#### Active Learning Stations: Notes for Bike Safety Education with Elementary Students

© Bike West Hartford, Inc., updated 15 May 2024, with Creative Commons BY-NC-SA license Anyone can download, edit your own, and freely share, with credit to: BikeWestHartford.org/safety

**Objective:** We designed four **active-learning stations** to engage upper-elementary students (ideally 3rd grade, ages 9-10) with ten safety reminders in our two-page English-Spanish <u>Bike Safety Guide</u>. We offer this curriculum as an alternative to the *school assembly lecture model* (where adults tell students to be safe, but meaningful learning is minimal) and the *full-scale hands-on bike instruction model* (where bicycles are integrated into the physical education curriculum for one week, but many schools lack resources to rent or purchase a bike fleet, or lack staffing and training to make it happen). As an all-volunteer non-profit organization, we have freely shared our curriculum for others to build on.

**Credits:** CT Department of Transportation and the Capitol Region Council of Governments awarded a \$5,000 <u>Active Transportation Microgrant</u> to Bike West Hartford Inc. in April 2024 for this project. BWH volunteers: Jack Dougherty, Richelle Efland, Hector Correa, Ethan Frankel, Tom Martin, Eric Riotte. Thank you to partners: Charter Oak principal Georgina Rivera, BiCiCo.org community bike shop, family of Eva Luna and Espy for permission to photograph. Resources we consulted: Federal Highway Administration, <u>Bicycle Safer Journey</u> videos; Bike WalkCT "Bicycle Education Curriculum for 4th Grade Elementary Students," 2019, print only.

#### Staffing required:

Minimum: 4 trained adult volunteers, one per learning station Ideally, more volunteers: 1 intro/timekeeper; 2 more at helmets, 1 more at other stations

#### Time required:

**At school:** 3 minute intro + (8 min x 4 stations) + 3 min conclusion = about 40 minutes per class Example: 40-minute interval x 3 3rd grade class of 24 students = 120 min or 2 hrs (9-11am) Small groups (6) simultaneously rotate through four stations (ideally, helmets before scooters)

$A \rightarrow$	$D\downarrow$
B↑	C ←

**At festival:** Designate time windows for small groups of walk-ups to work their way through a sequence of four learning stations, probably finish in 20 minutes (because they advance after completing station).

$A \rightarrow$	$B \rightarrow$	$C \rightarrow$	D
-----------------	-----------------	-----------------	---

#### Introduction (and timekeeper for school events)

- Today we'll learn how to be safe & have fun with bikes, and choose a free helmet to take home

- For school events: Sound off 1-2-3-4 to form groups to start at one of the learning stations. When the bike bell rings, your group will rotate to the next station to complete all four. (Bring clipboard and bike bell to keep track of time, roughly 7-8 minutes per learning station.)

- For festival events: Youth walk up to the first station and proceed as a small group to each station.

- All: After last station, hand out Bike Safety Guide for youth to bring home to discuss with family.

## A) Helmet Station

Purchase bike helmets wholesale from community bike shop (\$12-16 each Kidzamo, Munchkin, Aerius)

- Cut "head sizers" on 2-inch posterboard strips, with colored masking tape for overlapping ranges (cm)

- Unpack helmets and arrange by size with colored masking tape on back & markers for names

- Optional: purchase 1x2 inch "reflective" holographic stickers for adults to place on back of helmets

Colored masking tape	Helmet range (in cm)	Helmet range (inches)
Red	52-56	20.4 - 22
Red + Yellow	52-58	20.4 - 22.8
Yellow	54-58	21.25 - 22.8
Green	58-62	22.8 - 24.4
Blue	60-63	23.6 - 24.8



Photos: Helmet station prep, posterboard head-sizers with colored masking tape, reflective stickers

Before students arrive, volunteers will set up Helmet Station sign, helmets, and items on long table:

- Bring two-sided helmet fit card, one copy of Bike Safety Guide for students to read aloud

- Optional: bring additional fun stickers for students to decorate helmets, especially plain white helmets *Reminder: Be mindful of differences in student size, hair length and style, headscarves, etc. Instead of saying "You have a small (or big) head," encourage youth to "Find a helmet marked with red/yellow/green/blue tape" and remind all that "Everyone is different!"* 

Volunteer guide (ideally two adults at this station):

- Today everyone will choose a free helmet and make sure it fits!

- Q: Who will read #1? *Does your helmet fit? Wear it buckled and snug, not slipped back.* Q: What's wrong in this (helmet) photo? What's a safer way? (2 finger-fit on forehead)

- Q: Let's find your helmet size with this head measuring ring. Everyone is different! Volunteer measures color range. Go choose a helmet with X color tape and try it on!

- Volunteers check helmet fit, help adjust straps, then student writes name on colored tape Q: Check your friend: Is their helmet buckled and snug?

