

K-12 Transportation Lesson Ideas ~ Workshop #2: Highway Safety ~ April 20, 2013

Play computer games

Distraction Dodger <http://www.its.umn.edu/DistractionDodger/>

Gridlock Buster <http://www.its.umn.edu/GridlockBuster/>

PreK /Kindergarten /1st Grade

Learning Objectives

Students will know or be able to:

- 1: Explain the purpose of a map.
2. Identify directions and directional words, i.e. north, south, east and west
3. Observe traffic signs in school neighborhoods while on a walk.
4. Identify various shapes of signs
5. Recognize print in their environment and to explain what print or picture means
6. Identify Michigan on a map

Materials

Paper, pencils, crayons, markers, various colors of construction paper, posterboard, magazines, scissors, glue, pipe cleaners, clay, large traffic signs available in pre-K materials

New Vocabulary

Directional words (east, west, south, north)

map

shapes (triangle, square, circle)

Activity Ideas

- Hold hand to learn about where Michigan and Detroit are located.
- Create own room map and discuss how room flow would be best used for safety, easiest exit route.
- Students will create map signs that would enable safe flow of traffic in the classroom.

Assessment

Large group SWBAT (students will be able to) about ways to change (extend) this activity. Describe their favorite part of this activity, through drawings or articulation.

Grades 1-3

Learning Objectives

1. Students will be able to safely get to the bus or cross the street
2. Write or draw safety rules, use vocabulary words, stop, go, look both ways, map
3. Safety survey
 - i. How many students walk, bus, vehicle
 - ii. Students will develop a safety survey and fill it out with their parents

Possible Activity Topics

- Safest route to get from the classroom to the bus
- Rules for students
- Rules for parents
- Adult supervision
- Educate Parents – workshop
- Students do maps
- Bulletin Board
- Pictures (photos) of students and parents choosing correctly
- Practice Route – Safety Tours
- Create a mock-up of a pedestrian crossing with boxes, stop signs, etc.
- Enrichment
 - Make safety signs
 - Role play
 - Correct safety procedures

Grades 4-5

Learning Objectives

1. Compare/contrast rail and freight transportation
2. Describe and identify types of transportation and transportation engineering
3. Write an action plan to avoid driver distractions and accidents
4. Write an action plan to avoid pedestrian injuries

Grades 6-8

New Vocabulary

MDOT = Michigan Dept. of Transportation

TRAC/Michigan Education Standards Transportation and civil engineering

TRAC Program

Lesson Plan

Learning Objectives (NGSS = National Generation Science Standards)

Students will be able to:

1. Identify velocity force & friction
2. Explain why cars should be built lighter ? (increase fuel efficiency)
3. Identify colliding objects in regards to Newton's 3 Law – Inelastic and Elastic collisions
4. ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

Sample Activities

1. Tell the different types of engineering jobs
2. Internship for summer school to work w/ engineering

Special Needs Ideas: Transportation Lesson

Non-readers

1. Make traffic lights from card board and construction paper and become familiar with what colors mean.
2. Role play do and don'ts of crossing the street. Acceptable and unacceptable behavior and distractions
3. Identify traffic signs such; time, green person, red hand for stop and flashing light

Learning Objectives

1. Explain or identify meaning and color of traffic signs
2. Explain or respond to functional terms (stop, go, slow down, caution, danger, do not enter)
3. Describe acceptable and unacceptable behavior and distractions when crossing the street
4. Identify, understand and avoid the dangers of road rage!

Special Education Post-secondary (18-26 years)

Brainstorm Ideas

Learning Objectives –

DOK Level 2 – Describe cause & Effect of particular events

Level 3 – Identify patterns, events, or behavior

Level 4 - Conduct a project that requires a specifying a problem, designing and conducting an experiment, analyzing its data and reporting results/solutions

Activities to explore

Discussion of signs, safety behavior in car, taxi, bus, distractions

Learn safety vocabulary words

Play computer games

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Videotape traffic areas around our school for distractions, safety, etc.