

# Virtual Teaching Techniques in Driver Education



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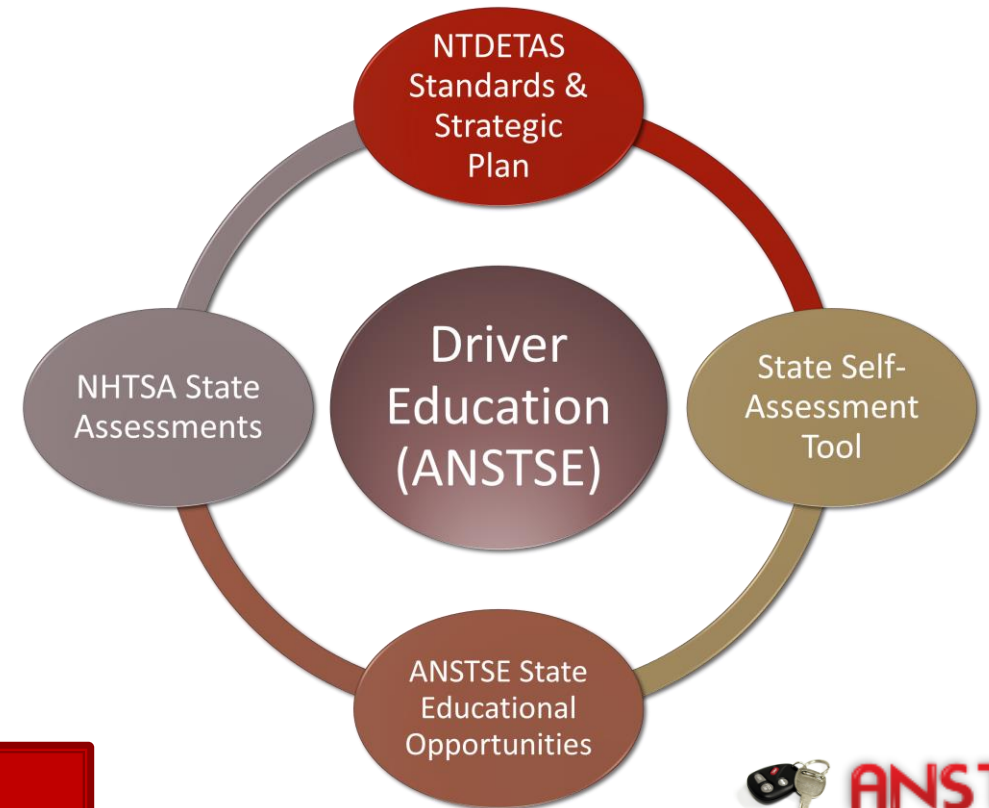
# ANSTSE

Association of National Stakeholders in Traffic Safety Education

- ▶ National Organizations in teen traffic safety.
- ▶ Improve traffic safety education.



- ▶ Supports efforts to improve driver education



# Objectives

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By the end of this presentation, you will be able to:

- Describe blended learning strategies/platforms
- Identify the Challenges and Benefits of virtual training
- Identify distracting mannerisms we use in the virtual setting
- Identify how to set up for virtual instruction
- Plan for technical issues we can face in the virtual setting
- Describe how to use effective questioning techniques in your virtual class
- Describe tools to use in your virtual classroom
- Utilize student activities to engage your virtual class

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# Blended Learning Strategies / Approaches



# What is a Blended Program or Course?

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- A course that combines two modes of instruction for classroom learning, such as online, virtual and face-to-face.
- Has been discussed in the past decade as the future of driver education.
- The future is now!



# Needs to Be Scientifically Based (Does it Work?)

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- ▶ Recent studies at the University of Tennessee and Stanford give us evidence that:
  - a blended learning strategy actually improves learning outcomes by providing a better match between how a learner wants to learn and the learning program that is offered.



# Needs to Be Scientifically Based (Does it Work?)

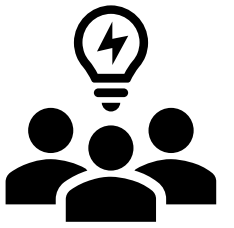
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- ▶ Institute of Electrical and Electronics Engineers Blended Learning Tools and Practices: A Comprehensive Analysis
  - It has been observed that blended learning approaches are effective compared to traditional e-Learning or face-to-face learning





# Activity



- ▶ Break into groups and make a list of what delivery strategies / approaches could be integrated within a blended program.





