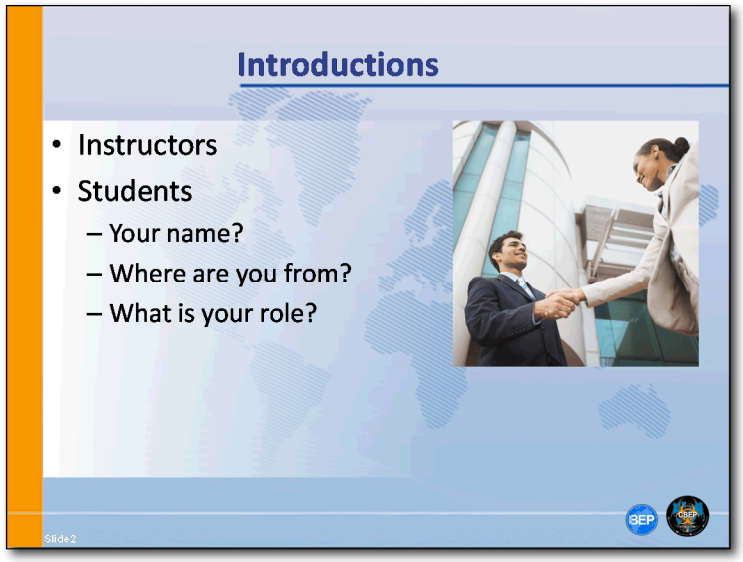
SAND2013-5091P

Strategies for Effective & Sustainable Global Biorisk Management (GBRMC) Training

Student Guide

Strategies for Effective & Sustainable Global Biorisk Management Curriculum (GBRMC) Training

Welcome to Strategies for Effective & Sustainable Global Biorisk Management Curriculum (GBRMC) Training


Introductions
• Instructors
• Students
– Your name?
– Where are you from?
– What is your role?
Slide 2

Agenda – Day 1 – July 24th

- Day 1 – TBD– Begin 09h30
  - **Welcome & Introductions**
    - Action Plan
    - GBRMC Intro – Strategic and Sustainable, Outcome Based
  - **Strategic Focus Block**
    - Know, Feel, Do – Objectives
      - Who is Targeted? What is Included?
      - What was Good? - Review of Previous Training Objectives
      - Draft Revised Training Objectives
    - Configure Training Event
      - Configuration Examples
      - Practice Configuring - GBRMC Course Matching Group Exercise
      - Review Configuration (Class Exercise) – Draft an Agenda
    - GBRMC Course Dissection
      - The GBRMC "Course"
      - Access to GBRMC Courses
      - Identify GBRMC Objectives Group Activity
  - **Teach-back/Feedback**
    - Assign GBRMC Key Message for Teach-back on Day 3
- End 16h00

Slide 3

Agenda – Day 2 – July 25th

- Day 2 – TBD– Begin 09h30
  - **Review**
    - Practice Matching Objectives
  - **Sustainable Focus Block**
    - Learning
      - Design
      - Principles of Learning
      - Learning Styles
      - Memory and Recall
    - GBRMC Course Dissection
      - Identify GBRMC Design Elements Group Activity
    - Activity Toolkit
    - Customize Training Pieces
      - Customization Options/Examples
      - Practice Customizing - (Class Exercise) Matching Customization to an Objective
  - **Teach-back/Feedback**
    - Time to Work on Teaching GBRMC Key Message
  - **Review Matched Objectives and Customization Pieces – Update Agenda**
- End 16h00

Slide 4

Agenda – Day 3 – July 26th

- Day 3 – TBD– Begin 09h30
  - **Review**
    - Customization Options
  - **Apply Focus Block**
    - Group Activity - Teach-back/Feedback
      - GBRMC Activity
  - **Evaluate**
    - Strategy
    - Discussion
  - **Working Group Section**
    - Answer Questions
    - Fill in Gaps
    - Action Plan
  - **Strategic & Sustainable Review**
- End 16h00

Slide 5

Action Plan

By the end of this lesson, I would like to:					
KNOW		FEEL		BE ABLE TO DO	

Your learning doesn't stop with this lesson. Use this space to think about what else you need to do or learn to put the information from this lesson into practice.

What more do I need to know or do?	How will I acquire the knowledge or skills?	How will I know that I've succeeded?	How will I use this new learning in my job?

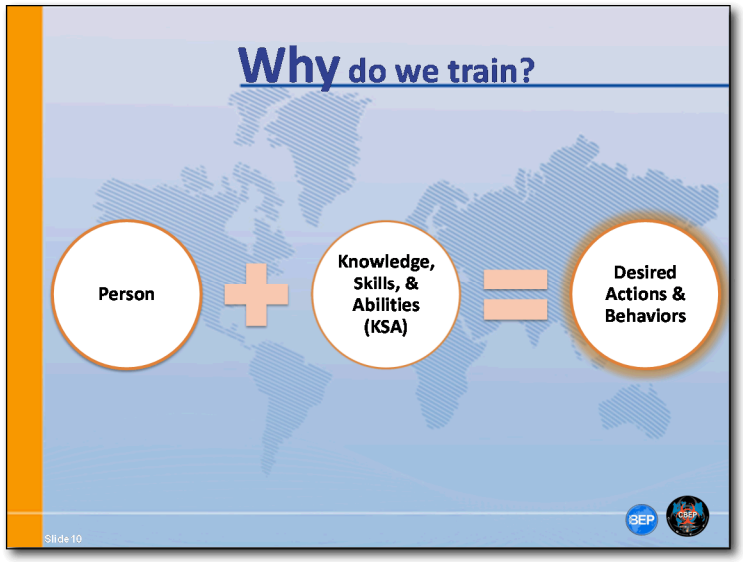
Use space on back, if needed

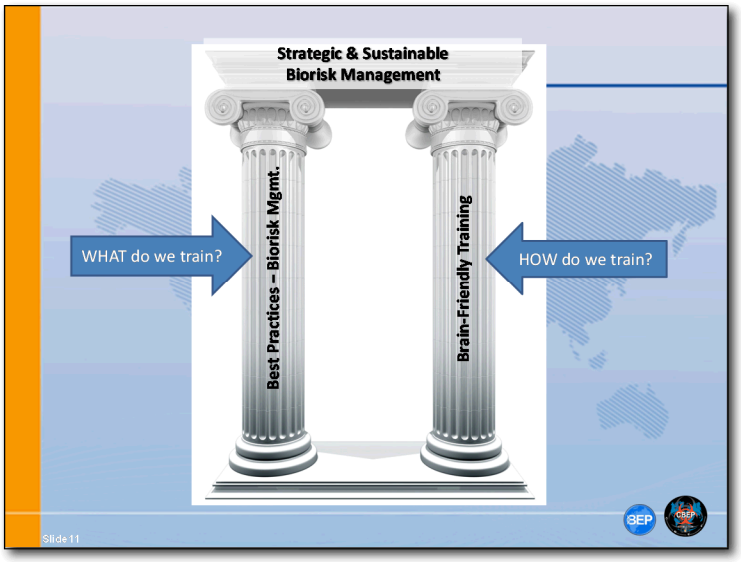
Objectives

- ***Know:***
  - That clearly identified objectives can be used to structure a training event
  - What is included in a GBRMC course.
  - That GBRMC courses are designed to enhance student learning.
  - The GBRMC evaluation and course/library improvement strategy
- ***Feel:***
  - Confident using a learning objectives based approach to configure and customize GBRMC materials
  - Good delivering a GBRMC course key message to support an identified learning objective using effective training strategies.
  - Confident accessing, using and contributing to the GBRMC
- ***Be Able to Do***:
  - Use learning objectives to develop a training event using GBRMC materials.
  - Access and use GBRMC materials from GBRMCNet
  - Able to customize GBRMC materials effectively to meet a learning objective.
  - Deliver a GBRMC course key message utilizing sustainable training strategies
  - Follow GBRMC evaluation and course/library improvement strategy


Day 1
Slide 8


Welcome to the GBRMC Library!
GBRMC = Global Biorisk Management Curriculum
Mission
– Biosafety & Biosecurity training materials. . .
• Strategic
• Sustainable
• Anywhere, anytime
• Well-branded
• Well-managed


Why do we train?
Person
Knowledge, Skills, & Abilities (KSA)
Desired Actions & Behaviors
Slide 10


Strategic & Sustainable Biorisk Management
WHAT do we train?
Best Practices – Biorisk Mgmt.
Brain-Friendly Training
HOW do we train?
Slide 11

Biorisk Management Definitions

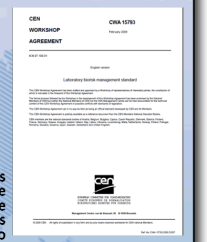
- Laboratory **biosafety**: containment principles, technologies, and practices implemented to prevent unintentional exposure to pathogens and toxins, or their unintentional release[1]
- Laboratory **biosecurity**: protection, control and accountability for valuable biological materials within laboratories, in order to prevent their unauthorized access, loss, theft, misuse, diversion or intentional release[2]

- [1]Laboratory biosafety manual, Third edition (World Health Organization, 2004)
- [2] Biorisk management - Laboratory biosecurity guidance (World Health Organization, 2006)

Definitions, continued

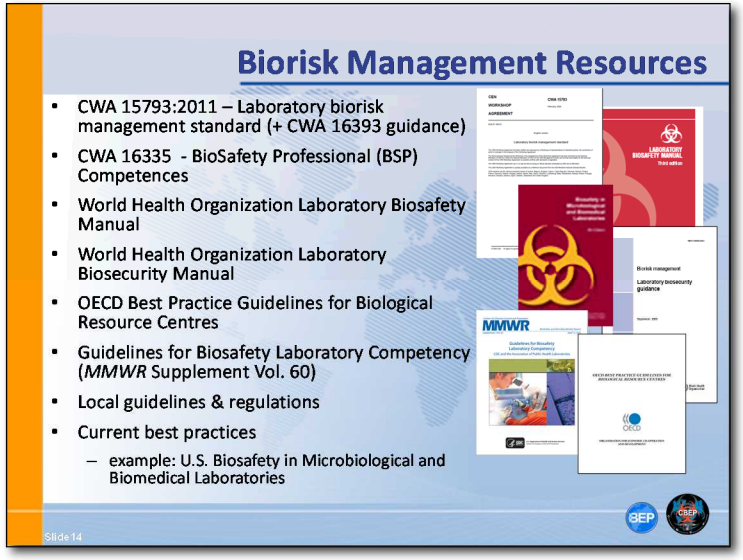
- The practices of laboratory **biosafety and laboratory biosecurity** are combined into an **integrated effort** known as **biorisk management** where the goals are, concurrently, to work safely and to keep the work secure.

Biorisk management (BRM) can be further defined as the actions taken (by laboratories or facilities which handle, store, or dispose biological agents or toxins) to control or minimize biorisk to acceptable levels in relation to employees, the community and others, as well as the environment, which could be directly or indirectly exposed to biological agents or toxins (adapted from CWA 15793:2011[1]).



[1]Laboratory biorisk management standard (CWA 15793:2011)

Slide 13


Biorisk Management Resources
CWA 15793:2011 – Laboratory biorisk management standard (+ CWA 16393 guidance)
CWA 16335 - BioSafety Professional (BSP) Competences
World Health Organization Laboratory Biosafety Manual
World Health Organization Laboratory Biosecurity Manual
OECD Best Practice Guidelines for Biological Resource Centres
Guidelines for Biosafety Laboratory Competency (*MMWR* Supplement Vol. 60)
Local guidelines & regulations
Current best practices
example: U.S. Biosafety in Microbiological and Biomedical Laboratories
MMWR
Slide 14


Biorisk Management:
AMP Model (World Health Organization)
Biorisk Management =
Assessment, Mitigation, Performance
Hazard ID
Risk Assessment
Biorisk Control Measures
Risk Management
Metrics
Indicators
Review/Revision

Global Biorisk Curriculum Library, 1

Basic Track

Audience: all personnel involved in biorisk management

- Biorisk Management Basics
  - Orientation to biorisk management
  - Bioethics
  - Dual-use and responsible conduct of research
  - Risk Characterization & Evaluation
  - Biosafety Risk Assessment
  - Biosecurity Risk Assessment
  - Biorisk Mitigation Strategies
  - Introduction to Incident Management & Response

Laboratory-Level Track

Audience: Biorisk Management Advisors, Scientific/Laboratory Management, Lab Workforce

- Lab-Level Administrative Controls
  - Human Performance for Biorisk Management in the Laboratory
  - Developing, evaluating, validating, and communicating standard operating procedures
  - Laboratory level hazard and risk communication

Laboratory-Level Track, continued

- Lab-Level Operational Controls
  - Risk mitigation strategies
  - Developing, evaluating, validating, and communicating standard operating procedures
  - Facility features
  - Engineering Controls and Equipment
  - Good laboratory practices
  - Personal protective equipment
  - Decontamination
  - Disposal
  - Biosecurity
  - Field biosecurity
  - Shipping Infectious Substances and Biological Specimens
- Reporting, monitoring, and Response
  - Incident recognition and response in the laboratory
  - Drills, audits, and inspections (lab-level)

March 2012

Global Biorisk Curriculum Library, 2

Management & Leadership Track

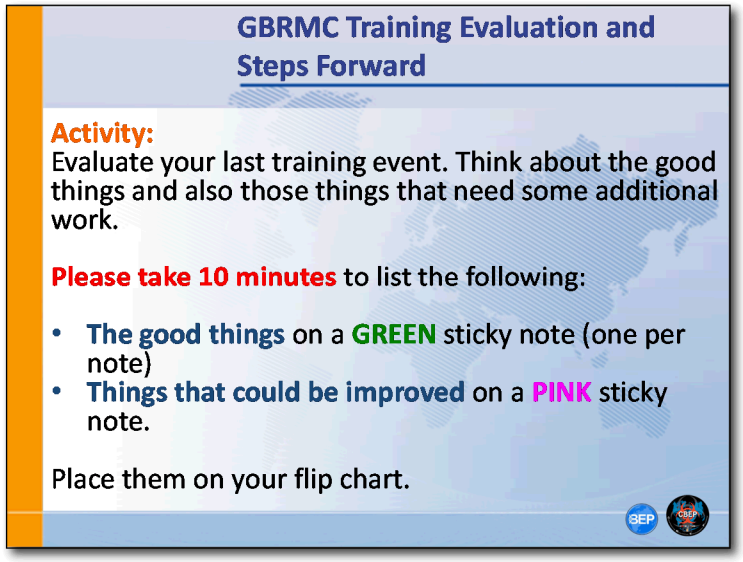
Audience: (Policy Makers) Top Management, Biorisk Management Advisors, Scientific/Laboratory Management

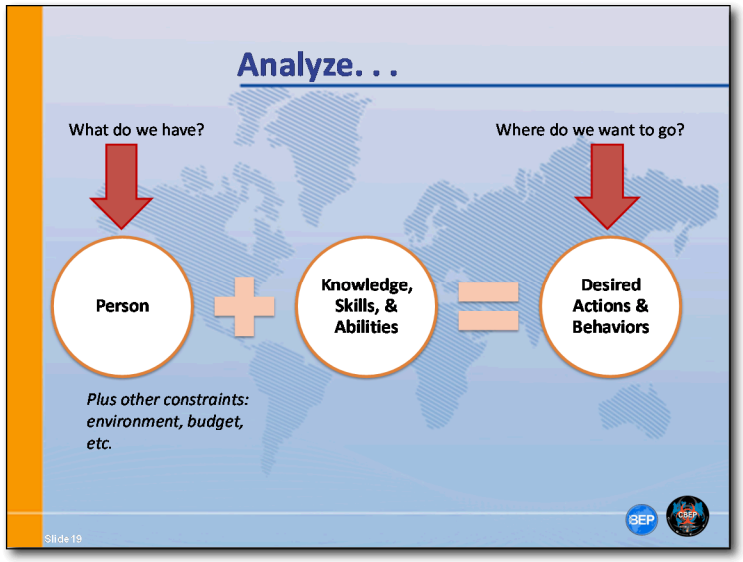
- Policy, Planning, and Assessment
  - Writing and communicating biorisk management policy
  - Establishing and communicating BRM roles, responsibilities, objectives, and goals
  - Developing, conducting, and maintaining a hazard inventory
  - Identifying legal requirements that impact BRM
  - Work program review and approval
- Developing and Maintaining Human Capacity for Biorisk Management (Managing People)
  - Managing human performance in the BRM workforce
  - Developing, implementing, and evaluating training and other methods to assure BRM competence
  - Establishing and maintaining formal and informal BRM mentoring programs
  - Establishing and maintaining Worker Health Programs
  - Developing roles & responsibilities for risk-based access to and accountability for biological agents and toxins

