Welcome Back!

Day 3

1

Today's Assignment

- Chapter 6 – High-Risk Populations and Audiences
- Chapter 7 – Fire and Life Safety Messages for Different Age Groups
- Chapter 15 – Developing Fire and Life Safety Curricula, Objectives, Lesson Plans, and Presentations (pages 270 – 276)

2

Review from Day 2

3

Passive and Active Learning

Which is better for message retention?

| What we read, hear, and see | Verbal Symbols | Passive Learning |
| Visual Symbols |
| Recordings Radio Still Pictures |
| Motion Pictures |
| Educational Television |
| Exhibits |
| Study Trips |
| Demonstrations |
| Dramatized Experiences |
| Contrived Experiences |
| Direct Purposeful Experiences |
| What we say and do | | Active Learning |
| Greater Message Retention |

4

Review

The Three Domains of Learning

- Created by Benjamin Bloom
  (Bloom's Taxonomy)
- Domains include:
  – Cognitive
  – Affective
  – Psychomotor
  Which domain does the fire service have the
  advantage of being able to use?

5

Review

Learning through the Senses: Three Learning Styles

- Based on three senses
  – Most have an innate preference for one
- Auditory learners
- Visual learners
- Tactile and Kinesthetic
Many people are _____?
What is the drawback for tactile learners?

6

Kevin Mixon's Teaching Sequence accounts for all three learner types

TABLE 2-1   Mixon's Teaching Sequence

1. **Hear it**: Introduce and engage auditory learners through verbal instruction, class discussion, questioning techniques, or storytelling.
2. **See it**: Get the visual learners on board through pictures, graphs, drawings, graphic organizers, or movies or DVDs.
3. **Show it**: Engage both auditory and visual learners by introducing a demonstration along with narration and critical thinking questions.
4. **Do it**: Enrich the experience for tactile or kinesthetic learners to benefit as audience participants practice the skill through bodily movements, writing, participating in demonstrations, role playing, and hands-on activities.

Adapted from Three Learning Styles … Four Steps to Reach Them, Kevin Mixon, Teaching Music; Feb 2004, Vol. 11 Issue 4, pp. 48–52.

What is another version of this sequence that many teachers are familiar with? Hint: I do it, _____, _____.

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company
www.jblearning.com

7

- What is the first thing to consider when planning a FLSE program?
- What is authentic learning?
- What is a tip offered for working in grade school classrooms?
- What kinds of questions do we want to pose to students?
- What is the turtle's name?
- What do you need to do at the end of a preschool lesson?
- How do preschoolers learn?

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company
www.jblearning.com

8

More Questions for You…..

- What is a practice we should avoid when working with adolescents?
- What can we focus on when demonstrating gear to adolescents?
- What are a few principles of adult learning?
- How does our role change in working with adult learners?
- What is an effective adult learning activity?
- Give a teaching tip for working with older adults.

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company
www.jblearning.com

9

Marsha P. Giesler

**Fire and Life
Safety Educator**
Principles and Practices
SECOND EDITION

**Chapter 6:
High-Risk Audiences and
Behaviors
Pages 123-140**

10

Objectives (1 of 3)

- Identify populations at high risk from fire and injury (NFPA 4.1.1). (pp. 123–124)
- Identify factors that place some populations at higher risk for fire or injury (NFPA 4.1.1). (pp. 123–124)
- Discuss the factors fire and life safety educators should consider when working with and addressing high-risk populations (NFPA 4.4.4). (pp. 124–125)

11

Objectives (2 of 3)

- Identify individuals and organizations the local fire and life safety educator can call upon to help reduce risks in various populations (NFPA 4.2.4). (pp. 136–139)
- Identify *Solutions 2000* and *Beyond Solutions 2000* as resources for providing insight into risk reduction for high-risk populations. (pp. 123–124)

12

Objectives (3 of 3)