# Example Elements of a Blended Program

Parent/Guardian seminars

eLearning (pre, post, concurrent)

Virtual learning

Traditional classroom

Non-traditional learning methods\*

Behind-the-Wheel

Observation

Progress meetings with parents

We can't keep doing the same thing and expect different results...

\*computer based/virtual reality (VR)/simulation



# Examples of a Blended Program

- ▶ 45-hour classroom
  - 15 hours in person
  - 15 hours virtual
  - 15 hours online independent learning, such as training through an LMS or CBT (e.g., RAPPT)
- ▶ 45-hour classroom
  - 15 hours virtual/online
  - 30 hours in person



# Example – Michigan

- ▶ Segment 1 (24 hours)
  - 12 hours in person
  - 6 hours virtual
  - 6 hours online independent learning, such as training through an LMS or CBT (e.g., RAPT)
- ▶ Segment 2 (6 hours)
  - 3 hours virtual
  - 3 hours in person

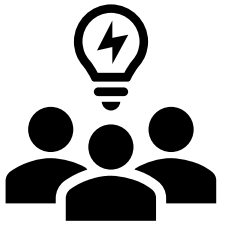




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# Challenges and Benefits of Virtual Training

# Group Activity



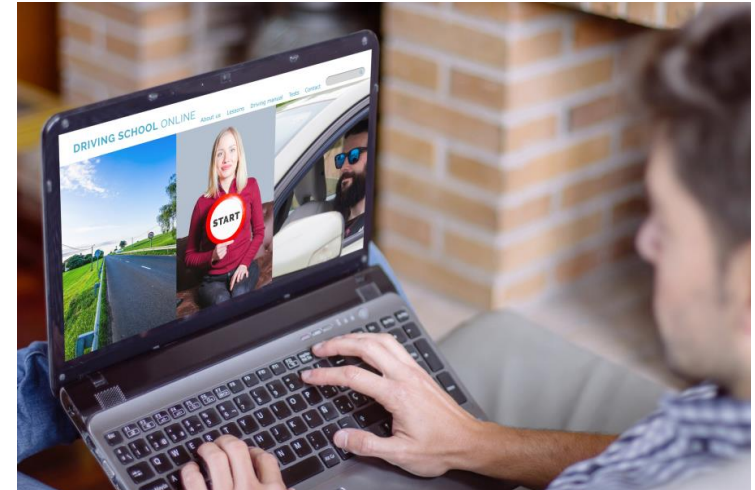
- ▶ Break into groups and discuss:
  - The challenges of Virtual Training
  - Advantages of Virtual Training



# Challenges of Virtual Training

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- ▶ Won't remember everything
- ▶ Won't be able to do student centered activities
- ▶ Won't be able to get feedback on how each student is doing
- ▶ Some students don't learn as well
- ▶ Questioning is too hard

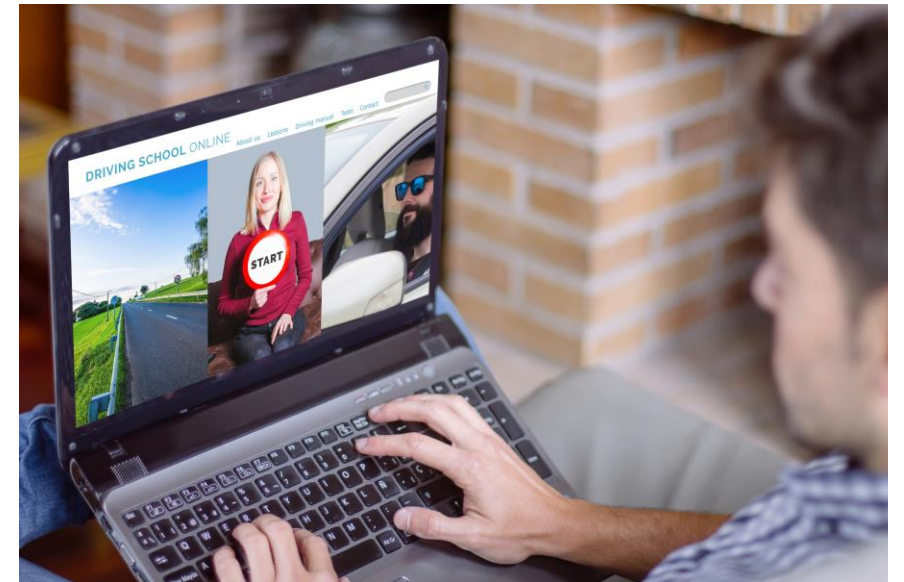




# Benefits of Virtual Training

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- ▶ Greater access
- ▶ Distributive learning
- ▶ Snow days
- ▶ National/State emergency
- ▶ Cost savings



