps someone balance, and stay safe while surfing. Learn about its different parts.



**CHAIR**  
The chair helps a person sit safely and not fall while surfing.

**PADDLE**  
The paddle helps move and turn the surfboard. You hold it and push the water to go where you want.

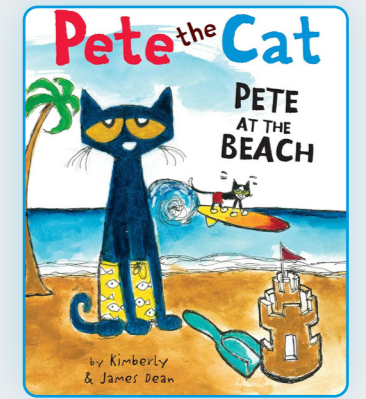
**SURFBOARD**  
The board is the big, flat part that floats on the water. It holds the person and the chair.



# How It Works

## Step 1 - Read

Educators begin with a read-aloud of a children’s book that introduces a sport-related or inclusion-based theme. These stories help build early literacy skills, spark curiosity, and set the stage for deeper exploration.



## Step 2 - Learn & Explore

Students are introduced to a foundational STEM concept alongside a real-world technology or innovation that makes sport more inclusive—for example, adapted equipment, accessible tools, or thoughtful design features. This helps students make connections between STEM and the world around them.



## Step 3 - Invent

Using materials from Kid Spark Education’s Early Inventors STEM Lab, students design and build an invention inspired by the book and STEM concept. Educators guide students through the engineering process, encouraging collaboration, creativity, and reflection as they share their ideas and solutions.



# Built on the Young Readers Program

This curriculum extends the foundation of Special Olympics Washington's **Unified Young Readers Club**, which uses children's books to promote social-emotional learning and inclusive values.

Each lesson begins with a story and builds toward a hands-on invention experience that supports communication, creativity, and connection.



# Supporting Social-Emotional Learning (CASEL-Aligned)

The curriculum supports all five CASEL competencies through storytelling, collaboration, and invention:

- Self-Awareness
- Social Awareness
- Relationship Skills
- Responsible Decision-Making
- Self-Management

These skills are embedded in classroom conversations, invention challenges, and group sharing.



# The Power of STEM + Literacy

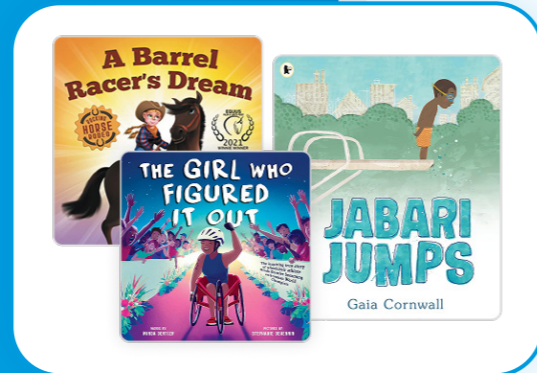
**This curriculum promotes both academic and personal growth by:**

- ⚙️ Building vocabulary and comprehension
- ⚙️ Strengthening problem-solving and design thinking
- ⚙️ Supporting spatial awareness and fine motor development
- ⚙️ Encouraging perseverance and collaboration
- ⚙️ Fostering early STEM identity and confidence



# Getting Started

To implement the curriculum, educators will need a few key components—each designed to support hands-on, inclusive learning.



## Kid Spark Education's Early Inventors STEM Lab

A hands-on set of building materials for early engineering & invention.

## Curated Book List

Storybooks selected to spark curiosity & support SEL.

## Lesson Plans

Simple, flexible guides with step-by-step activities.

## Training & Support

Onboarding and ongoing support to help educators launch & sustain the program.



# Contact & Program Info

Ready to bring inclusive STEM learning to your school or afterschool program?

[kidsparkeducation.org/contact](https://kidsparkeducation.org/contact)



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## EARLY INVENTORS STEM LAB

1 Design to support the 4- to 6th Grade levels.

2 Access curriculum and lesson materials:

<https://www.kidspark.org/teachers>  
**NOTE:** For a lesson to be eligible for support, it must be a lesson plan that aligns with the standards provided in each topic.

3 Explore professional learning resources:

<https://www.kidspark.org/professional-learning>

4 Order engineering materials:

<https://www.kidspark.org/engineering-parts>



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## STEADY INVENTING

# Invent an Adaptive Bicycle



ACTIVITY GUIDE

### STEP 01: READ

Use the Flip-A-Page with the Flip-A-Page!



#### Literacy Focus

##### VOYABULARY

Use the Flip-A-Page with the Flip-A-Page!

##### EDUCATIONAL GOALS

Use the Flip-A-Page with the Flip-A-Page!



##### GOALS - 1 - 2 - 3

Use the Flip-A-Page with the Flip-A-Page!

### STEP 02: LEARN & EXPLORE

Read the book and explore the different types of adaptive bicycles. Learn about the different parts of an adaptive bicycle and how they work.



#### ADAPTIVE BIKE

The different types of adaptive bicycles and how they work.

#### HAND CYCLES

Use your hands to move forward.

#### SEAT CUSHIONING

The seat cushioning is made of foam.

STEADY INVENTING

## Invent an Adaptive Bicycle

STEADY INVENTING

# Invent an Adaptive Bicycle

ACTIVITY GUIDE

NATIONAL GEOGRAPHIC

### Overview

In this lesson, students will explore the history and importance of adaptive bicycles and how they are used to help people with disabilities. They will also learn about the different types of adaptive bicycles and how they work.

### Learning Objectives

- 1. Understand the history and importance of adaptive bicycles.
- 2. Identify the different types of adaptive bicycles and how they work.
- 3. Explain the importance of adaptive bicycles for people with disabilities.
- 4. Describe the different parts of an adaptive bicycle and how they work.
- 5. Create a simple adaptive bicycle using recycled materials.

### What You Will Need to Know Before Starting

Students should have a basic understanding of the different types of adaptive bicycles and how they work.

### What You Will Need to Know After Starting

Students should be able to explain the importance of adaptive bicycles for people with disabilities.

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Students should be able to create a simple adaptive bicycle using recycled materials.



## STEP 03: INVENT

How to Build the Example Adaptive Bicycle



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-  Self-Awareness
-  Social Awareness
-  Relationship Skills
-  Responsible Decision-Making
-  Self-Management