- Define *accessibility* (NFPA 4.1.1). (p. 125)
- Discuss methods and messages for addressing high-risk populations (NFPA 4.4.1). (pp. 124–139)
- Distinguish between correct and incorrect methods of working with high-risk populations (NFPA 4.4.3, NFPA 4.4.4). (pp. 124–139)

13

Introduction

- Members of some groups are more vulnerable to fire and injury and have a disproportionately higher rate of morbidity and mortality.
- The educator should:
  - Learn about and communicate with these populations
  - Research their needs and capabilities (comprehension, physical abilities)
  - Identify available resources for providing the information necessary to improve their safety

14

Who Is at Risk? (1 of 2)

- At-risk groups:
  - Young children (younger than age 5 years)
  - Older adults (older than 65 years old)
  - People with disabilities:
    - People who are blind or have low vision
    - People who are deaf or hard of hearing
    - People with physical disabilities
    - People who are developmentally disabled or have other cognitive disabilities

15

Who Is at Risk? (2 of 2)
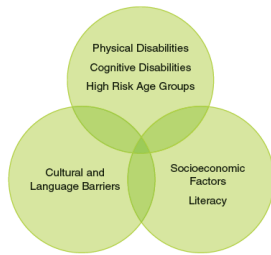
- At-risk groups:
  – Sociocultural and economic status
  – Gender (males exhibit higher risk)
  – Cultural, language, and communications barriers

16

Who Is at Risk?

A person's vulnerability to risk can dramatically increase when several risk factors overlap and apply to that one person.

Physical Disabilities
Cognitive Disabilities
High Risk Age Groups

Cultural and Language Barriers

Socioeconomic Factors
Literacy

17

General Considerations for Working with Any High-Risk Group

- Educators must remember to use **People First Language**. Avoid equating people with their disability.
- Make the audience aware of risks.
- Avoid assumptions and generalizations.

18

General Considerations for Working with Any High-Risk Group

- Addressing high-risk populations
  - Include them in planning and evaluation (how would you know?)
  - "Nothing About Us Without Us"
- Emphasize adaptable and alternative methodologies.
- Dedicate more information to planning and preparation.
- **Accessibility** enables people with disabilities to fully participate, use a product or device, and receive information.

19

Young Children

- Unintentional injury is the top cause of death of children ages 1 to 14 years in the United States.
- Factors:
  - They are too young to always react appropriately.
  - They have little control over their environment.
  - **They lack the ability to accurately perceive danger.**
  - They possess a limited ability to react both physically and cognitively.

20

Young Children (cont'd.)

- Educators should promote and advocate for:
  - Improvements in childhood environments
  - Increased use of safety devices accompanied by frequent home drills

- Other risk factors
  - Poverty
  - Frequent household moves
  - Single-parent households
  - Child aggression
  - Impulsivity and hyperactivity
  - Child abuse and neglect

21

Older Adults

- Want to remain independent
  - Live in their own homes
  - Able to control the destiny of their safety
  - Need to understand dangers of unsafe habits
  - Fastest growing segment of population
  - 50% of individuals over 70 have some form of disability.

- Adoption of universal design in homes provides safer living conditions for everyone, particularly older adults.

22

Older Adults

- Of special concern for fire service personnel is the number of older adults who "hoard."

  - **Hoarding** is the acquisition of, and failure to use or discard, such a large number of possessions that it causes significant clutter and impairment to basic living activities such as mobility, cooking, cleaning, showering, or sleeping.