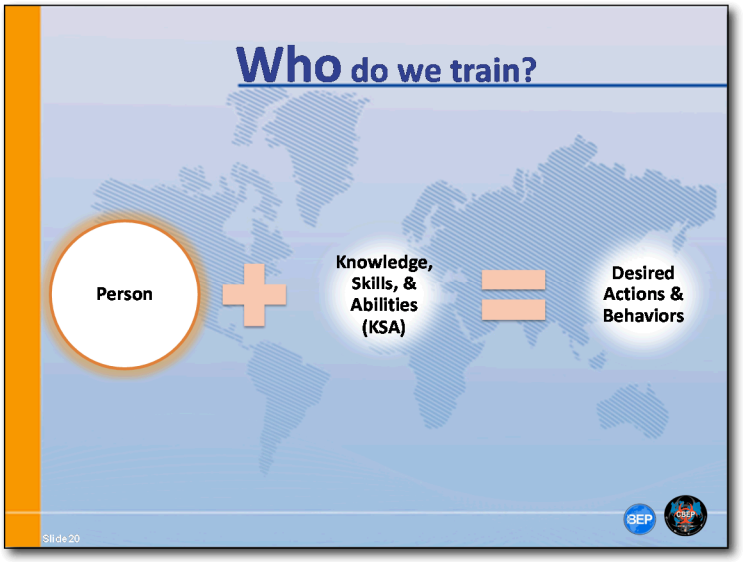
Management & Leadership Track, continued

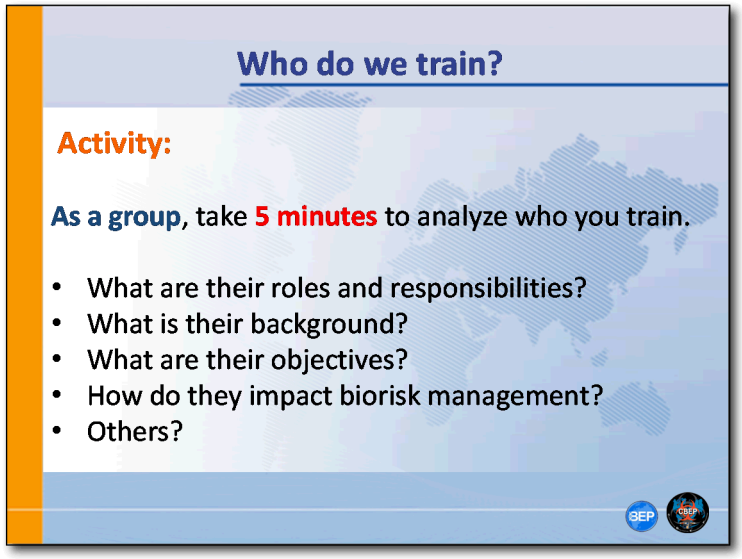
- Developing and Maintaining Physical Infrastructure for Biorisk Management
  - Understanding and maintaining facilities & equipment for biorisk management
  - Basic features & maintenance for physical and information security measures
- Incident Management & Response
  - Incident Response Planning and Preparation
  - Incident Response & Investigation
  - Incident Response Evaluation & Improvement
- Measuring and Improving Biorisk Management Performance
  - Measurement and Analysis of Biorisk Management System Performance
  - Conducting Audits and Inspections to Assess Biorisk Management Performance
  - Revising and Improving a Biorisk Management System based on Performance Results
  - Establishing and Using Performance Indicators

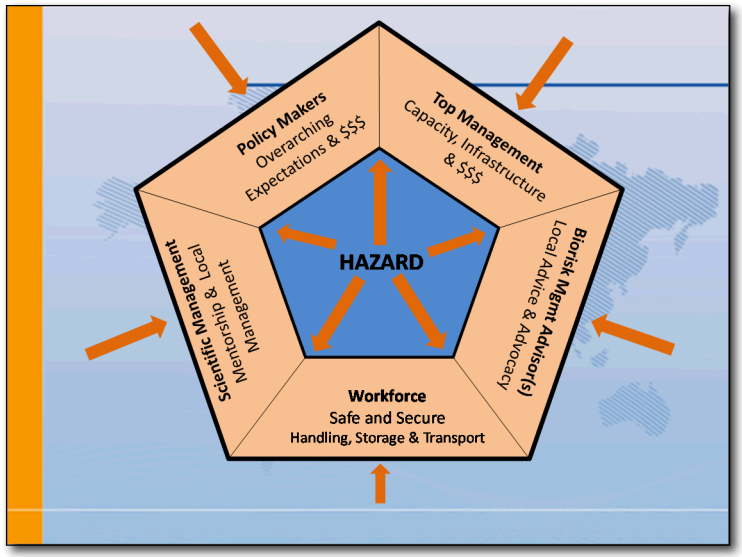
March 2012

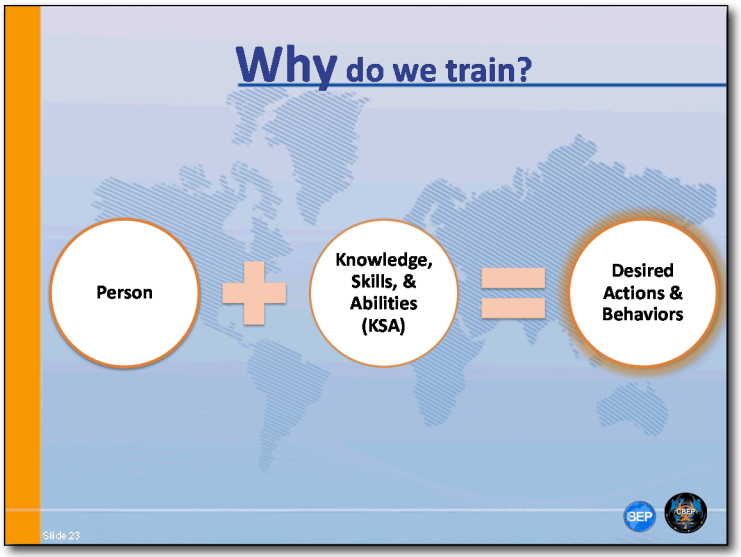

GBRMC Training Evaluation and Steps Forward
Activity:
Evaluate your last training event. Think about the good things and also those things that need some additional work.
Please take 10 minutes to list the following:
• The good things on a GREEN sticky note (one per note)
• Things that could be improved on a PINK sticky note.
Place them on your flip chart.

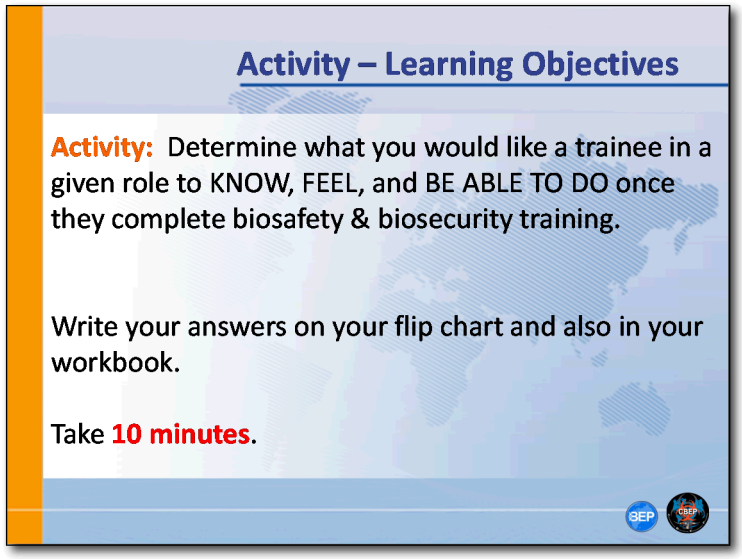

Analyze. . .
What do we have?
Where do we want to go?
Person
Knowledge, Skills, & Abilities
Desired Actions & Behaviors
Plus other constraints: environment, budget, etc.
Slide 19


Who do we train?
Person
Knowledge, Skills, & Abilities (KSA)
Desired Actions & Behaviors
Slide 20


Who do we train?
Activity:
As a group, take 5 minutes to analyze who you train.
• What are their roles and responsibilities?
• What is their background?
• What are their objectives?
• How do they impact biorisk management?
• Others?


Policy Makers
Overarching Expectations & $$$
Top Management
Capacity, Infrastructure & $$$
Biorisk Mgmt Advisor(s)
Local Advice & Advocacy
Workforce
Safe and Secure
Handling, Storage & Transport
Scientific Management
Mentorship & Local Management
HAZARD


Why do we train?
Person
Knowledge, Skills, & Abilities (KSA)
Desired Actions & Behaviors
Slide 23


Activity – Learning Objectives
Activity: Determine what you would like a trainee in a given role to KNOW, FEEL, and BE ABLE TO DO once they complete biosafety & biosecurity training.
Write your answers on your flip chart and also in your workbook.
Take 10 minutes.

After biosafety and biosecurity training, the worker assigned to the tasks above will:	
Know	
Feel	
Be Able to Do	

Objectives

- ***Know:***
  - That clearly identified objectives can be used to structure a training event
  - What is included in a GBRMC course.
  - That GBRMC courses are designed to enhance student learning.
  - The GBRMC evaluation and course/library improvement strategy
- ***Feel:***
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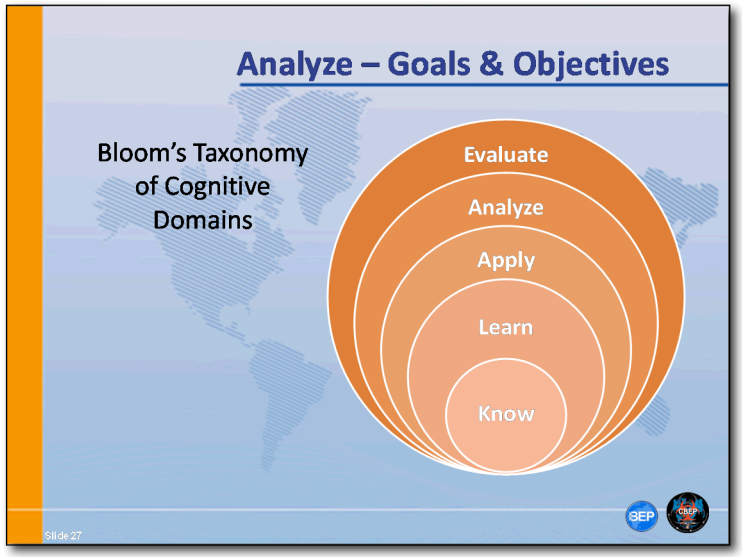
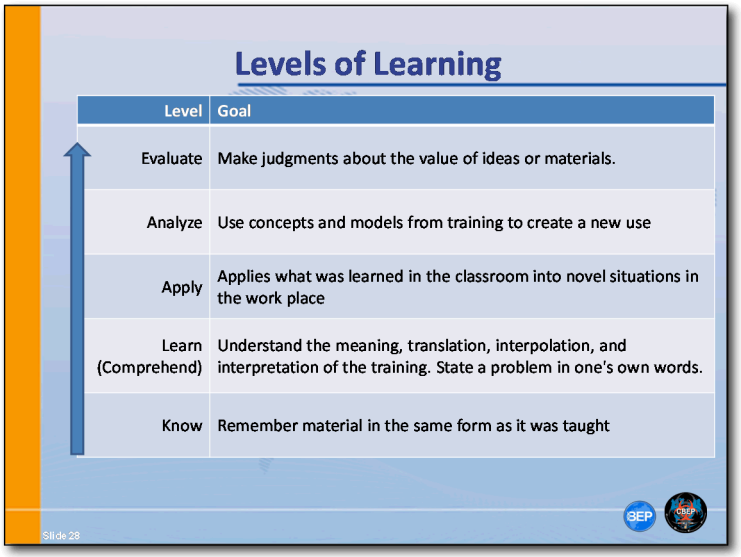
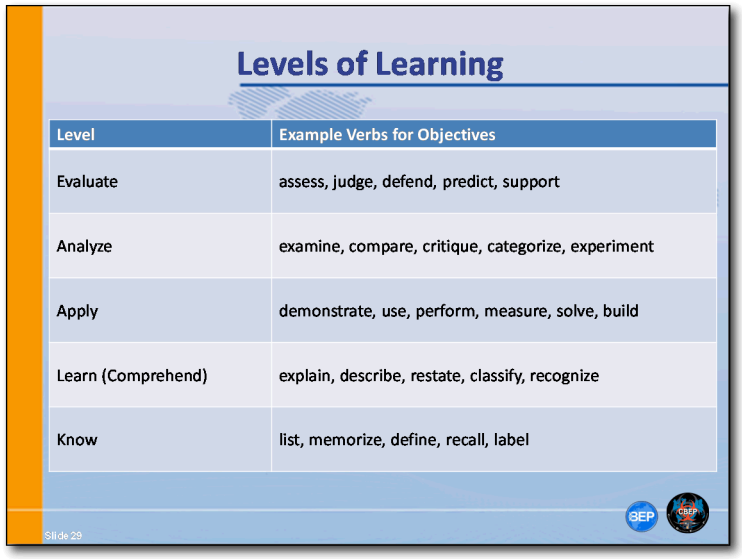
  - Follow GBRMC evaluation and course/library improvement strategy


Analyze – Goals & Objectives
Bloom's Taxonomy of Cognitive Domains
Evaluate
Analyze
Apply
Learn
Know
Slide 27

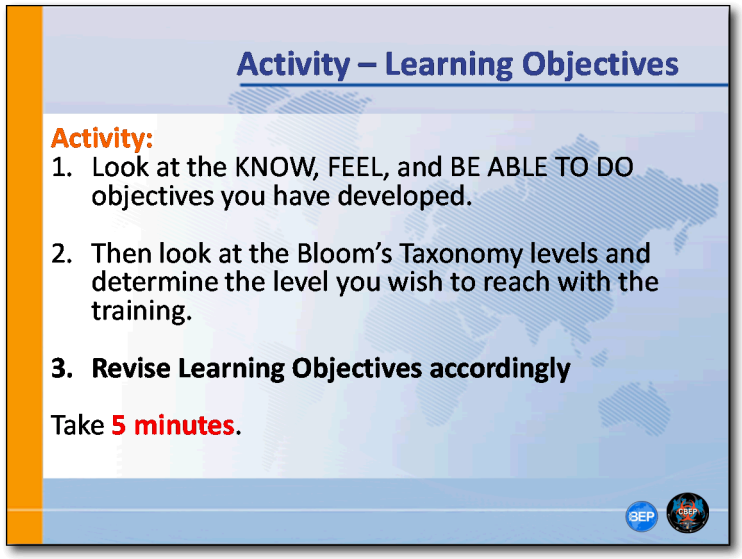

Levels of Learning
Level
Goal
Evaluate
Make judgments about the value of ideas or materials.
Analyze
Use concepts and models from training to create a new use
Apply
Applies what was learned in the classroom into novel situations in the work place
Learn (Comprehend)
Understand the meaning, translation, interpolation, and interpretation of the training. State a problem in one's own words.
Know
Remember material in the same form as it was taught
Slide 28

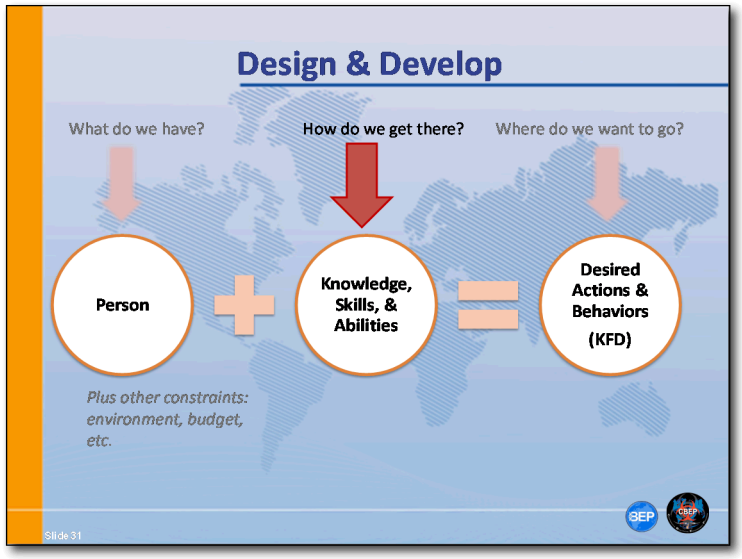


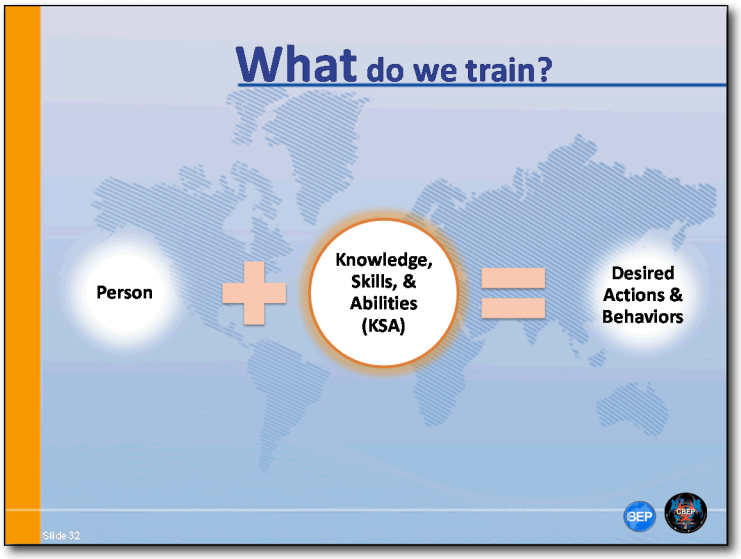
Levels of Learning

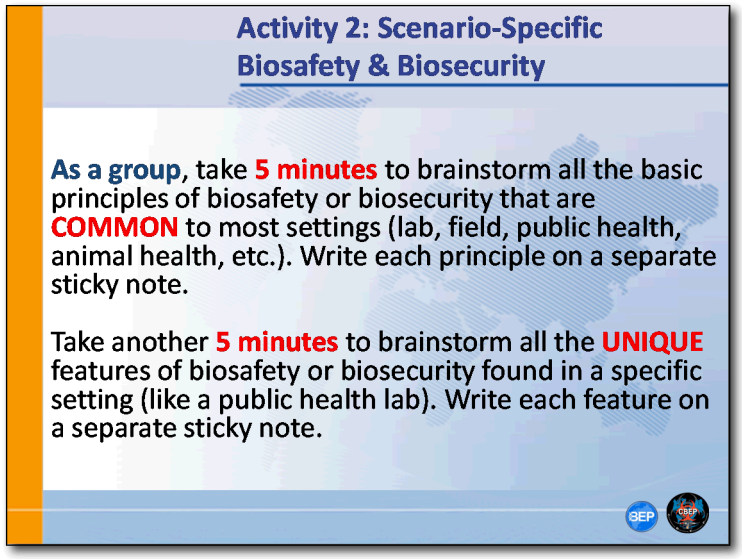
Level	Example Verbs for Objectives
Evaluate	assess, judge, defend, predict, support
Analyze	examine, compare, critique, categorize, experiment
Apply	demonstrate, use, perform, measure, solve, build
Learn (Comprehend)	explain, describe, restate, classify, recognize
Know	list, memorize, define, recall, label

