

# Lesson Plan

## ***Lesson Overview: Dragging Incidents on the School Bus***

In the last eleven years over 31 students have been reported in the media as being dragged by their school bus. These 31 draggings have occurred in 18 states with two students losing their lives. Draggings have ranged in distance from a few feet to nearly a mile. It is important to note that many more draggings most likely have occurred across the nation, but were not reported to the major media outlets making these numbers most likely much higher.

School Bus Driving Instructors (SBDIs) should read the recommended materials to prepare them to teach this safety topic to transportation professionals and parents.

Objective: To raise awareness of the national school bus student dragging problem with school bus drivers, attendants, mechanics, and supervisors.

Outcomes: School bus professionals will learn six specific outcomes.

1. The need to report near misses
2. The number of states which have had a student dragged by their school bus between 2004-15
3. Name 5 distractions school bus drivers face in performing their jobs
4. Briefly understand what is Inattentional Blindness
5. How the driver's seat height affects the vision of students exiting the stepwell
6. A student dragging catch phrase to prevent draggings

Materials Needed: PowerPoint presentation titled Student Dragging Incidents Presentation MI Candidate Give Back 2016, the student dragging report titled Dragging Threat – Nearly 20 Years Later: Students Trapped in Doors – A Five Second Cure to Eliminate this Threat by Lawrence and Furneaux, and optional but recommended book the Invisible Gorilla by Chabris and Simons.

Outline of Activities: SBDIs will use a PowerPoint presentation comprised of a mix of lecture and multimedia (~60% of the time), small group discussion and review questions to test participant's understanding (~40% of the time) and explore this topic. The presentation has instructor notes where additional content experience is needed beyond the SBDIs requisite knowledge.

Suggested Activity Duration: 50-75 minutes

School Bus Dragging Facts to Learn and Share:

During this session SBDIs should review with participants important school bus dragging facts, safety tips, and ways their attitudes affect safety on their school bus.

- School buses are the safest form of transportation for getting children to and from school.
- However, between 1991 and 1997 America experienced eight student fatalities as a result of students becoming trapped in handrails while exiting their school bus. The school bus industry responded by accelerating a voluntary recall of 160,000 school buses where a modification to the handrail was needed to prevent this tragedy from reoccurring. Fortunately, these types of dragging incidents have been eliminated through better design and awareness training. However, recent dragging incidents have drawn attention back to the issues surrounding school bus design and driver training.
- From 2004 to 2015, in 18 states, there were 31 reported instances where students were shut in the service door.
- The distances students were dragged ranged from a short distance of less than 20 feet up to nearly a mile. Surprisingly, only two children lost their lives as a result of these preventable events (slide 7).
- New York State transports approximately 2.3 million children to and from school each day on its 50,000 plus school buses. Transporting a higher percentage of children compared to many other states, along with a relatively sophisticated incident tracking system could help explain why the total count of incidents in New York State is the highest in the nation.
- All of these dragging events have one thing in common; they are 100% preventable. Driver distraction during the loading and unloading process is one of the most dangerous challenges a

- school bus driver faces.
- Managing distraction during this critical time can mean the difference between a student arriving home safely and a heart-breaking service door incident occurring.
  - Report all “Near Misses” of students getting injured or caught in the service door to a supervisor and NYSED (slide 8).
  - Beware of *inattentional blindness* (slide 15) that is an error that occurs resulting from a lack of attention to an unexpected object. People don’t see what they are not expecting to see.
  - People are predisposed to be overconfident in their abilities. This overconfidence can negatively affect safety (slide 16).
  - Looking, but failing to see happens to seasoned veterans when they go through the motions to comply, but inside feel that they will not see anything. We need to look with *fresh eyes* so we can identify things that may be out of place. See the example of the USS Greenville in the presentation (slide 17).
  - Our eyes and depth perception can easily be tricked. We cannot operate on automatic pilot as we will miss important details on our routes and increase our chances for an accident or fatality to occur.
  - Authors Chabris and Simons from the *Invisible Gorilla* explain how people use mental stitching to make sense of the data the brain receives. Sometimes this stitching is accurate, but often it makes assumptions that are incorrect.
  - An example of mental stitching (slide 19) can occur when a driver has performed a task 20 times in the morning, 20 times in the afternoon times 180 days or 7,200 times in one year. Over 15 years, this could amount to 108,000 times without incident. You can see where a driver could *look, but not see!* Instead, they mentally stitch what makes sense to them. In this case, they might have assumed the student has exited the service door area when they had not. But because their students have safely exited their buses over 100,000 times, they may mentally stitch that the area is clear when it is not!
  - There is a significant height difference on most school buses between the driver’s height and the street level that a student must descend to exit a school bus. This height differential requires the driver to not only look to the service door, but also down to the bottom step to ensure a student is not stuck in the service door (slide 20).