23

24

Older Adults

- Older adults must be:
  - Informed about their vulnerability in a respectful and sincere manner
  - Convinced of the advantages of adopting safety practices and given help to implement the suggestions

25

Older Adults

- Reminders
  - Preserve their dignity
  - Combine messages with their concern about security issues
  - Keeping necessities by bedside
  - Buddy system
  - Room arrangements

26

People with Disabilities

- Approximately one out of every five adults in the United States has a disability.
- Many individuals have multiple disabilities.
- **Americans with Disabilities Act (ADA)**:
  - Provided significant inroads to improving safety for those with disabilities of all types, but there is still a long way to go

27

People with Disabilities

TABLE 6-1 Emergency Evacuation Considerations for People with Disabilities				
	What is the emergency? Will I recognize the notification?	Where is the way out? Can I find the way out?	Can I get out alone (or do I need assistance)?	What kind of assistance might I need?
Visual Impairment	Yes, if the emergency is apparent to the other senses	Only with training	Yes, in some familiar environments	Anything from no assistance to one-on-one help
Hearing Impairment	Yes, with assistive devices	Yes, with assistive devices	Yes – able to evacuate alone	None, with proper notification
Speech Impairment	Yes	Yes	May not be able to call for help	Pre-planning for potential emergencies
Physical Impairment	Low probability of a problem	Low probability of a problem	Depends on the environment and the disability	Anything from no assistance to one-on-one help
Cognitive Impairment	May recognize with training	Only with significant training and practice	May be able to with a plan and practice	May need guidance
ADHD	Low probability of a problem	Low probability of a problem	Low probability of a problem	Low probability of a problem
Autism	May become too disregulated to identify the emergency	Only with significant training and practice, more likely in a familiar setting	May need help to stay calm	May require assistance
Social, Emotional, and/or Behavioral Problems	Low probability of a problem	Low probability of a problem	Low probability of a problem	Low probability of a problem

Courtesy of Patti Cepeda, Behavioral Specialist.

28

People with Disabilities - Reminders

- Seek assistance from someone in the field
- Look at what they are *able* to do, not only what they are *unable* to do
- Schools – LRE (Least Restrictive Environment)
- Gain a basic understanding of the population
- There are always exceptions to the rule
- NFPA – *Emergency Evacuation Planning Guide for People with Disabilities*

29

Visually Impaired

- Vision impairment can range from partial to total vision loss.
- Visually impaired people may not even be able to recognize the early stages of fire.
  – The best chance for survival is to practice fire safety and evacuation.
- Helpful measures: tactile signage, a "buddy system," teaching caregivers and family members to help implement safety measures.

30

Visually Impaired – Reminders

- Higher risk as they try to navigate in a world of sighted people
- Need clear paths
- Older adults not able to see how high the flames are when turning on stovetop
- Need to memorize the environment
- Buddy system along with independence for unfamiliar environments
- Radio PSAs

31

Deaf or Hard of Hearing

- Nearly 40 percent of those older than 65 years of age experience some degree of hearing loss.
- **American Sign Language (ASL)** allows the deaf community to communicate efficiently with each other and those who understand the language.
- Echo, reverberation, and extraneous background noise can distort hearing for those using hearing aids.

32

Deaf or Hard of Hearing

- Talking louder does not always benefit those who are hard of hearing.
- Messages for safety should be universal and aligned with all other fire and injury prevention messages.
  – However, the importance of practicing escape plans and testing alarms must be emphasized.
- Educators should use facial expression, hand gestures, and eye contact to relay the message clearly.
- Keep message simple, straight forward

33

Speech Impaired

- Cognitive, emotional, and physical disabilities can all affect a person's ability to speak.
- Educators need to familiarize this segment of people in what needs to be done in the event of an emergency.
- Technology is a boon in helping them communicate
  – Example: one-to-one devices

34

Physically or Mobility Impaired
(Might have perfect cognitive abilities)

- **Ambulatory** refers to a person who is able to physically navigate on his or her own without assistance.
- **Nonambulatory** refers to a person unable to physically navigate on his or her own without assistance.
- All of them need special consideration when planning for safety, bearing in mind the uniqueness of each situation and the varying degrees of disability.

35

Physically or Mobility Impaired

- A **disability evacuation plan (DEP)** provides a questionnaire for individuals and their families to complete that will assist in understanding their needs, emergency contacts, and other pertinent information.
- In all the activities, involve people with disabilities to be part of it, from the planning stage to helping disseminate the information.