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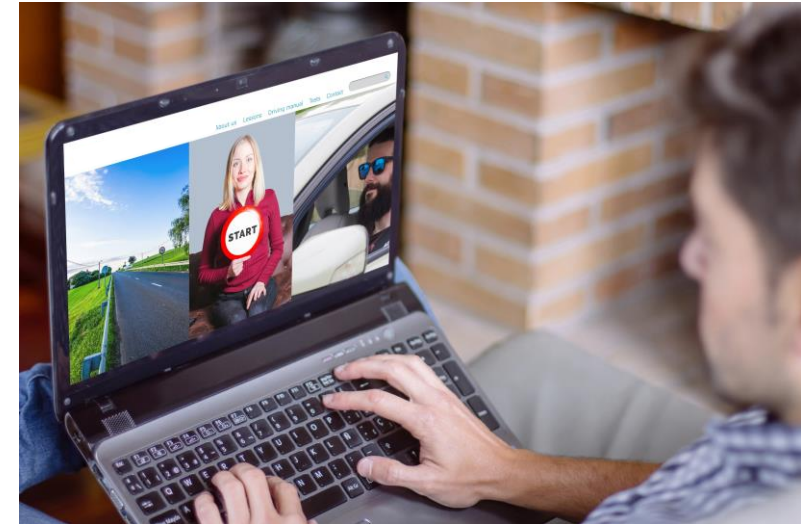
# Distracting Mannerisms in the Virtual Setting (Challenges)

# Virtual Verbal Mannerisms

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## ► Overview

- Distracting verbal mannerisms have always been a challenge in the classroom.
- Since the emergence of the virtual meeting-space, they have become more prevalent or more obvious (grossly overused).
- We are afraid of silence in this virtual meeting-space.