Slide 29

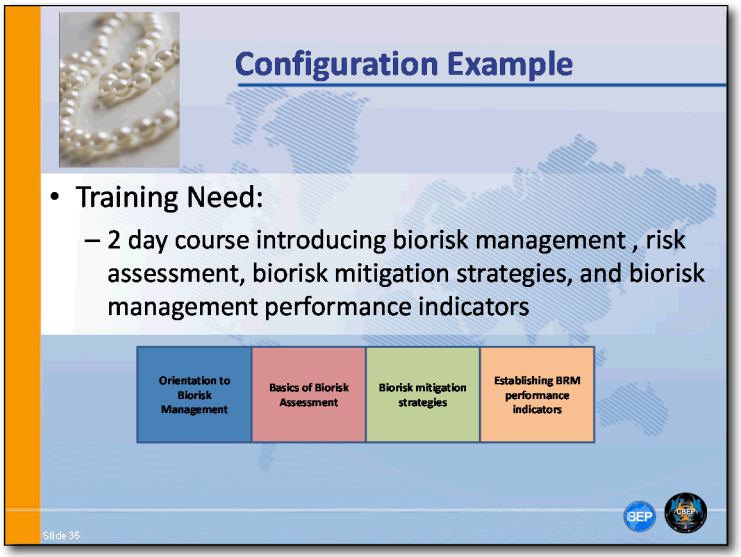

Activity – Learning Objectives
Activity:
1. Look at the KNOW, FEEL, and BE ABLE TO DO objectives you have developed.
2. Then look at the Bloom's Taxonomy levels and determine the level you wish to reach with the training.
3. Revise Learning Objectives accordingly
Take 5 minutes.

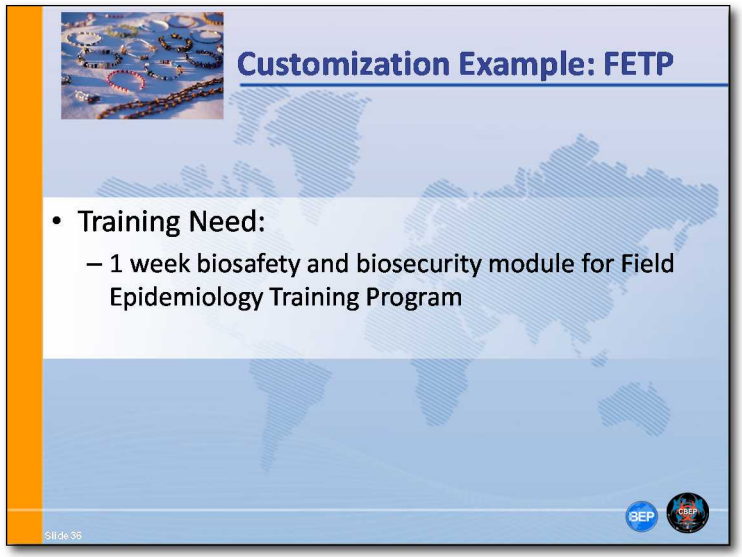

Design & Develop
What do we have?
How do we get there?
Where do we want to go?
Person
Knowledge, Skills, & Abilities
Desired Actions & Behaviors (KFD)
Plus other constraints: environment, budget, etc.
Slide 31

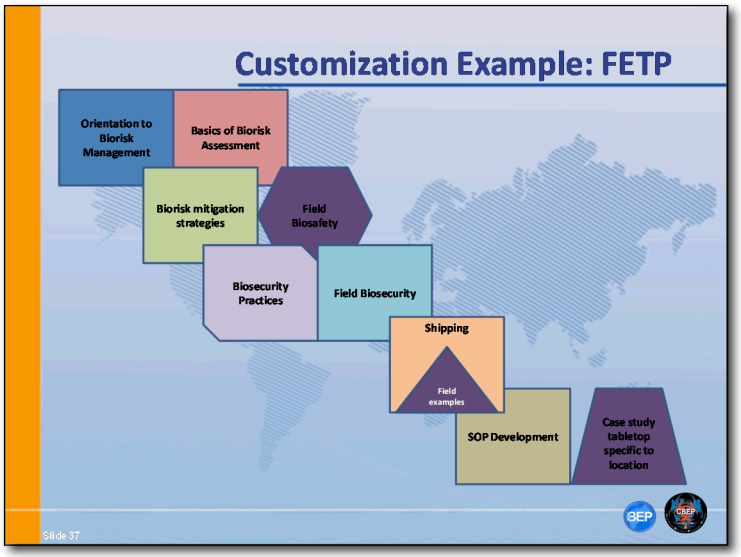

What do we train?
Person
Knowledge, Skills, & Abilities (KSA)
Desired Actions & Behaviors
Slide 32

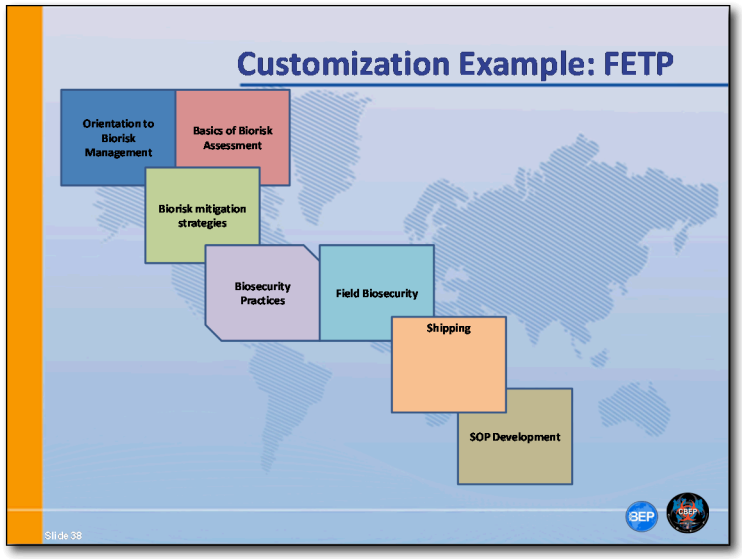

Activity 2: Scenario-Specific Biosafety & Biosecurity
As a group, take 5 minutes to brainstorm all the basic principles of biosafety or biosecurity that are COMMON to most settings (lab, field, public health, animal health, etc.). Write each principle on a separate sticky note.
Take another 5 minutes to brainstorm all the UNIQUE features of biosafety or biosecurity found in a specific setting (like a public health lab). Write each feature on a separate sticky note.


Configuration & Customization
Configuration
matching objectives between training needs and GBRMC courses
Customization
adding course materials to address additional objectives not met by GBRMC
Slide 34


Configuration Example
• Training Need:
– 2 day course introducing biorisk management , risk assessment, biorisk mitigation strategies, and biorisk management performance indicators
Orientation to Biorisk Management
Basics of Biorisk Assessment
Biorisk mitigation strategies
Establishing BRM performance indicators
Slide 35


Customization Example: FETP
• Training Need:
– 1 week biosafety and biosecurity module for Field Epidemiology Training Program
Slide 36


Customization Example: FETP
Orientation to Biorisk Management
Basics of Biorisk Assessment
Biorisk mitigation strategies
Field Biosafety
Biosecurity Practices
Field Biosecurity
Shipping
Field examples
SOP Development
Case study tabletop specific to location
Slide 37


Customization Example: FETP
Orientation to Biorisk Management
Basics of Biorisk Assessment
Biorisk mitigation strategies
Biosecurity Practices
Field Biosecurity
Shipping
SOP Development
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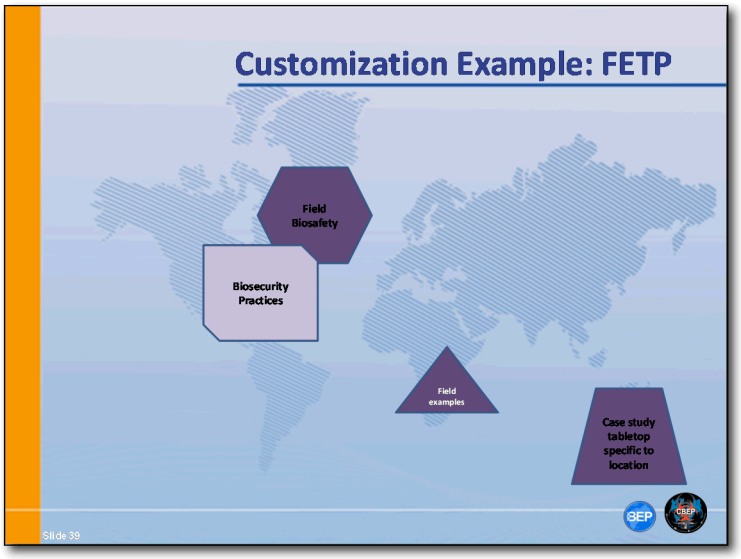
Customization Example: FETP
Field Biosafety
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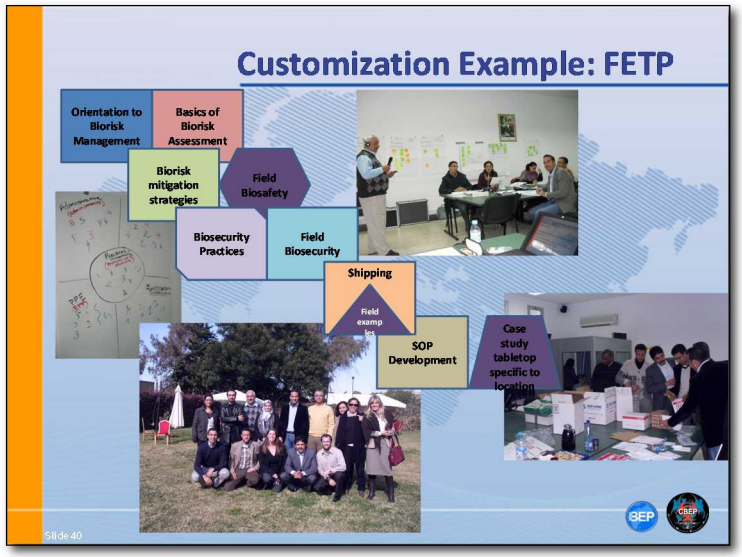
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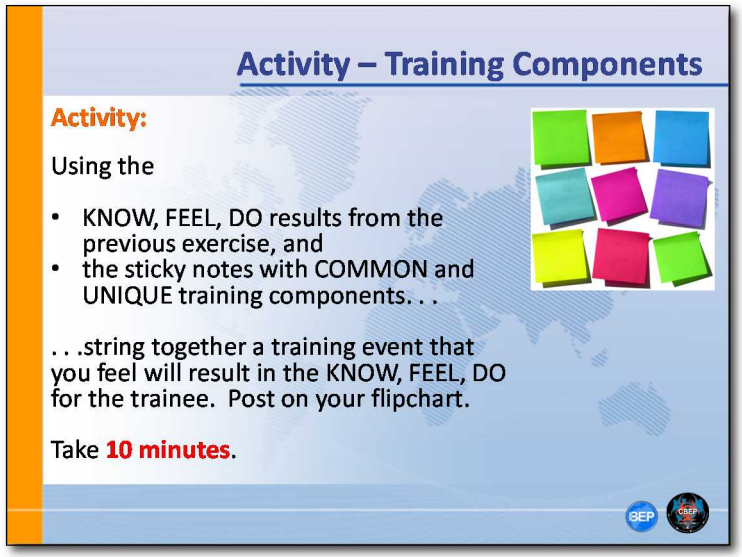
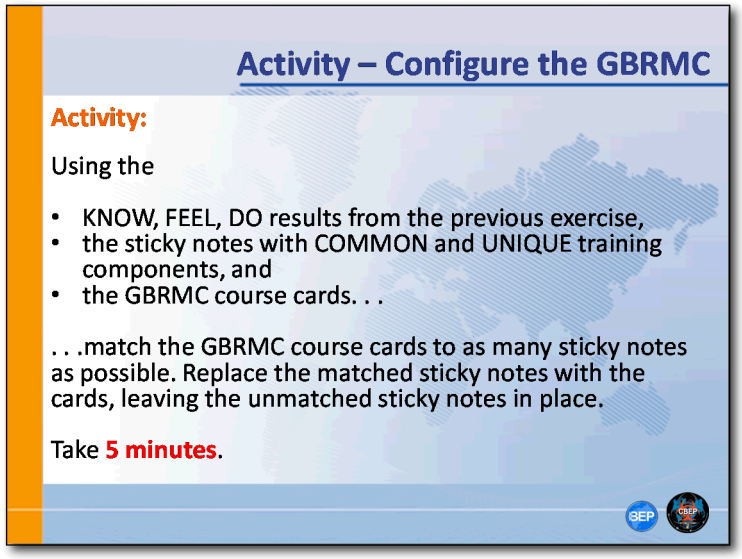
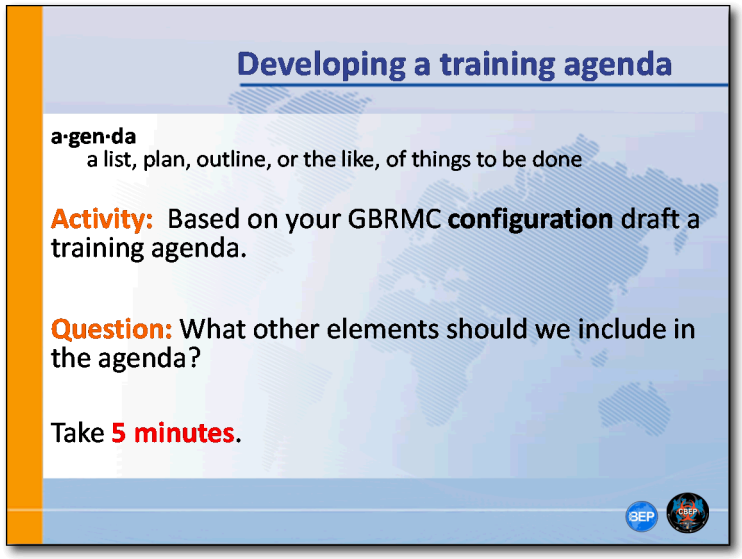
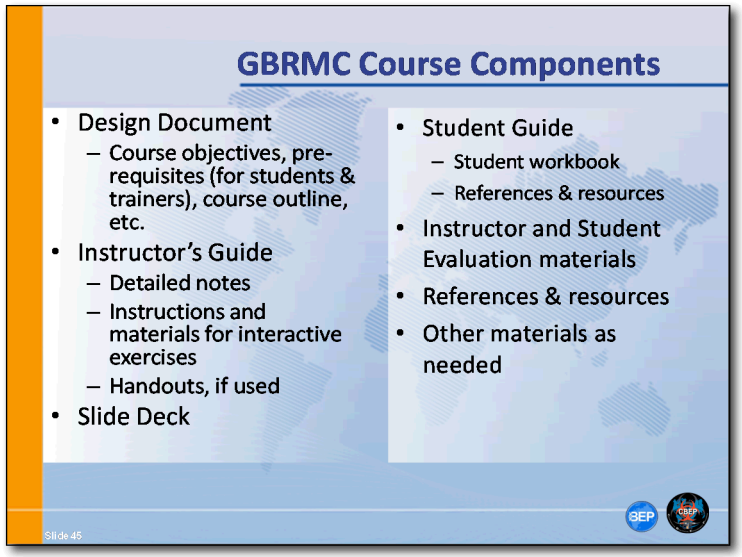
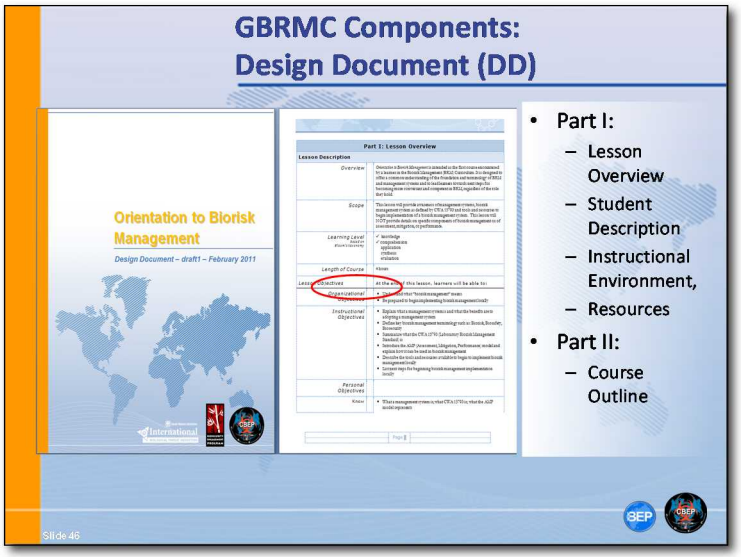
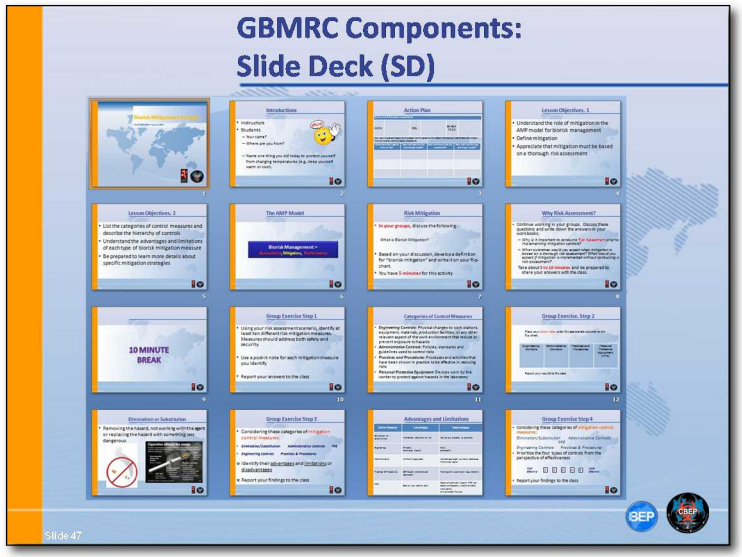