- Optional: if some students finish quickly, offer fun stickers to decorate while you help others



Photos: Helmet Station

## **B) Bike Check Station**

Before students arrive, volunteer will set up Bike Station Sign and bring:

- our demo bike with very low adjustable seat post, air pump, appropriate tool to loosen brakes, and rag or glove to remove and restore chain, reflectors and bike light. (We used a Brompton.)

- two-sided predictable card, two-sided visible card, one Bike Safety Guide for students to read aloud

### Volunteer guide:

- Today we will test our bike fit and check bike ABCs before each ride!
- Q: Who will read #2? *Does your bike fit? Sit on your seat and touch the ground with both feet.* Q: Who will check if this bike fits? (Hold bike, ask student to sit on high seat; lower seat)
- Q: Who will read #3? *Check your bike ABCs: Air, Brakes, Chain. Tell an adult if a problem.* (Ask students to turn away, then deflate a tire, loosen brakes, and remove chain)
  - Q: Check your bike ABCs. Is there anything wrong with this bike?

When a student notices a flat tire, ask a student to help pump it back up.

When a student notices a loose brake handle, ask a student to help tighten up.

When a student notices chain is off, ask a student to put it back with rag/glove

- Q: Who will read #4? *Ride with an adult or older family member if you are younger than 10 years old or on a busy road.* (There is no photo or activity for this item.)

- Q: Who will read #5? Be visible and predictable. Help drivers see where you are going.

- Q: What's wrong in this photo? (show unpredictable) What's a safer way? (bike straight)
- Q: What's wrong in this photo? (show not visible) What's a safer way? (reflectors & light) (on demo bike, point to reflectors, and light if biking at night)



Photo: Bike Check Station

# C) Tabletop Station

Before students arrive, volunteer bring Tabletop Station sign and set items on short table

- 18 x 24 inch road layout on foam board
- mini toys: 2 finger bikes by Tech Deck, 2 toy trucks, 2 toy people walking
- one copy of Bike Safety Guide for students to read aloud

Volunteer guide:

- Today we will use the mini toys to show how to bike safely on roads!
- Q: Who will read #6? Ride on the right side of the road, the same direction as traffic.
  - Q: Who will show us how to do this with the toys? (Also, watch out for parked cars.)
- Q: Who will read #7? If roads are too busy, ride bike on the sidewalk, or walk it where required.
  - Q: Who will show us how to do this with the toys?

- Q: Who will read #8? Stop at intersections and anywhere with cars, look left-right-left, then cross when safe.

Q: Can we all do this together and show with our heads? I'll move bike to stop sign.

- Q: Who will read #9? Use hand signals. Point your arm to turn left or right, or down to stop.

Q: Can we all do this one together with our hands? I'll move the bike to stop sign.

- Q: Who will read #10? When passing a walker or other bike rider, ring your bell or say "Passing on your left."

Q: Who will show us how to do this with the toys?

Option to rephrase for advanced learners: How would you show a younger child how to...?



Photos: Tabletop station, with mini toy finger bikes, trucks, people, <u>18x24 map layout</u> on foam board

## **D) Scooter Station**

Before students arrive, volunteer brings:

- Scooter Station sign and at least 1-2 scooters, ideally 5-6 scooters

- two-sided Stop and Turn Arrow card, Red car and Turn Arrow card, one Bike Safety Guide

- for indoor or outdoor scooter activity, mark a reasonable distance (25 feet or more) and place two tennis ball halves to designate start and turning point

- Optional: if outdoors, use sidewalk chalk to mark a reasonable scooter lane width (3 feet) Reminder: Be mindful that some students may not own a scooter or bike, or may never have ridden a scooter or bike, or may need adaptive assistance if not able to stay on a scooter.

Volunteer guide:

- Today everyone can use the scooter to show how to safely stop, look, and turn!

- Q: Who will read #8? Stop at intersections and anywhere with cars, look left-right-left, then cross when safe.

- Q: Who will read #9? Use hand signals. Point your arm to turn left or right, or down to stop.

- Q: Who will listen carefully to my instructions and go first? One at a time, ride the scooter towards me, and show the proper hand signal and look left-right-left when I show either STOP, CAR, or TURN signs, then circle behind me and ride back for the next student to go.

When volunteer shows STOP or CAR sign, student will signal, full stop, look L-R-L When volunteer shows TURN ARROW, student will signal, circle around, back to start If a student forgets a step, ask them to get back in line and try again!

Optional extra challenge: Can you ride straight while turning your head behind to look for cars?

After student circles around volunteer and rides scooter back to start Remind students to ride straight while occasionally looking back to volunteer

When volunteer holds up the CAR sign, student must shout "CAR" when they see it



Photo: Scooter Station – all printouts can be downloaded from https://BikeWestHartford.org/safety

# Conclusion

After students complete last station, congratulate all and ask:

Q: What's something you learned today?

Hand out <u>two-sided Bike Safety Guide</u>, remind youth to write names at top, check the four completed station boxes on the back, and discuss with family members at home.