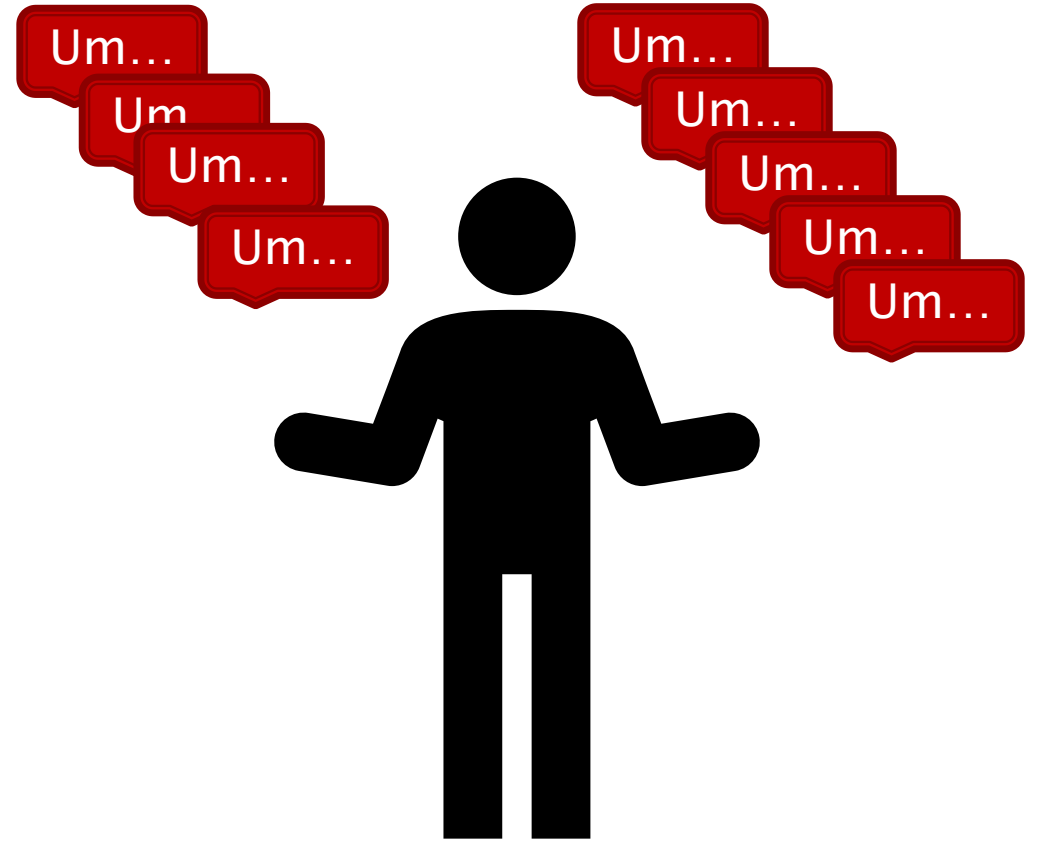
# Virtual Verbal Mannerisms

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## Fillers:

- Um'
- Ah's – different variations
- So
- So anyway
- Anyway
- But anyhow
- Well
- Let's

**REPLACE WITH A PAUSE**



# Virtual Verbal Mannerisms

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## Affirmation:

- Alright
- Okay
- Kay
- “Ay”
- Got it (can be negative)



REPLACE WITH “ASKING – ANY QUESTIONS?”

# Virtual Verbal Mannerisms

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## Uncertainty or Unfamiliar:

- Actually
- Essentially
- In essence
- Basically
- It says here...
- You know/you know what I mean/I mean...

Actually

Always present materials as a “mater-of-fact” and that the information is coming directly from you.

# Virtual Verbal Mannerisms

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## Other Distracting Mannerisms:

- Clicking or ticking of the tongue
- Clearing throat
- Coughing
- Sniffling
- Touching your face
- Eating



# Solutions for Verbal Distractions

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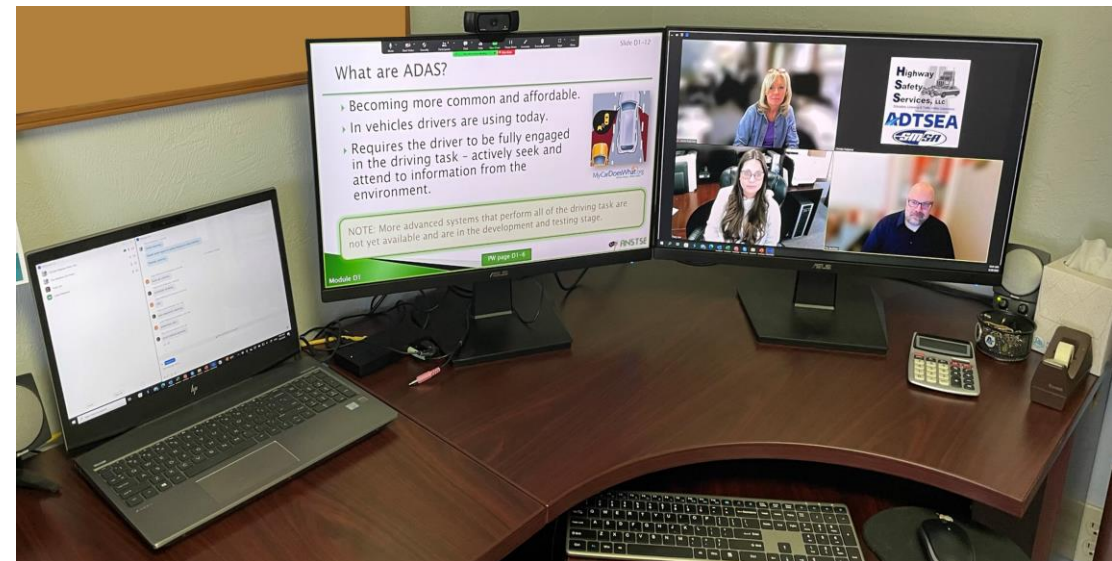
- ▶ Record yourself teaching
- ▶ Speak clearly and concisely
- ▶ Be deliberate with your speech
- ▶ Use pauses (you and your student's need pauses)
- ▶ Have a peer record/track your distracting mannerisms
- ▶ Practice and work to remove your distracting mannerisms each time you teach.