36

Physical Disabilities - Reminders

- Each situation is different
- More than orthopedic difficulties
- Consider disaster preparedness
- Respect independence and privacy
- Special session or inclusion?
- Who else might be working with this population?

37

38

Cognitively and Developmentally Impaired (page 131)

- Educational institutions today follow the concept of **least restrictive environment**.
  - They must provide an educational setting for exceptional children and for the education of children with disabilities with nondisabled children whenever realistic and possible.
  - These children will be **mainstreamed** or placed into one or more general academic classes with the general school population in compliance with school inclusion policies.

39

13

Cognitively and Developmentally Impaired

- Cognitive impairments
  - Psychiatric, organic, or developmental
  - Capacity for judgment and reasoning
    - Significantly diminished
  - Include:
    - Attention-deficit disorder
    - Attention-deficit hyperactivity disorder
    - Behavioral and emotional disorders
    - Autistic and other spectrum disorders

40

Cognitively and Developmentally Impaired

- About 15 to 20 percent of the U.S. population exhibits some form of **learning disability**.
- Some simple strategies:
  - Speak clearly and use simple language.
  - Use visual aids.
  - Use incentives for cooperation and completion of assignments.
  - More strategies can be employed when training adults (e.g., encouraging buddy systems).

41

Cognitive and Developmental Reminders

- Work with the facilitator ahead of time – including station tours
- Expect them to follow the rules
- Do not cater to outbursts, can ignore
- Provide time for them to talk
- Demonstrate and repeat
- Label visual aids with simple text

42

Cognitive and Developmental Reminders

- Speak to them at their level, but use lower level visuals. Do not disrespect them. Do not give them handouts for young children.
- Incentives!
- Color code exits, pictures, etc.
- Remember that secondary audience
- Engage that facilitator or job coach – you need them
- Page 132!!!

43

TABLE 5-1 Cognitive and Developmental Disorders Overview		
Behavior or Disorder	**What You May See**	**What You Can Do**
Attention-deficit disorder (ADD) Attention-deficit hyperactivity disorder (ADHD)	Restlessness, distractibility, yelling out, inability to follow more than one or two steps in a direction	Move them closer to you, give them a reason to move, allow them to hold something for you
Cognitive impairment	Obvious lack of understanding when you pace your instruction at the normal level	Reduce the number of new things you expect them to master, provide visual reminders that they will associate with what they are learning
Autistic or other spectrum disorders	Little or no eye contact, repetitive motions or noises, hand flapping, odd positioning of the head	Do not require eye contact, avoid touching them, provide visual reminder of work, provide schedules
Emotional disability or behavioral disorder	Refusal to follow even simple directions; rude, defiant, disruptive behaviors	Ignore behaviors that do not disrupt teaching, give positive feedback when they approximate the appropriate behavior

Courtesy of Patti Cepeda, Behavioral Specialist.

TABLE 6-2 Cognitive and Developmental Disorders Overview
page133

44

Attention-Deficit Disorder and Attention-Deficit Hyperactivity Disorder

- These learning disabilities are not limited to children.
- When working with children and adults with ADD or ADHD:
  – Reduce environmental stimuli.
  – Avoid wordiness and limit the time of continuous instruction.
  – Allow participants to move around as much as realistically possible.

45

Behavioral and Emotional Disorders

- Students who are diagnosed with behavioral or emotional problems can have a wide range of issues.
- Many of these students will only perform for people they feel a connection to.
- It is important to get input from the teacher about how best to work with various disorders.

46

Autism Spectrum Disorder (1 of 2)

- **Autism** is a complex neurobiological developmental disability that causes problems with social interaction and verbal and nonverbal communication.
- Students diagnosed with an **autism spectrum disorder (ASD)** are very likely to have sensory problems.
- Students with **pervasive developmental disorder** or **Asperger syndrome** have a wide range of abilities and preferences.