Activity – Training Components
Activity:
Using the
• KNOW, FEEL, DO results from the previous exercise, and
• the sticky notes with COMMON and UNIQUE training components. . .
. . .string together a training event that you feel will result in the KNOW, FEEL, DO for the trainee. Post on your flipchart.
Take 10 minutes.

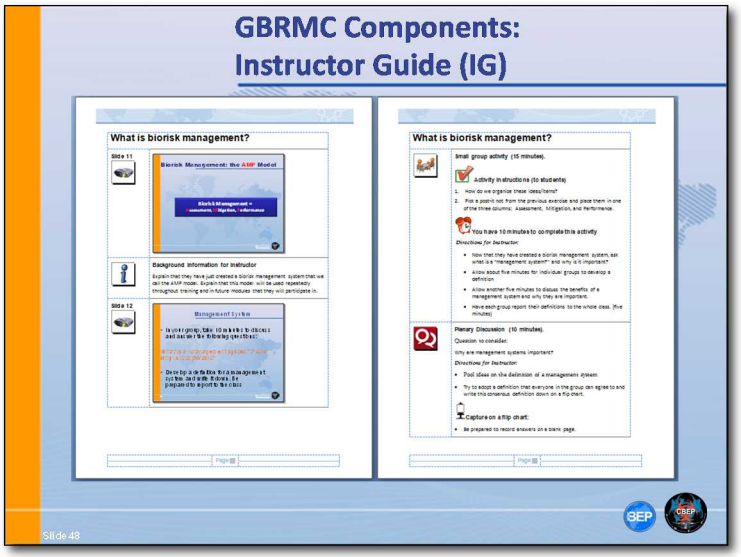

Activity – Configure the GBRMC
Activity:
Using the
• KNOW, FEEL, DO results from the previous exercise,
• the sticky notes with COMMON and UNIQUE training components, and
• the GBRMC course cards. . .
. . .match the GBRMC course cards to as many sticky notes as possible. Replace the matched sticky notes with the cards, leaving the unmatched sticky notes in place.
Take 5 minutes.

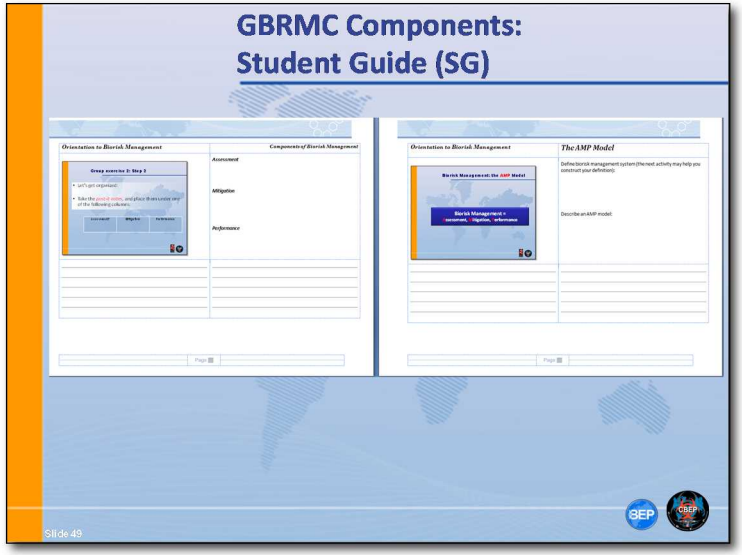

Developing a training agenda
a·gen·da
a list, plan, outline, or the like, of things to be done
Activity: Based on your GBRMC configuration draft a training agenda.
Question: What other elements should we include in the agenda?
Take 5 minutes.

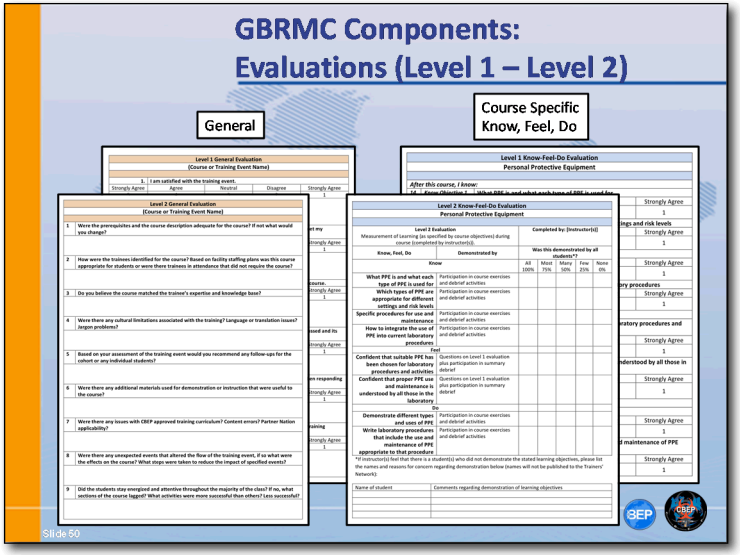

GBRMC Course Components
• Design Document
– Course objectives, pre-requisites (for students & trainers), course outline, etc.
• Instructor's Guide
– Detailed notes
– Instructions and materials for interactive exercises
– Handouts, if used
• Slide Deck
• Student Guide
– Student workbook
– References & resources
• Instructor and Student Evaluation materials
• References & resources
• Other materials as needed
Slide 45

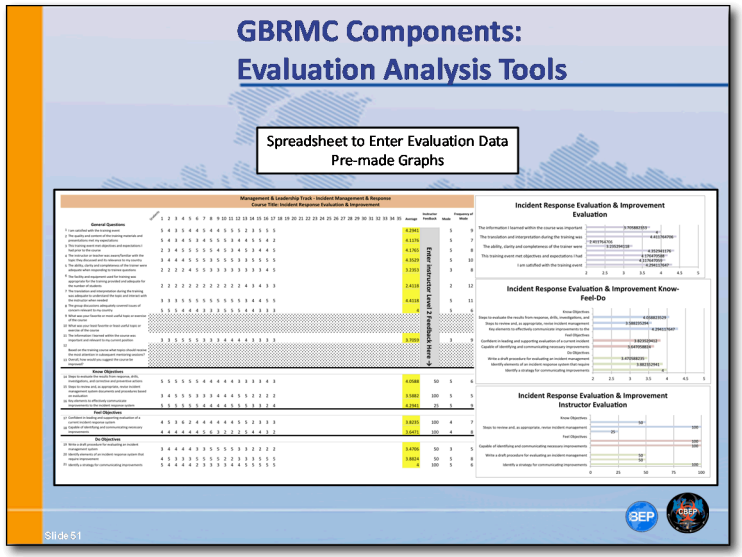

GBRMC Components: Design Document (DD)
Orientation to Biorisk Management
Design Document – draft1 – February 2011
Part I: Lesson Overview
• Part I:
– Lesson Overview
– Student Description
– Instructional Environment,
– Resources
• Part II:
– Course Outline
Slide 46

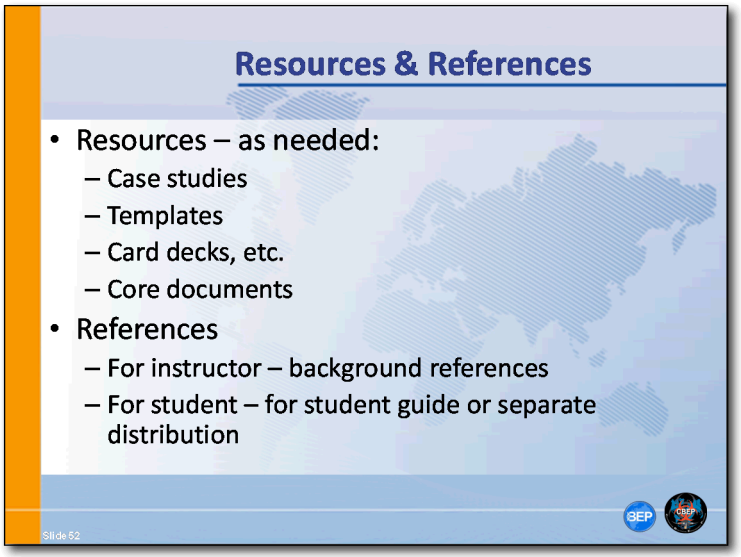

GBMRC Components:
Slide Deck (SD)
10 MINUTE BREAK
Slide 47

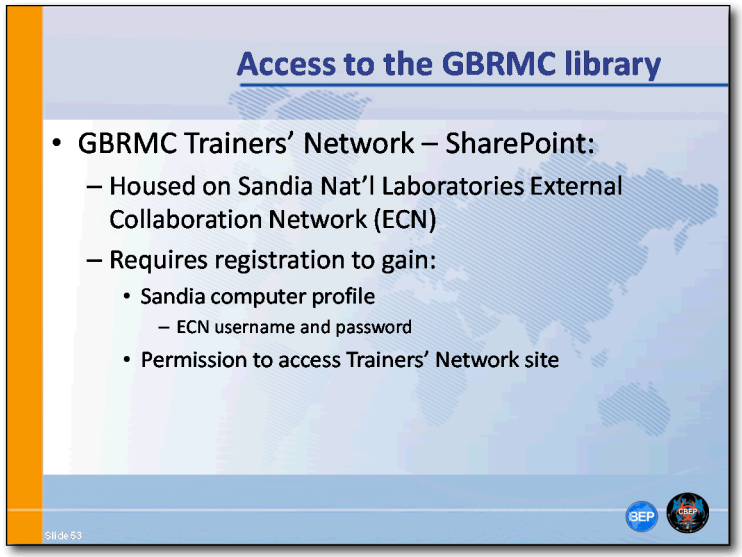

GBRMC Components:
Instructor Guide (IG)
What is biorisk management?
What is biorisk management?
Slide 48

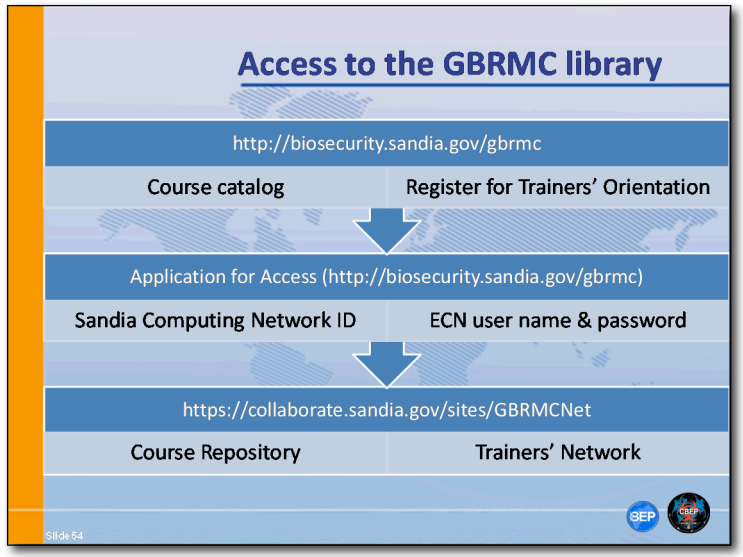

GBRMC Components:
Student Guide (SG)
Orientation to Biorisk Management
Components of Biorisk Management
Assessment
Mitigation
Performance
Orientation to Biorisk Management
The AMP Model
Define biorisk management system (the next activity may help you construct your definition):
Describe an AMP model:
Slide 49

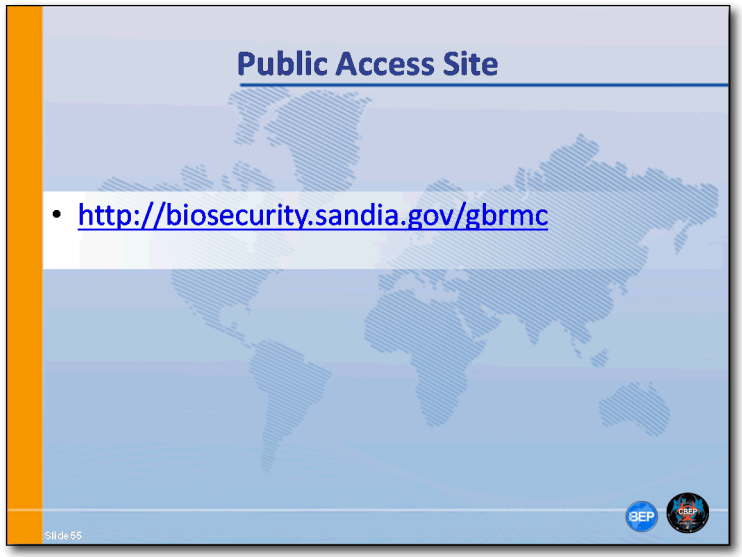

GBRMC Components:
Evaluations (Level 1 – Level 2)
General
Course Specific
Know, Feel, Do
Level 1 General Evaluation
(Course or Training Event Name)
Level 2 General Evaluation
(Course or Training Event Name)
Level 1 Know-Feel-Do Evaluation
Personal Protective Equipment
Level 2 Know-Feel-Do Evaluation
Personal Protective Equipment
Slide 50

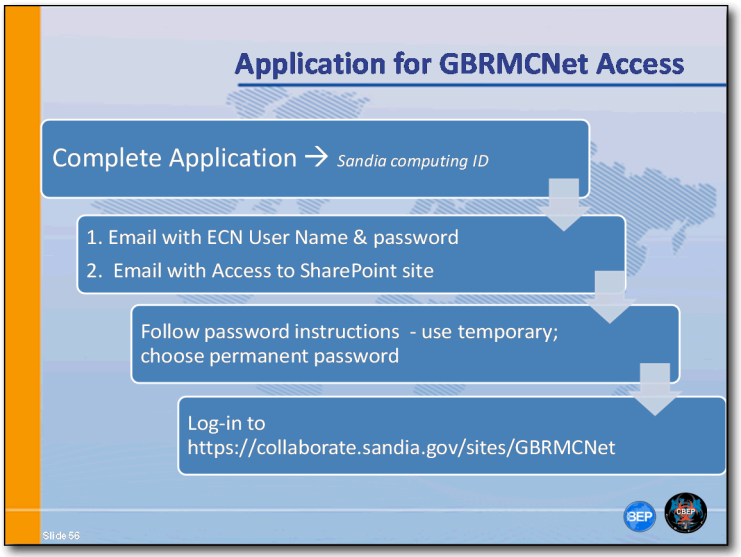

GBRMC Components:
Evaluation Analysis Tools
Spreadsheet to Enter Evaluation Data
Pre-made Graphs
Slide 51