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# Set Up for Virtual Training (Challenges)

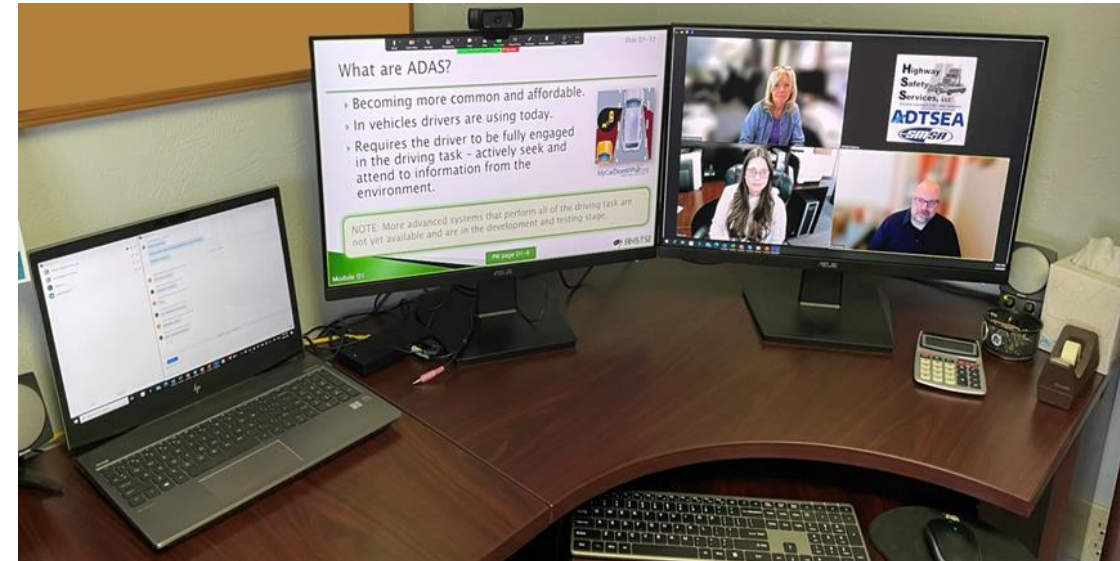
# Set Up

- ▶ Preferably three monitors – at least two
- ▶ Hard wired internet if possible
- ▶ Plugged in (laptop)
- ▶ 28–point font
- ▶ Make sure slides can be viewed on any device (preferably a computer)



# Virtual Requirements

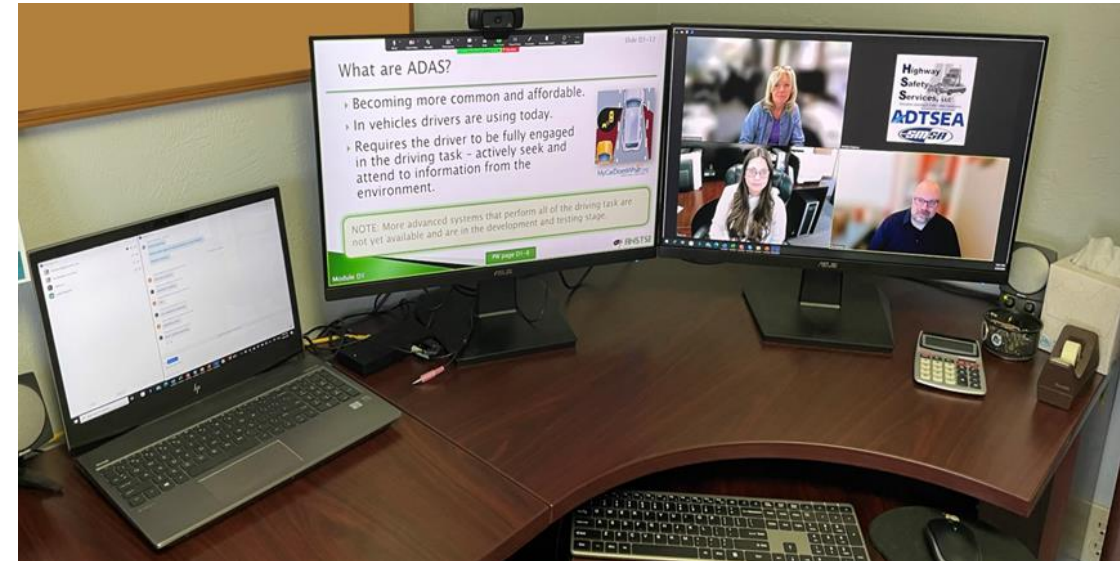
- ▶ A quality computer that supports the virtual platform
  - Phones and tablets do not fully support the needs for training
- ▶ Speakers, microphone, and camera
  - External is better
  - Better quality sound and images
- ▶ Stay centered in your camera
- ▶ Quiet area, will not be disrupted
- ▶ A clean or a virtual background