- Drivers must instruct their students to clear the service door when exiting the bus. This is an important addition to school bus safety training. The service door can be a danger zone when not monitored by the school bus driver (slide 21).
- Mirror adjustment is a critical and often overlooked items by many school bus drivers and mechanics. Federal Motor Vehicle Safety Standard 111 outlines the requirements that all school buses must meet. Slide 22 briefly discusses the importance of proper mirror adjustment. Note: there is a link to a Rosco mirror video that all instructors should review prior to teaching this lesson at: <https://www.youtube.com/watch?v=Cq03OR8VDzg>
- Tragedy prevention strategies include a five-step process. (1) Scan all mirrors (2) Check the door for passengers (3) Check the crossover mirrors (4) *Check the door once more!* (5) Perform mirror sweep again (slide 23).
- Check the door once more posters (slides 24 & 25) are available from PTSI's website at:  
[https://www.ptsi.org/dl/Check%20the%20Door\\_v4.pdf](https://www.ptsi.org/dl/Check%20the%20Door_v4.pdf) and  
[https://www.ptsi.org/dl/Check%20the%20Door\\_v5.pdf](https://www.ptsi.org/dl/Check%20the%20Door_v5.pdf)

#### School Bus Safety Tips for Students:

- Make eye contact with the bus driver, and wait for the bus driver's signal before crossing the street. "I see you, you see me" is an important phrase to use with small children.
- Walk in front of the bus; never walk behind the bus to cross the street.
- While waiting for the bus, stay in a safe place away from the street.
- Before leaving the sidewalk, look for the flashing red lights and driver's signal is crossing the road.
- Never go near or under the bus to retrieve something you've dropped.
- Be alert to traffic. Check both ways for cars before stepping off the bus.
- *Once you are exiting the bus, deliberately move away from the door to prevent getting caught in the door.*

Resources: Are available from the following links

Kentucky School Bus Dragging

Dragging Incidents on the School Bus Lesson Plan – MI Giveback 2016 –  
Peter Lawrence, Ed.D.

<http://www.nbcnews.com/news/us-news/surveillance-video-captures-school-bus-dragging-young-girl-n360066>

PTSI Downloads

<https://www.ptsj.org/?dp=downloads>

Dragging Threat – Nearly 20 Years Later: Students Trapped in Doors – A Five Second Cure to Eliminate this Threat by Lawrence and Furneaux

<https://www.ptsj.org/downloads/pdf/NYSED%20Dragging%20Article%20-%20PLawrence%20and%20KFurneaux%207-23-2015.pdf>

Invisible Gorilla Book by Chabris and Simons

[http://www.amazon.ca/Invisible-Gorilla-How-Intuitions-Deceive/dp/0307459667/ref=sr\\_1\\_1?ie=UTF8&qid=1452974945&sr=8-1&keywords=invisible+gorilla](http://www.amazon.ca/Invisible-Gorilla-How-Intuitions-Deceive/dp/0307459667/ref=sr_1_1?ie=UTF8&qid=1452974945&sr=8-1&keywords=invisible+gorilla)

M.C. Escher website on illusions

[www.mcescher.com](http://www.mcescher.com)

Rosco Field of Vision

<https://www.youtube.com/watch?v=Cq03OR8VDzg>

Check the Door Once More - version 5

[https://www.ptsj.org/downloads/pdf/Check%20the%20Door\\_v5.pdf](https://www.ptsj.org/downloads/pdf/Check%20the%20Door_v5.pdf)

Check the Door Once More - version 4

[https://www.ptsj.org/downloads/pdf/Check%20the%20Door\\_v4.pdf](https://www.ptsj.org/downloads/pdf/Check%20the%20Door_v4.pdf)

Check the Door Once More - red version

[https://www.ptsj.org/downloads/pdf/Check%20the%20Door%20Poster\\_Red\\_23x18\\_includes%20bleeds.pdf](https://www.ptsj.org/downloads/pdf/Check%20the%20Door%20Poster_Red_23x18_includes%20bleeds.pdf)

Check the Door Once More - white version

[https://www.ptsj.org/downloads/pdf/Check%20the%20Door%20Poster\\_White\\_23x18\\_includes%20bleeds.pdf](https://www.ptsj.org/downloads/pdf/Check%20the%20Door%20Poster_White_23x18_includes%20bleeds.pdf)

Questions regarding this lesson plan? If you have questions regarding this lesson plan or materials, please feel free to contact me (Peter Lawrence) at [plawrence@fairport.org](mailto:plawrence@fairport.org) or by phone at (585) 421-2025.