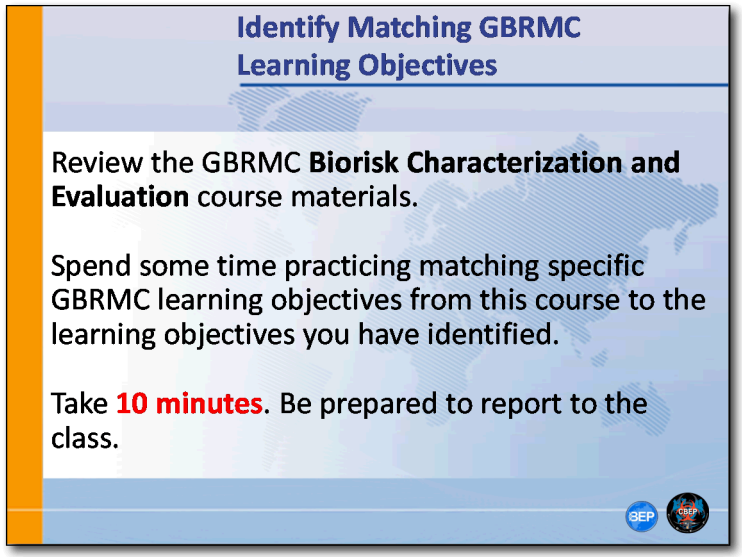

Resources & References
• Resources – as needed:
– Case studies
– Templates
– Card decks, etc.
– Core documents
• References
– For instructor – background references
– For student – for student guide or separate distribution
Slide 52

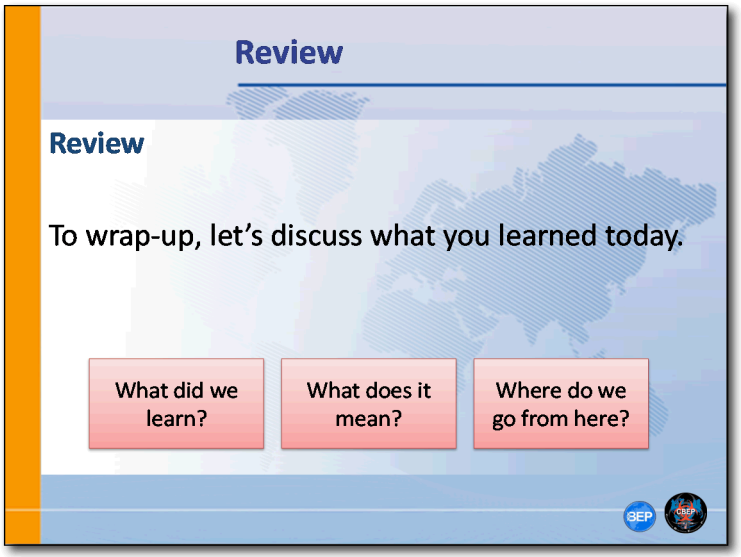

Access to the GBRMC library
• GBRMC Trainers' Network – SharePoint:
– Housed on Sandia Nat'l Laboratories External Collaboration Network (ECN)
– Requires registration to gain:
• Sandia computer profile
– ECN username and password
• Permission to access Trainers' Network site
Slide 53

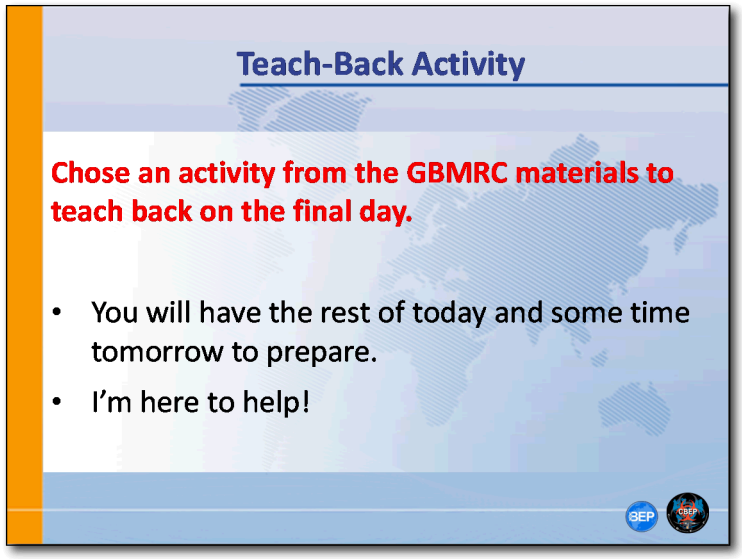

Access to the GBRMC library
http://biosecurity.sandia.gov/gbrmc
Course catalog
Register for Trainers' Orientation
Application for Access (http://biosecurity.sandia.gov/gbrmc)
Sandia Computing Network ID
ECN user name & password
https://collaborate.sandia.gov/sites/GBRMCNet
Course Repository
Trainers' Network
Slide 54


Public Access Site
• http://biosecurity.sandia.gov/gbrmc
Slide 55

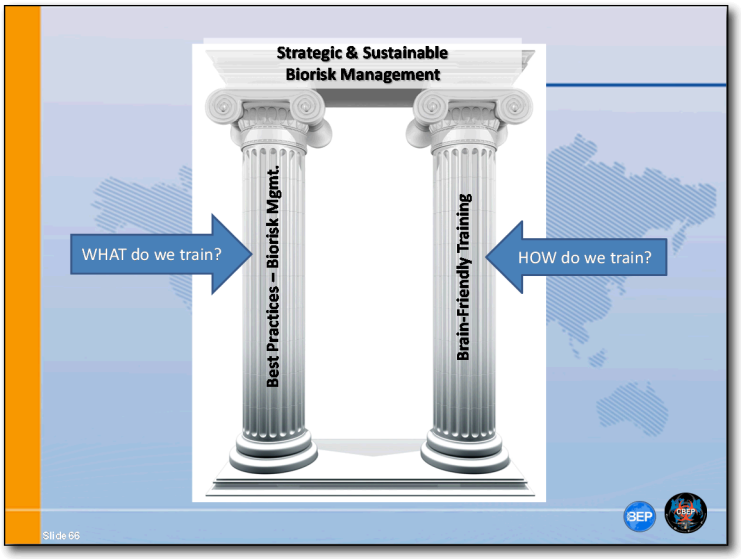

Application for GBRMCNet Access
Complete Application → Sandia computing ID
1. Email with ECN User Name & password
2. Email with Access to SharePoint site
Follow password instructions - use temporary; choose permanent password
Log-in to https://collaborate.sandia.gov/sites/GBRMCNet
Slide 56

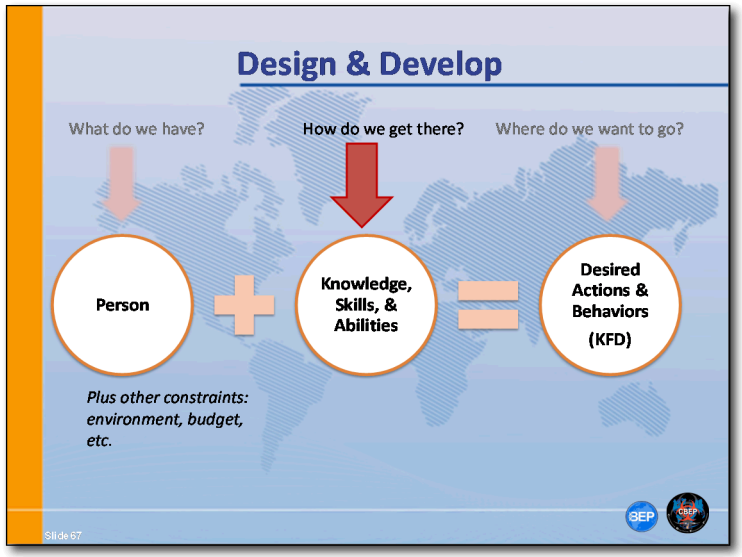

Identify Matching GBRMC Learning Objectives
Review the GBRMC **Biorisk Characterization and Evaluation** course materials.
Spend some time practicing matching specific GBRMC learning objectives from this course to the learning objectives you have identified.
Take **10 minutes**. Be prepared to report to the class.


Review
Review
To wrap-up, let's discuss what you learned today.
What did we learn?
What does it mean?
Where do we go from here?

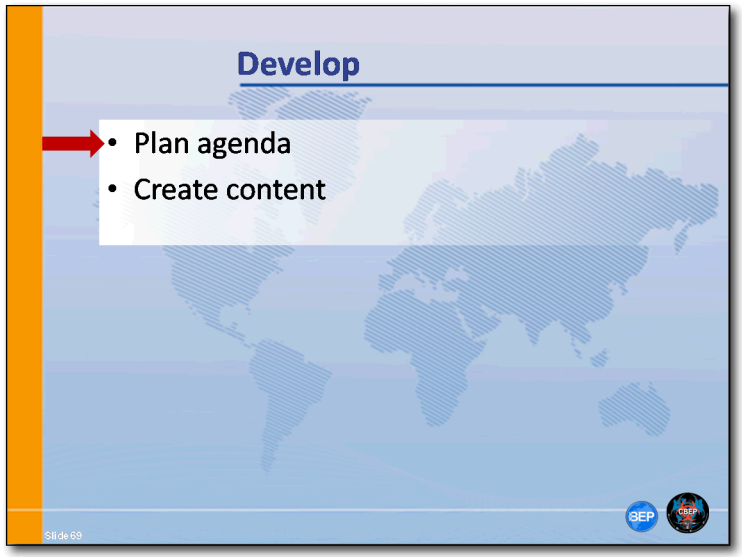

Teach-Back Activity
Chose an activity from the GBMRC materials to teach back on the final day.
• You will have the rest of today and some time tomorrow to prepare.
• I'm here to help!

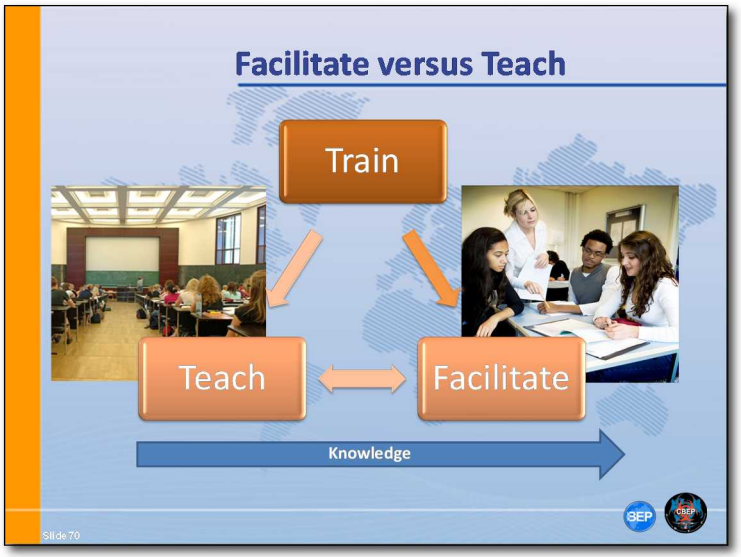

Day 2
Slide 62


Strategic & Sustainable Biorisk Management
WHAT do we train?
Best Practices – Biorisk Mgmt.
Brain-Friendly Training
HOW do we train?
Slide 66

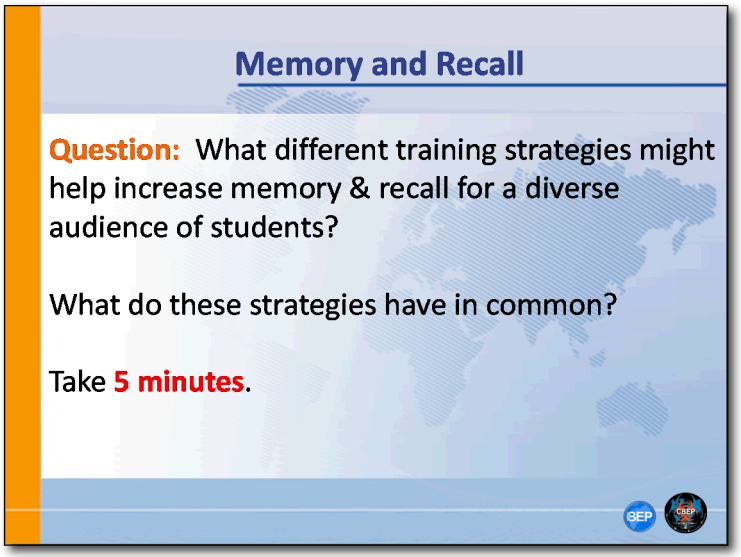

Design & Develop
What do we have?
How do we get there?
Where do we want to go?
Person
Knowledge, Skills, & Abilities
Desired Actions & Behaviors (KFD)
Plus other constraints: environment, budget, etc.
Slide 67

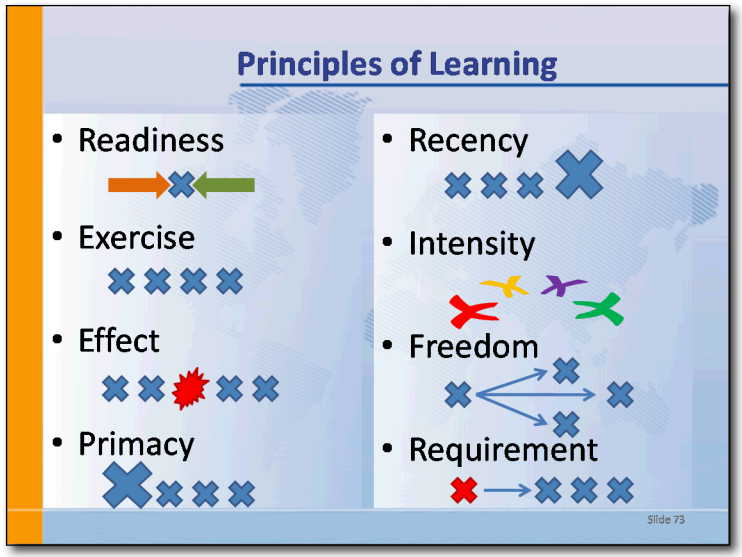

Design
Apply training strategies to achieve goals & objectives
Design the students' experience
Apply visual design (look & feel)
Slide 68

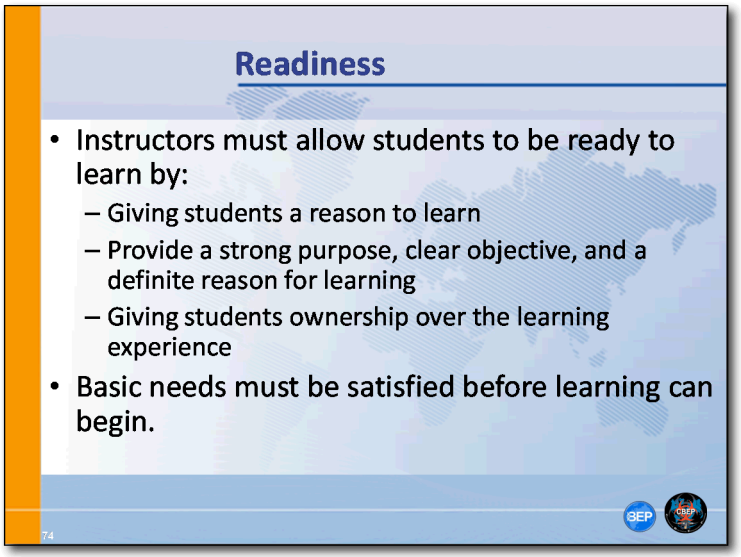

Develop
• Plan agenda
• Create content
Slide 69

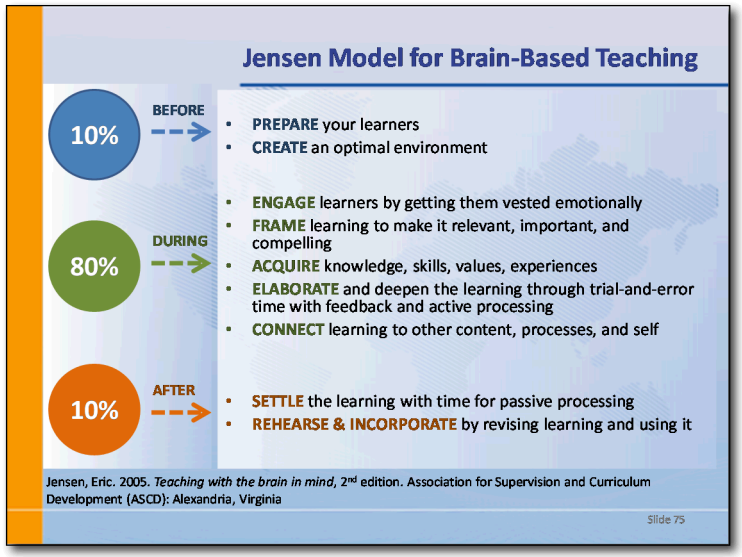

Facilitate versus Teach
Train
Teach
Facilitate
Knowledge
Slide 70

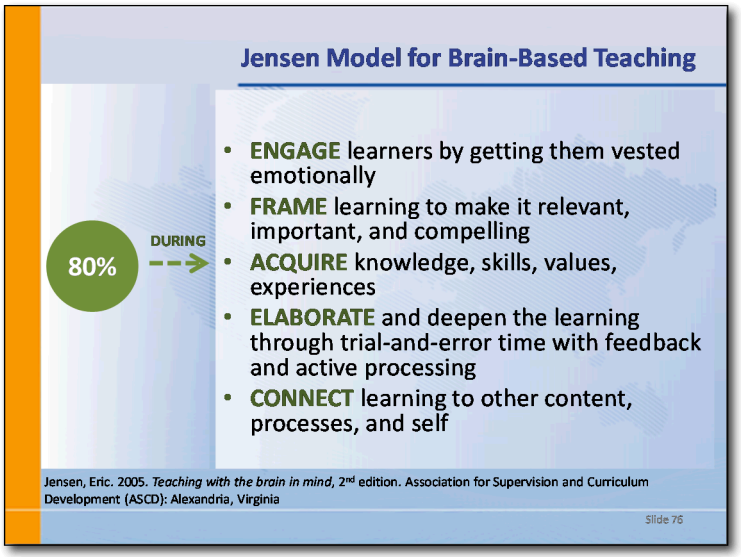

Know – Feel - Do
"People will forget what you say.
People will forget what you do.
But people will never forget the way you made them feel."
– Maya Angelou
Slide 71

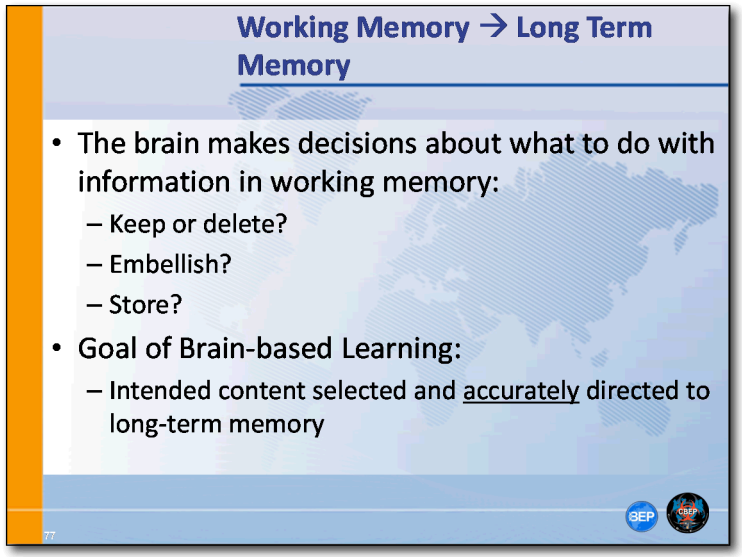

Memory and Recall
Question: What different training strategies might help increase memory & recall for a diverse audience of students?
What do these strategies have in common?
Take 5 minutes.