# Virtual Instructor Cautions

- ▶ Shared monitor has a clean desktop
- ▶ No other programs opened
- ▶ No quick access bookmarks on web application browser, if used
- ▶ Share one monitor and move applications in and out of that monitor as needed
- ▶ Never show them passwords to external sites (no personal info.)



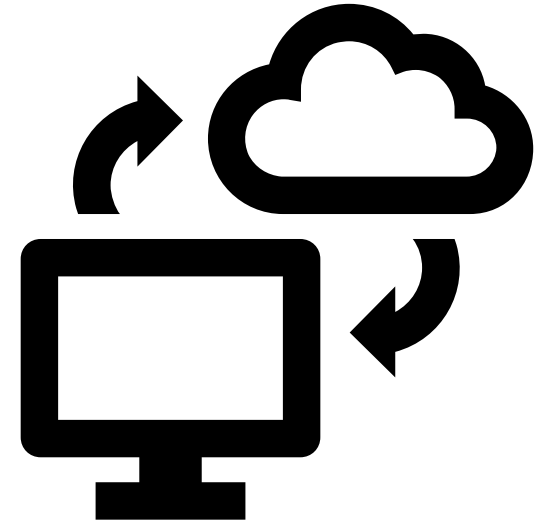
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# Technical Issues (Challenges)

# Technical Issues

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- ▶ We should be set up to avoid most technical problems
- ▶ Students will have technical problems
  - Internet
  - Microphone
  - Camera
- ▶ What problems will students have with the internet, microphone, or camera?
- ▶ What other technical problems will students have?



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# Questioning Techniques for Virtual Classroom (Benefit)



# Effective Questioning Techniques

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- ▶ Jump Ball/chat
- ▶ All are involved
- ▶ Classroom management skills
- ▶ Short attention spans
- ▶ Keeps them doing something
- ▶ Is jump ball questioning technique the only one?



# Effective Questioning Techniques

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- ▶ Pre-directed
- ▶ Overhead direct
- ▶ Deferred or deflected
- ▶ How can we use these questioning techniques in a virtual setting?




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# Tools to Use in Virtual Training (Benefit)

# Tools We Can Use

- ▶ Chat
- ▶ Polls
- ▶ Quizzes
- ▶ Physical equivalent practice (PEP)
- ▶ Videos
- ▶ Breakout Rooms
- ▶ Google Classroom
- ▶ Google Jamboard



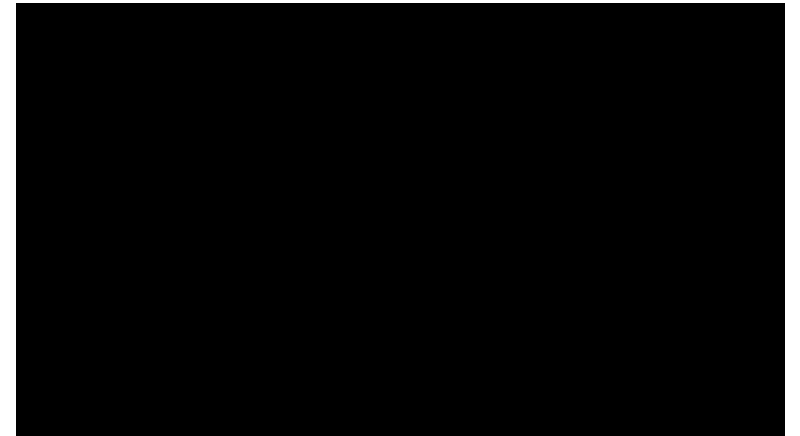
The screenshot shows a Microsoft Teams 'Polls' window. At the top, the title bar says 'Polls'. Below it, a green bar indicates 'Following Distance in Progress' with a timer of '0:07'. A dark grey bar below that shows 'Attendees are now viewing questions' and '0 of 0 (0%) voted'. The main content area displays a question: '1. When following another vehicle you should maintain a following distance of:'. Below the question are three radio button options: '2 seconds (0) 0%', '3 seconds (0) 0%', and '4 seconds (0) 0%'. At the bottom of the window is a blue 'End Polling' button.