47

Autism Spectrum Disorder (2 of 2)

- Suggestions when working with members of the ASD community:
  - Simplify the environment.
  - If possible, allow these individuals to explore before beginning a program or tour.
  - Avoid using lights, sirens, and other sensory stimuli.
  - Individualize learning experiences rather than using large group work.
  - Use simple, concrete language.
  - Use more visuals than words.

48

Socioeconomic Factors (1 of 3)

- Fire incidence and patterns differ in urban and rural areas.
  – In urban areas, people living in abandoned buildings may light fires indoors, causing a fire hazard.
  – In rural communities, residents may have less sophisticated equipment for fighting fires and training, which creates a challenge for educators.

49

Socioeconomic Factors (2 of 3)

- The basics of the community risk reduction process model are:
  – Identify and prioritize the community problem to be addressed.
  – Identify root causes that contribute to the occurrence of leading fire risks.
  – Identify primary and secondary audiences to be included in the intervention strategy.
  – Work with community partners.
  – **Determine an intervention strategy for your community.**

50

Socioeconomic Factors (3 of 3)

- Recommendations for improving safety:
  – Conduct multi-hazard surveys.
  – Place breakaway bars on windows and doors.
  – Promote engineering- and policy-oriented solutions.
  – Work with parents to increase their awareness.
  – Educate the local fire department about its role in preventing serious fire and injuries.
  – Encourage the local fire department to develop a community outreach program.

51

4/16/2019

Culture Differences and Language Barriers

- **Acculturation** is the process of integration of native and traditional values with the dominant culture's values.
- Safety educators and English Language Learning (ELL) or English as a Second Language (ESL) teachers can work together to provide safety education designed specifically for children from multiethnic communities.
  - Be prepared before facing a culturally diverse group.

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company
www.jblearning.com

52

Culture Differences and Language Barriers

- Reminders
  - Talking openly may not be comfortable
  - Eye contact may not be acceptable
  - Women may not be allowed to make decisions
  - People in uniform may not be welcomed
  - Channels of communication vary
  - Develop strategies to reduce barriers
  - Get a "Gatekeeper" – someone that community trusts!

Copyright © 2018 by Jones & ...ng Company
www.jblearning.com

53

Literacy

- Types of literacy:
  - **Prose literacy**
  - **Document literacy**
  - **Quantitative literacy**
- There are five literacy levels.
  - Level I (below basic)
  - Level II (basic)
  - Level III (competent)
  - Levels IV and V (proficient)

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company
www.jblearning.com

54

18

What This Means for Fire and Life Safety Educators

- Use highly illustrated, easy-to-read information, limiting the amount of text.
  - **Visual literacy** is the ability to recognize and understand ideas conveyed through visible actions or images.
- Avoid using trifold brochures.
- Gray, horizontal bars assist readers
- Train literacy experts in the basics of fire safety.
- Develop a home smoke alarm installation program.

55

Summary (1 of 3)

- The educator should be aware that most communities today are likely to be home to high-risk populations. Every effort must be made to identify who they are and where they exist.
- Each high-risk group possesses its own characteristics and needs, but there are a few universal rules to remember when working with all populations.

56

Summary (2 of 3)

- Educators will encounter people with some form of disability in most walks of life today. It is the responsibility of educators to learn about the latest methods and technology available to assist this population to maintain and improve their own safety.
- Educators need to address young audiences to ensure they become familiar with fire service personnel and learn that even in their full gear, fire fighters are there to help.

57

Summary (3 of 3)

- First responders should be aware of any special accommodations a business, school, or other facility provides for the safety of their high-risk populations.
  - Areas of refuge, stair chairs, or other devices provided on-site should be employed and practiced during drills to mitigate any unforeseen challenges in their use.
- Fire and life safety educators must build trust between the fire department and those who can benefit from their expertise in safety.

58

_____

_____

_____

_____

_____

_____

_____