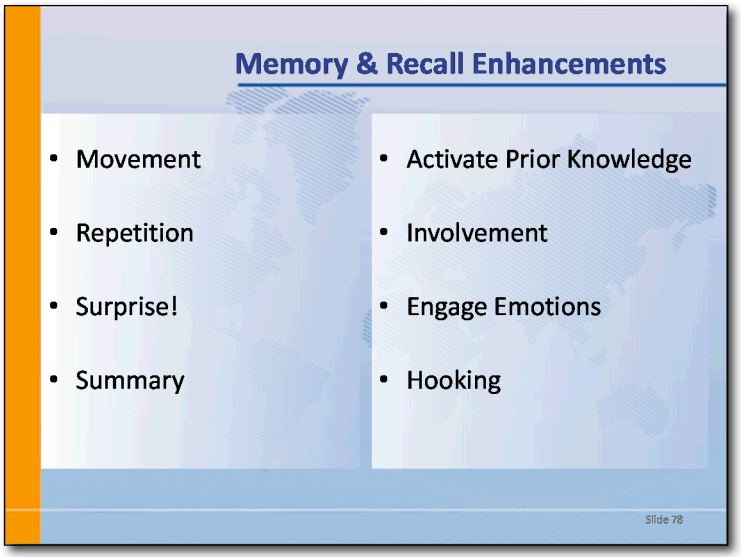

Principles of Learning
• Readiness
• Exercise
• Effect
• Primacy
• Recency
• Intensity
• Freedom
• Requirement
Slide 73

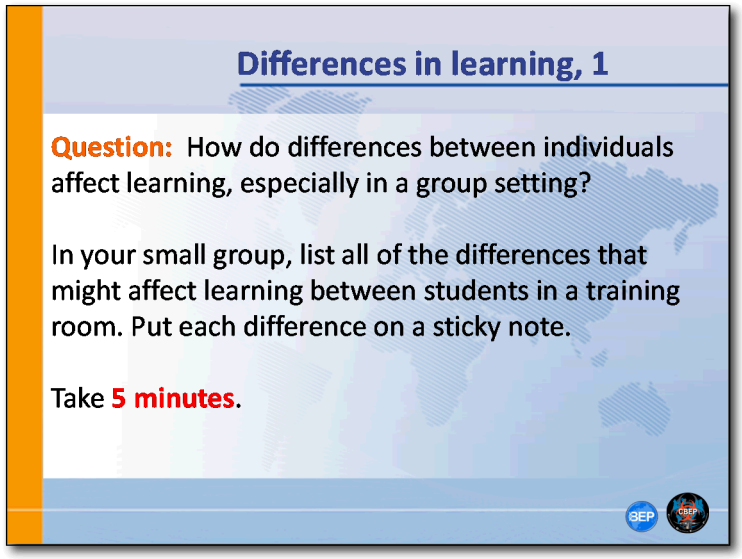

Readiness
• Instructors must allow students to be ready to learn by:
– Giving students a reason to learn
– Provide a strong purpose, clear objective, and a definite reason for learning
– Giving students ownership over the learning experience
• Basic needs must be satisfied before learning can begin.
74


Jensen Model for Brain-Based Teaching
10%
BEFORE
PREPARE your learners
CREATE an optimal environment
80%
DURING
ENGAGE learners by getting them vested emotionally
FRAME learning to make it relevant, important, and compelling
ACQUIRE knowledge, skills, values, experiences
ELABORATE and deepen the learning through trial-and-error time with feedback and active processing
CONNECT learning to other content, processes, and self
10%
AFTER
SETTLE the learning with time for passive processing
REHEARSE & INCORPORATE by revising learning and using it
Jensen, Eric. 2005. Teaching with the brain in mind, 2nd edition. Association for Supervision and Curriculum Development (ASCD): Alexandria, Virginia
Slide 75


Jensen Model for Brain-Based Teaching
80%
DURING
ENGAGE learners by getting them vested emotionally
FRAME learning to make it relevant, important, and compelling
ACQUIRE knowledge, skills, values, experiences
ELABORATE and deepen the learning through trial-and-error time with feedback and active processing
CONNECT learning to other content, processes, and self
Jensen, Eric. 2005. Teaching with the brain in mind, 2nd edition. Association for Supervision and Curriculum Development (ASCD): Alexandria, Virginia
Slide 76

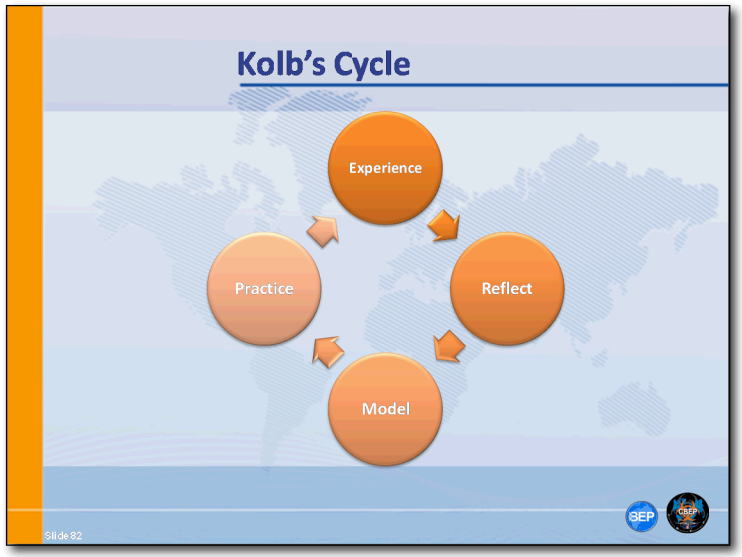

Working Memory → Long Term Memory
• The brain makes decisions about what to do with information in working memory:
– Keep or delete?
– Embellish?
– Store?
• Goal of Brain-based Learning:
– Intended content selected and accurately directed to long-term memory
77

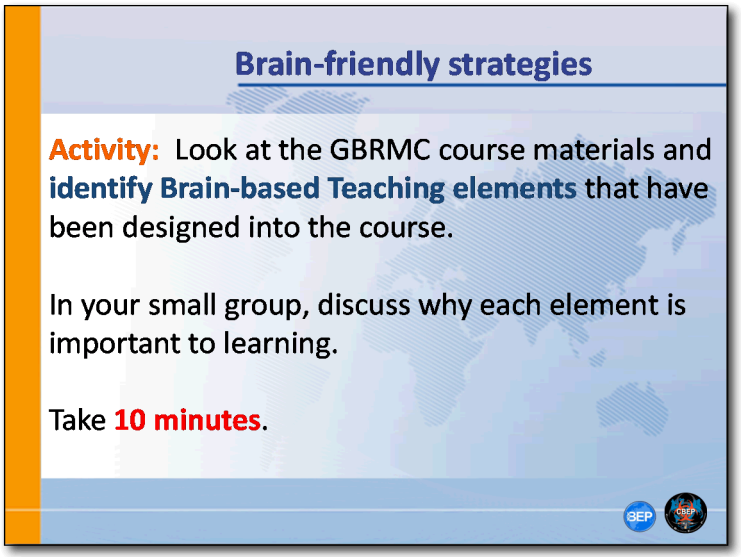

Memory & Recall Enhancements
• Movement
• Repetition
• Surprise!
• Summary
• Activate Prior Knowledge
• Involvement
• Engage Emotions
• Hooking
Slide 78


Differences in learning, 1
Question: How do differences between individuals affect learning, especially in a group setting?
In your small group, list all of the differences that might affect learning between students in a training room. Put each difference on a sticky note.
Take 5 minutes.


Sensory Styles
Auditory (hearing)
Visual (seeing)
Kinesthetic (moving)
Slide 80


Learning Styles
Reflector
Theorist
Pragmatist
Activist
Slide 81


Kolb's Cycle
Experience
Reflect
Model
Practice
Slide 82


Brain-friendly strategies
Activity: Look at the GBRMC course materials and identify Brain-based Teaching elements that have been designed into the course.
In your small group, discuss why each element is important to learning.
Take 10 minutes.

Activity Toolkit

Question: What different training strategies might help increase memory & recall for a diverse audience of students?

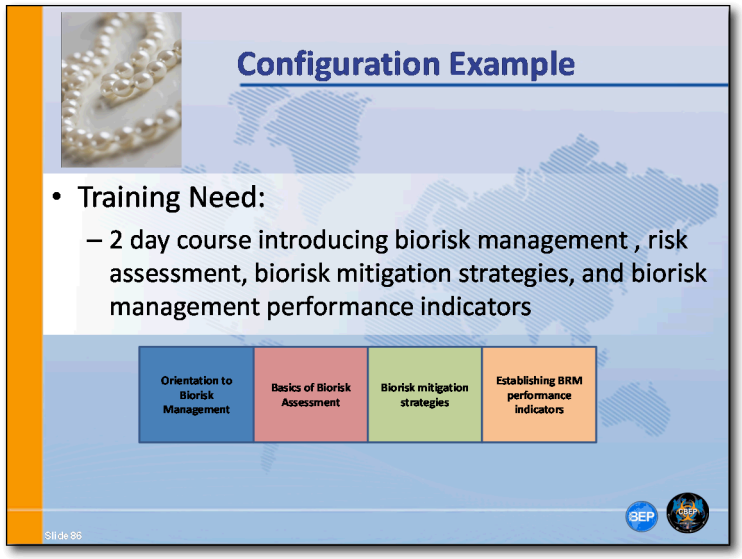
Take **5 minutes**.

Configuration & Customization

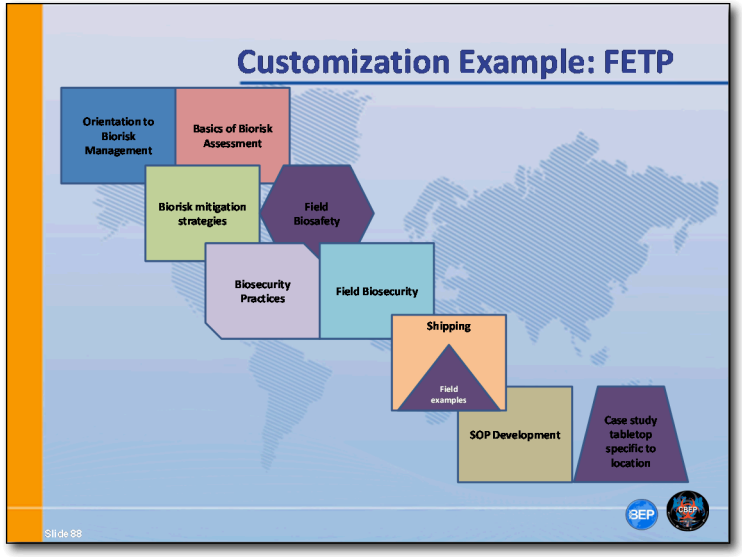
Configuration
matching objectives between training needs and GBRMC courses

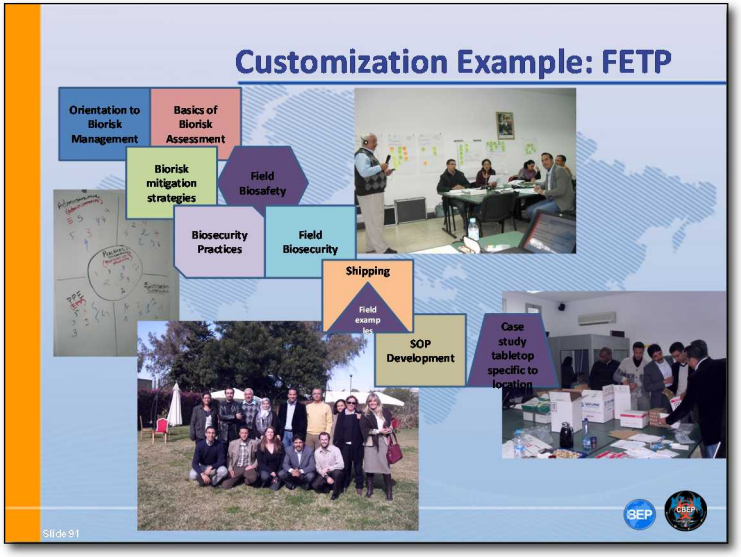
Customization
adding course materials to address additional objectives not met by GBRMC

Slide 85


Configuration Example
• Training Need:
– 2 day course introducing biorisk management , risk assessment, biorisk mitigation strategies, and biorisk management performance indicators
Orientation to Biorisk Management
Basics of Biorisk Assessment
Biorisk mitigation strategies
Establishing BRM performance indicators
Slide 86


Customization Example: FETP
• Training Need:
– 1 week biosafety and biosecurity module for Field Epidemiology Training Program
Slide 87


Customization Example: FETP
Orientation to Biorisk Management
Basics of Biorisk Assessment
Biorisk mitigation strategies
Field Biosafety
Biosecurity Practices
Field Biosecurity
Shipping
Field examples
SOP Development
Case study tabletop specific to location
Slide 88