# On-road Video Scenarios

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- ▶ Helps develop visual search patterns.
- ▶ Helps develop cognitive mental skills and decision-making skills.
- ▶ Students are immersed in the content. Use Commentary Driving.
- ▶ Should be no other distractions.
- ▶ Requires good classroom management.
- ▶ Short videos with no narration.



# Concentrate on Cognitive Skills

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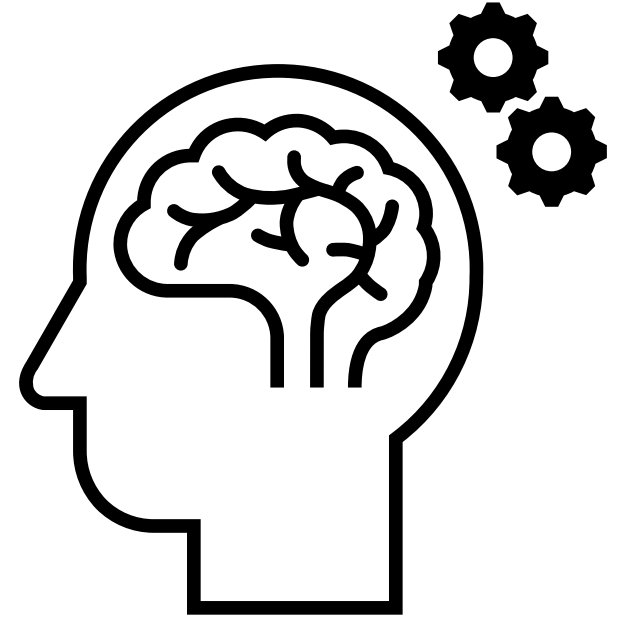
- ▶ Best practices suggest higher-order attitudinal-motivational and cognitive-perceptual skills should be utilized in driver education to be most effective.
  - Information processing (visual search)
  - Hazard perception
  - Situational awareness
  - Attentional control
  - Self-assessment of driving skills
- ▶ Classroom (theory) & BTW



# 9 Cognitive Skills to Develop

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- ▶ Sustained Attention
  - ▶ Selective Attention
  - ▶ Divided Attention
  - ▶ Long-Term Memory
  - ▶ Working Memory
  - ▶ Logic and Reasoning
  - ▶ Auditory Processing
  - ▶ Visual Processing
  - ▶ Processing Speed (processing speed ability)
- (source: International School of Arizona)



# Google Jamboard

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- ▶ A digital whiteboard that lets you collaborate in real time
- ▶ Students can collaborate in innovative ways
- ▶ Add sticky notes to brainstorm ideas together
- ▶ Draw with pens and colors to bring ideas to life
- ▶ Can insert photos and stickers





# Google Classroom – Evaluation/Assessment

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- ▶ Keeps all assignments organized
- ▶ Set reminders (before class starts)
- ▶ Communication all in one spot (group or individual)
- ▶ Can be saved for next class
- ▶ Assessments
- ▶ One stop shop and work smarter not harder



# Student Centered Activities

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- ▶ Imperative we do student centered activities
  - Keeps them engaged
  - Part of the application step
- ▶ Let's deal with the lag issue first
  - Determining following distance
- ▶ Activities for the virtual setting
- ▶ Use breakout rooms



# Benefits of Virtual Training: Wrap-up

- ▶ Similar to traditional classroom
- ▶ Advantages of blended learning
- ▶ Everyone can be involved with use of chat & other techniques
- ▶ Immersive traffic videos and pictures become more realistic
- ▶ Flexibility
- ▶ Accessibility



Benefits can far outweigh the challenges!

# Takeaways: Wrap-up

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- ▶ Benefits to blended learning approaches
- ▶ Studies show blended approaches produce better results
- ▶ The right setup for virtual is important
- ▶ Improving virtual teaching skills
- ▶ Engage students more (activities/Q&A/Chat)
- ▶ Opportunities to develop cognitive mental skills in the virtual setting
- ▶ Opportunities to incorporate many resources





# Thank you!

Thank you for your support and interest in Driver Education and Training!

## ANSTSE

Association of National Stakeholders in Traffic Safety Education

### Advancing Quality in Driver Education!



# Questions

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