Customization Example: FETP
Orientation to Biorisk Management
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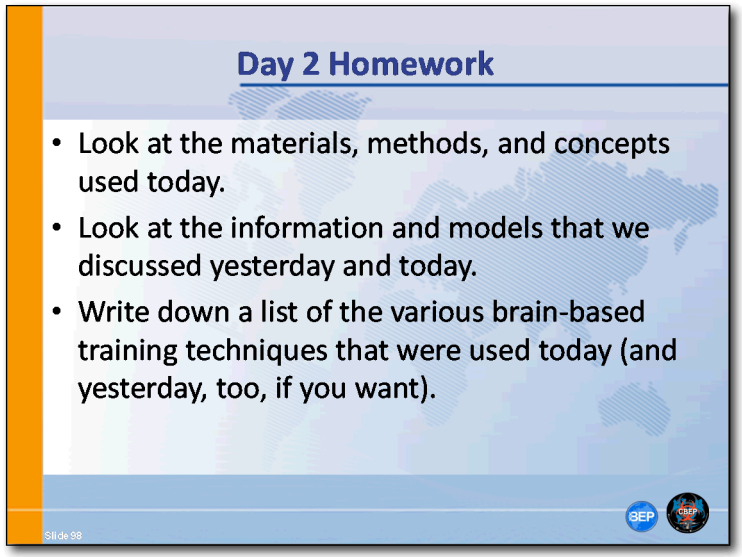
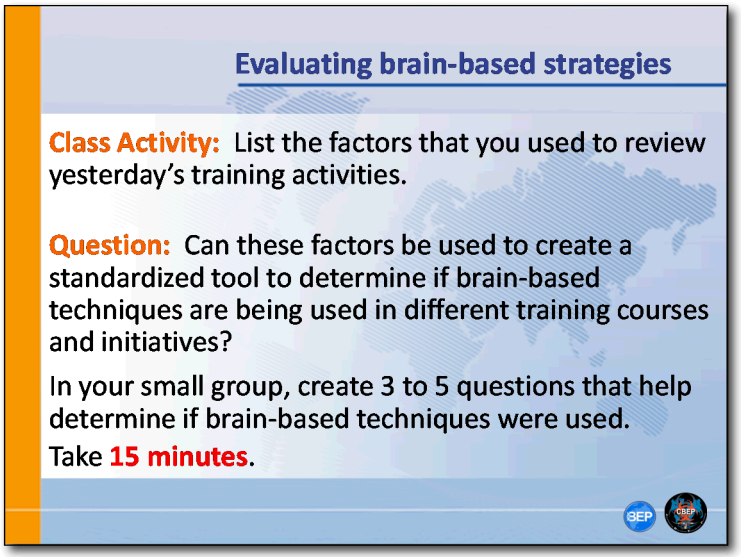
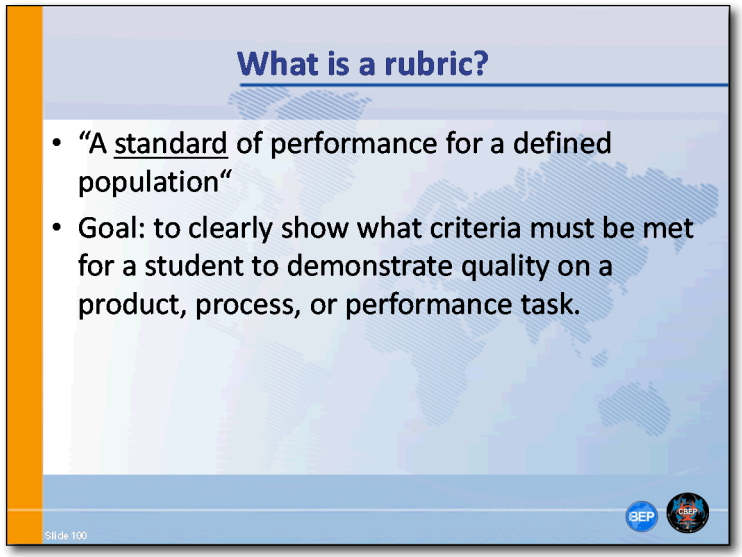
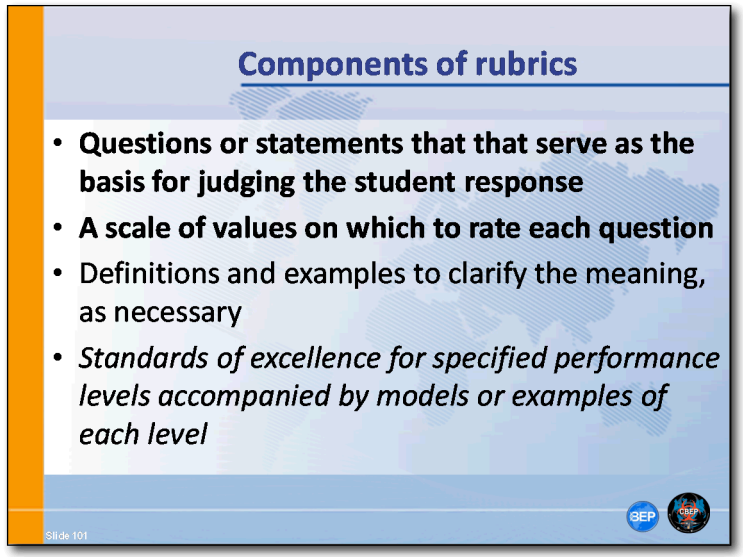
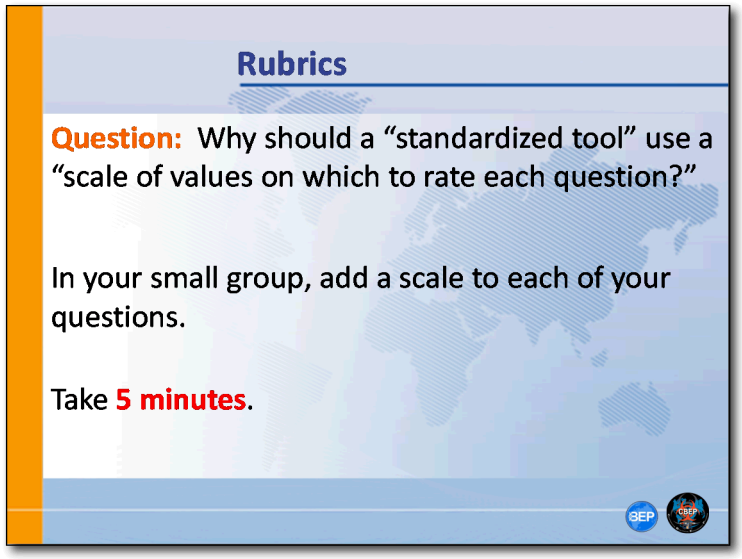
Biorisk mitigation strategies
Field Biosafety
Biosecurity Practices
Field Biosecurity
Shipping
SOP Development
Case study tabletop specific to location
Slide 91

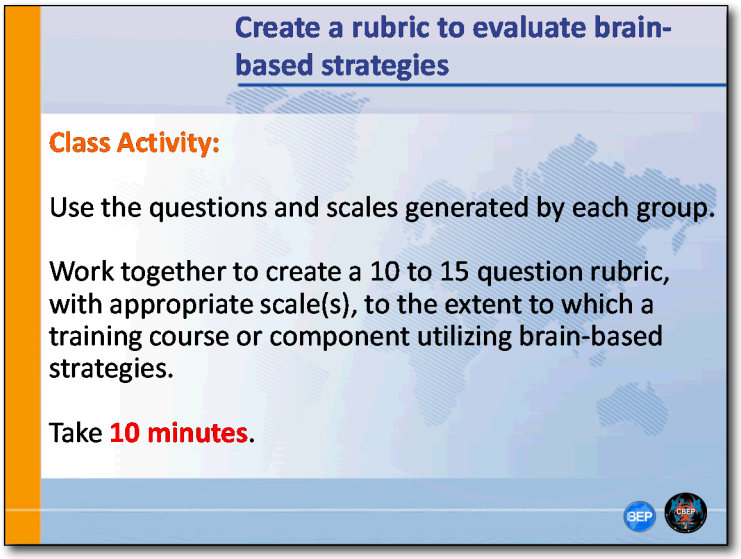

Day 2 Homework
• Look at the materials, methods, and concepts used today.
• Look at the information and models that we discussed yesterday and today.
• Write down a list of the various brain-based training techniques that were used today (and yesterday, too, if you want).
Slide 98

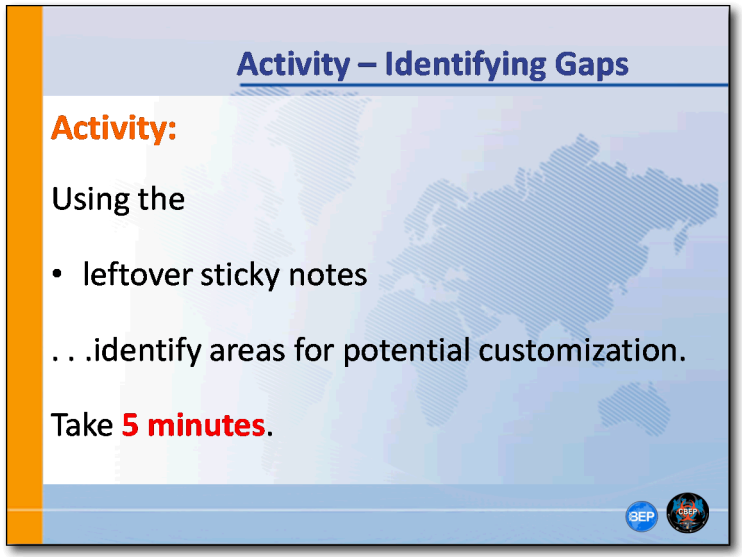

Evaluating brain-based strategies
Class Activity: List the factors that you used to review yesterday's training activities.
Question: Can these factors be used to create a standardized tool to determine if brain-based techniques are being used in different training courses and initiatives?
In your small group, create 3 to 5 questions that help determine if brain-based techniques were used.
Take 15 minutes.

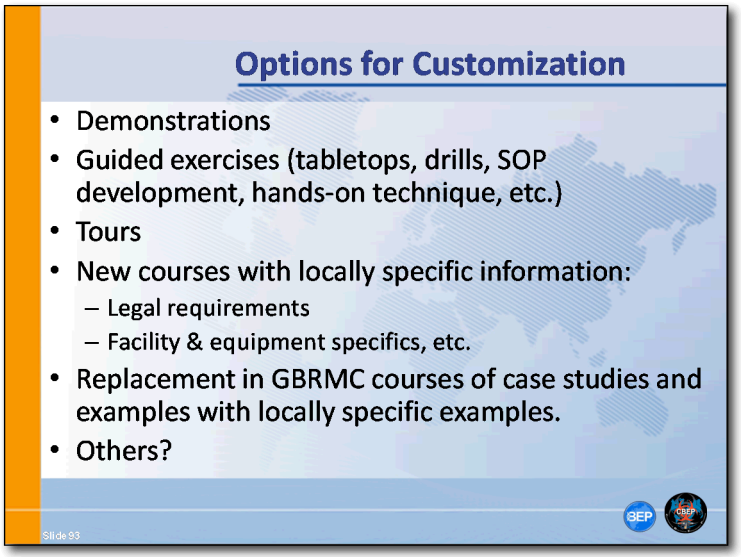

What is a rubric?
• "A standard of performance for a defined population"
• Goal: to clearly show what criteria must be met for a student to demonstrate quality on a product, process, or performance task.
Slide 100

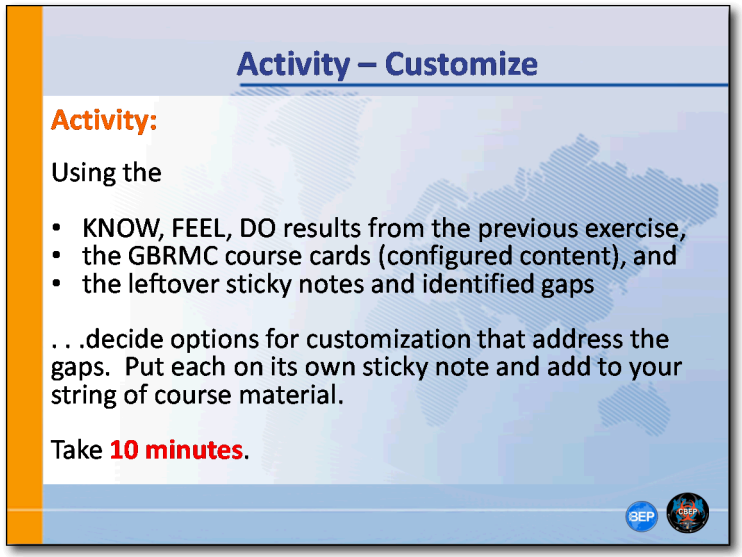

Components of rubrics
• Questions or statements that that serve as the basis for judging the student response
• A scale of values on which to rate each question
• Definitions and examples to clarify the meaning, as necessary
• Standards of excellence for specified performance levels accompanied by models or examples of each level
Slide 101

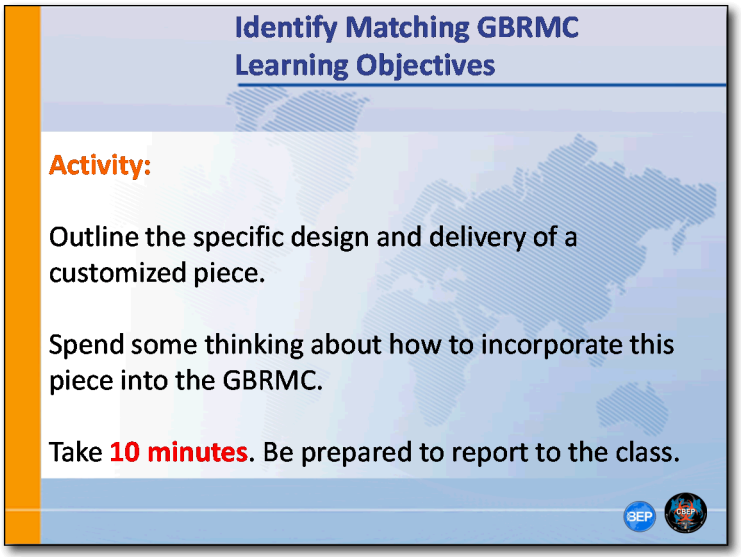

Rubrics
Question: Why should a "standardized tool" use a "scale of values on which to rate each question?"
In your small group, add a scale to each of your questions.
Take 5 minutes.

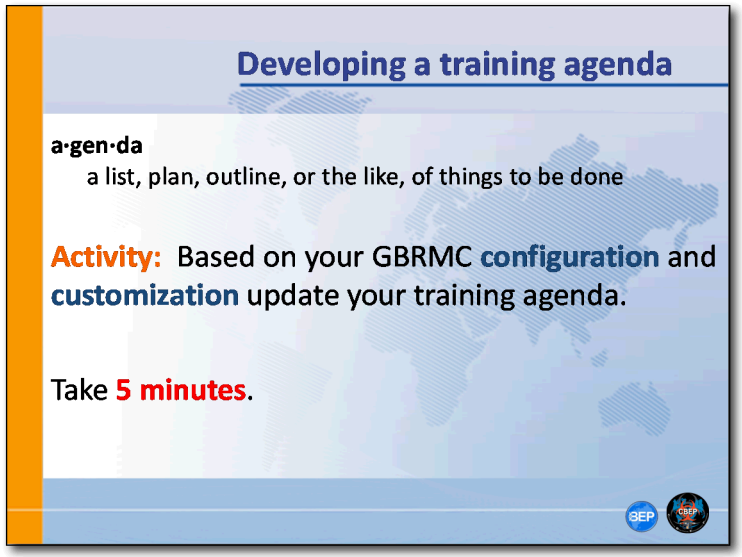

Create a rubric to evaluate brain-based strategies
Class Activity:
Use the questions and scales generated by each group.
Work together to create a 10 to 15 question rubric, with appropriate scale(s), to the extent to which a training course or component utilizing brain-based strategies.
Take 10 minutes.


Activity – Identifying Gaps
Activity:
Using the
• leftover sticky notes
. . .identify areas for potential customization.
Take 5 minutes.

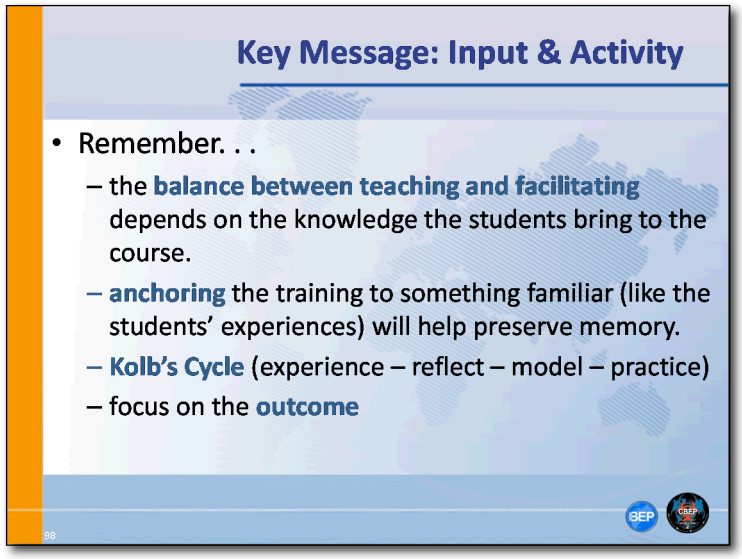

Options for Customization
• Demonstrations
• Guided exercises (tabletops, drills, SOP development, hands-on technique, etc.)
• Tours
• New courses with locally specific information:
– Legal requirements
– Facility & equipment specifics, etc.
• Replacement in GBRMC courses of case studies and examples with locally specific examples.
• Others?
Slide 93

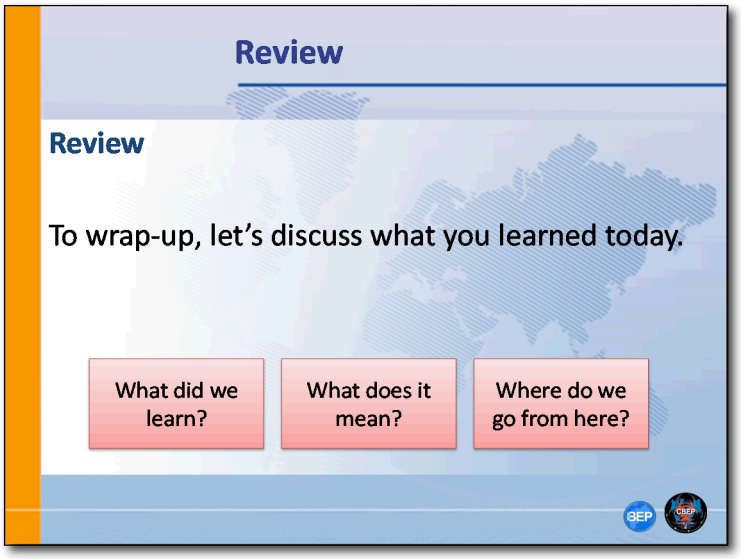

Activity – Customize
Activity:
Using the
• KNOW, FEEL, DO results from the previous exercise,
• the GBRMC course cards (configured content), and
• the leftover sticky notes and identified gaps
. . .decide options for customization that address the gaps. Put each on its own sticky note and add to your string of course material.
Take 10 minutes.


Identify Matching GBRMC Learning Objectives
Activity:
Outline the specific design and delivery of a customized piece.
Spend some thinking about how to incorporate this piece into the GBRMC.
Take 10 minutes. Be prepared to report to the class.

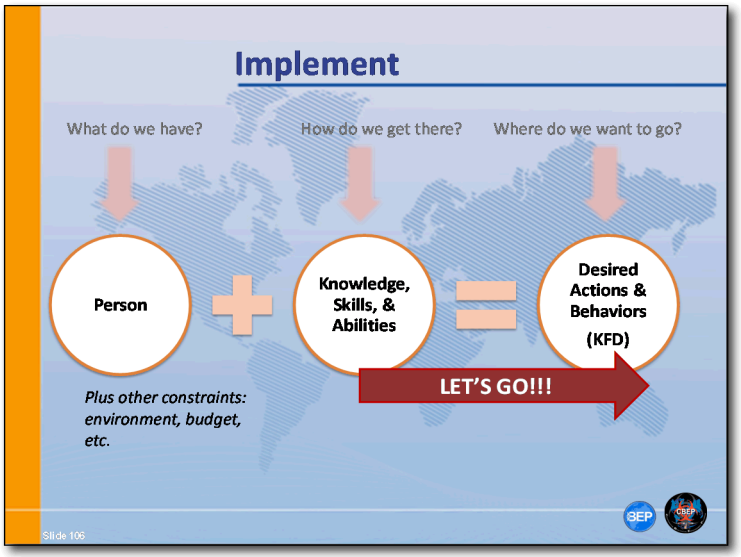

Developing a training agenda
a·gen·da
a list, plan, outline, or the like, of things to be done
Activity: Based on your GBRMC configuration and customization update your training agenda.
Take 5 minutes.


Agenda
• Set the stage
• Key message(s) – teach and/or facilitate
– remember Kolb's Cycle. . .
• Debrief
• Breaks (< 90 minutes between breaks)
• Recap
• Evaluations
Slide 97


Key Message: Input & Activity
• Remember. . .
– the balance between teaching and facilitating depends on the knowledge the students bring to the course.
– anchoring the training to something familiar (like the students' experiences) will help preserve memory.
– Kolb's Cycle (experience – reflect – model – practice)
– focus on the outcome
98


Review
Review
To wrap-up, let's discuss what you learned today.
What did we learn?
What does it mean?
Where do we go from here?


Day 3
Slide 102


Implement
What do we have?
How do we get there?
Where do we want to go?
Person
Knowledge, Skills, & Abilities
Desired Actions & Behaviors (KFD)
LET'S GO!!!
Plus other constraints: environment, budget, etc.
Slide 106

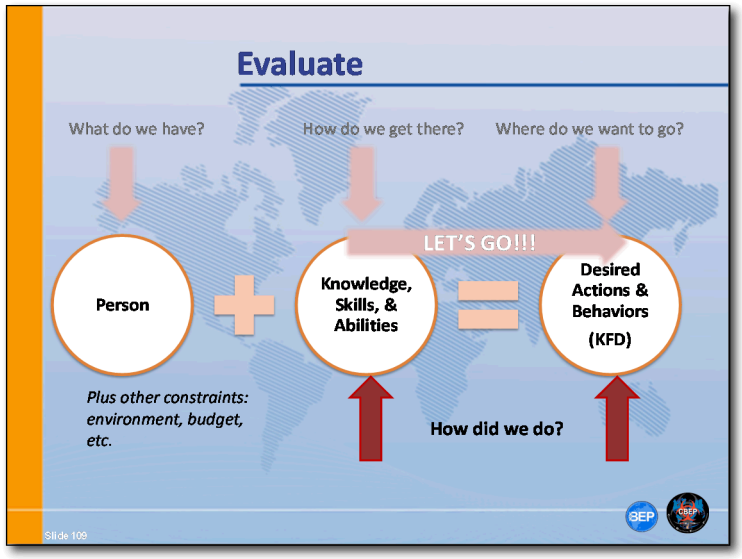
Providing feedback for training

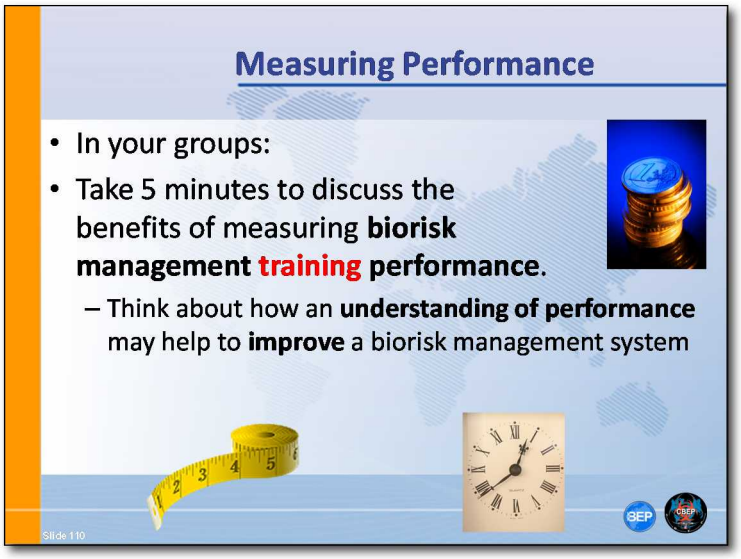
- Be respectful of the work that has been done.
- Start with "I like. . ." and list the good points.
- Don't say, "I like this, but. . ."
- When making suggestions, use phrases like, "This might be more effective if. . ." or "Have you thought about this. . .?"
- Be objective. Don't try to "fix the problem."
- Allow the trainer to ask questions.
- Listen to responses respectfully. If the writer does not agree with you, it is OK.

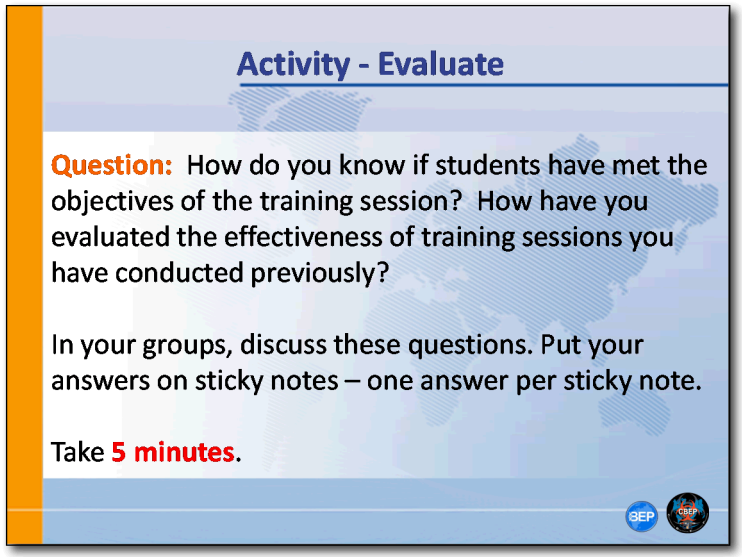
Slide 107

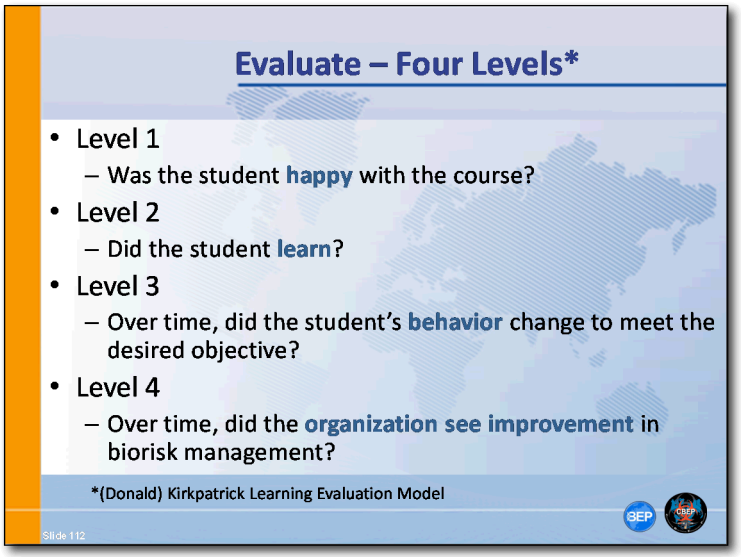
Teach-back time!

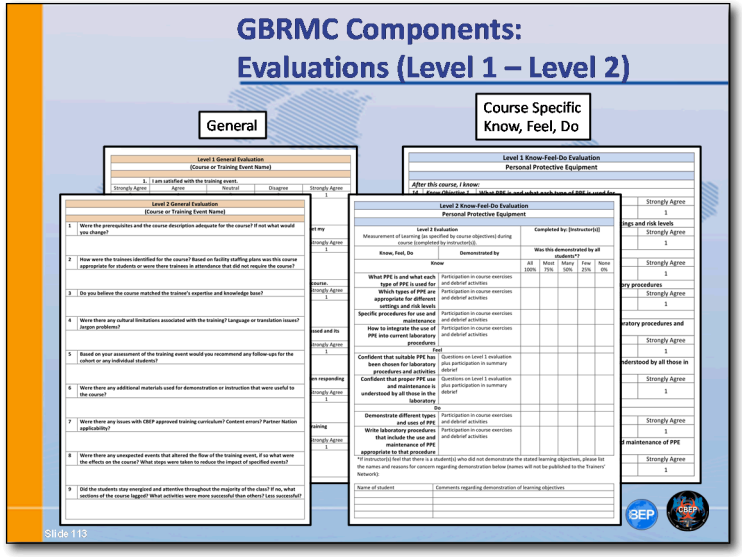
Slide 108

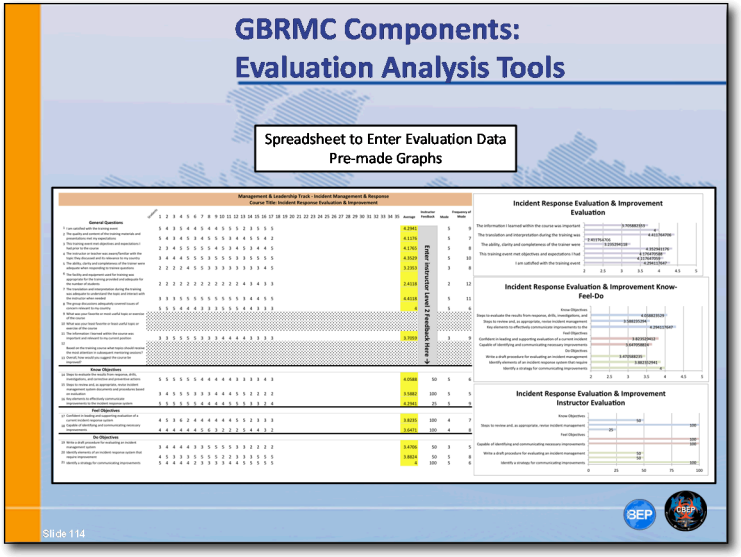

Evaluate
What do we have?
How do we get there?
Where do we want to go?
LET'S GO!!!
Person
Knowledge, Skills, & Abilities
Desired Actions & Behaviors (KFD)
Plus other constraints: environment, budget, etc.
How did we do?
Slide 109

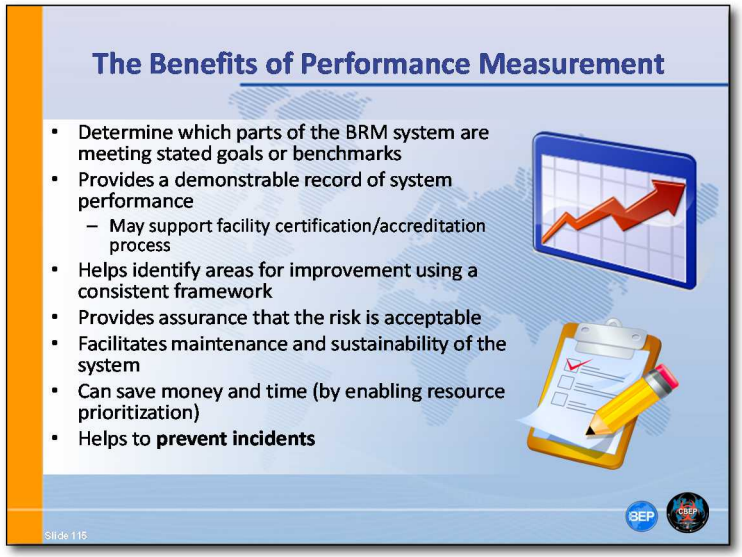

Measuring Performance
• In your groups:
• Take 5 minutes to discuss the benefits of measuring **biorisk management training performance**.
– Think about how an **understanding of performance** may help to **improve** a biorisk management system
Slide 110

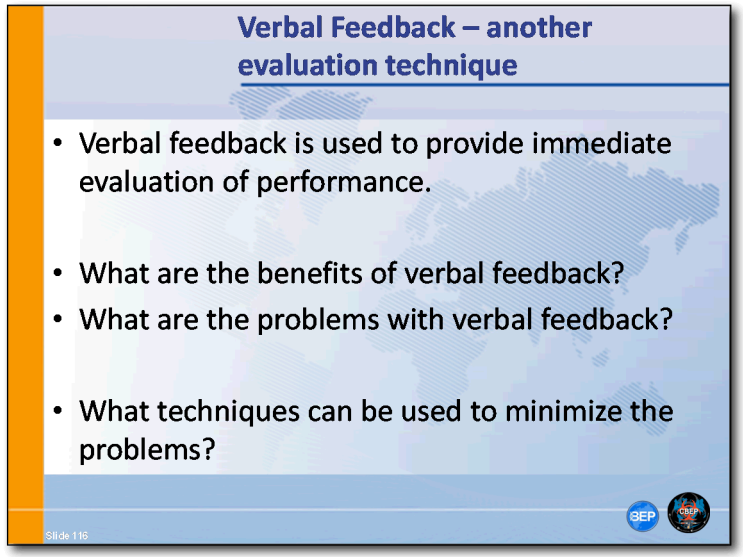

Activity - Evaluate
Question: How do you know if students have met the objectives of the training session? How have you evaluated the effectiveness of training sessions you have conducted previously?
In your groups, discuss these questions. Put your answers on sticky notes – one answer per sticky note.
Take 5 minutes.


Evaluate – Four Levels*
Level 1
– Was the student happy with the course?
Level 2
– Did the student learn?
Level 3
– Over time, did the student's behavior change to meet the desired objective?
Level 4
– Over time, did the organization see improvement in biorisk management?
*(Donald) Kirkpatrick Learning Evaluation Model
Slide 112

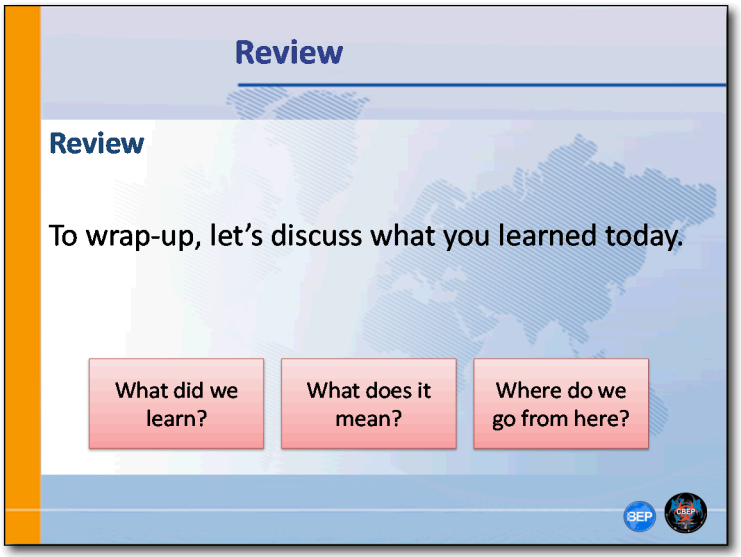

GBRMC Components:
Evaluations (Level 1 – Level 2)
General
Course Specific
Know, Feel, Do
Slide 113


GBRMC Components:
Evaluation Analysis Tools
Spreadsheet to Enter Evaluation Data
Pre-made Graphs
Slide 114


The Benefits of Performance Measurement
Determine which parts of the BRM system are meeting stated goals or benchmarks
Provides a demonstrable record of system performance
May support facility certification/accreditation process
Helps identify areas for improvement using a consistent framework
Provides assurance that the risk is acceptable
Facilitates maintenance and sustainability of the system
Can save money and time (by enabling resource prioritization)
Helps to prevent incidents
Slide 115


Verbal Feedback – another evaluation technique
Verbal feedback is used to provide immediate evaluation of performance.
What are the benefits of verbal feedback?
What are the problems with verbal feedback?
What techniques can be used to minimize the problems?
Slide 116


Working Group
Slide 117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Review
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