

Leadership Skills for Biosafety Professionals: Effective Training

Student Guide



Leadership Skills for Effective Biosafety Professionals: Effective Training



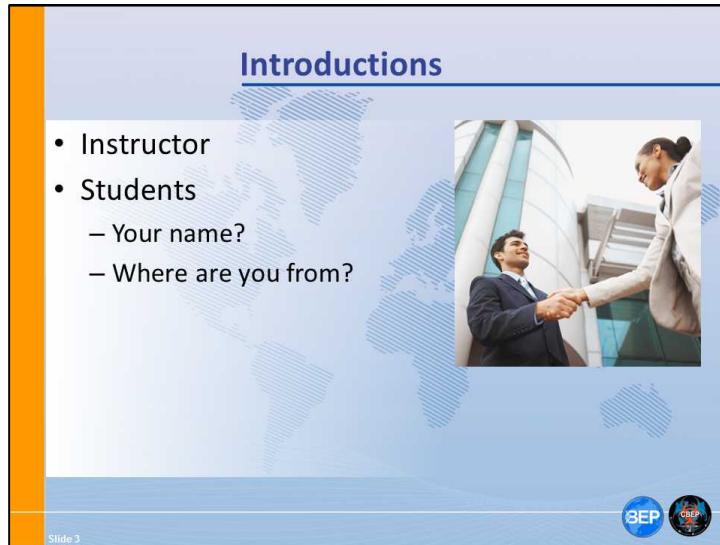
Welcome to Leadership Skills for Biosafety Professionals:
Effective Training!

Agenda

- **Welcome & Introduction**
- Training for Biorisk Management
- Using the Training Design Cycle
 - Analyze
 - Design
 - Develop
 - Implement
 - Evaluate
- The Global Biorisk Management Curriculum
- Wrap-Up & Summary

Slide 2







Biosafety Training

- Demonstrate how to design a training program
- Identify different ways of teaching (pro's and con's)
- Evaluate training

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Teaching a Course

- Being effective in fulfilling your course goals.
- And help your students remember it!
- Make the learning experience enjoyable!

Slide 5



Question: What makes training “good”

Individually, think of a training you attended that you really liked.

- What did you like about the training session?
- What made the session different from other training sessions?

Please take **5 minutes** and write these notes in your workbook.

What makes training good?

What did you like about the training sessions?

What made the session different from other training sessions?

Question: What makes training “good”

As a group:

- Take **10 minutes** to discuss the list you made in your workbook
- See what items you have in common.
- On your flip chart, list 7 to 10 items that are important to memorable training sessions.

What makes training good?

What I Will Share with You Today:

Different ways to Teach

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- What makes a training method strong?
- How do I develop good training materials?



- Evaluate what you hear
- Find gaps
- Draft an action plan to implement new training methods at home



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?

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Introduction



Question: Why do we train?

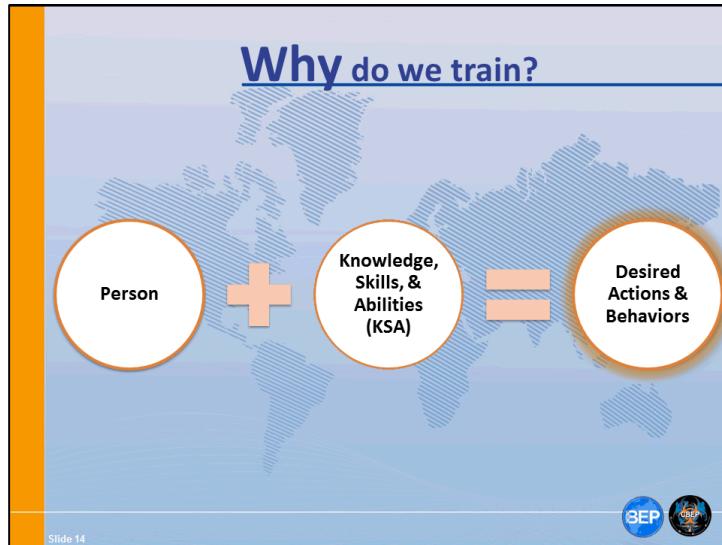
In your groups, please spend **5 minutes** to come up with as many different reasons as your group can, write each on a sticky note (one per sticky note) and place them on you flip chart.

Why do we train?



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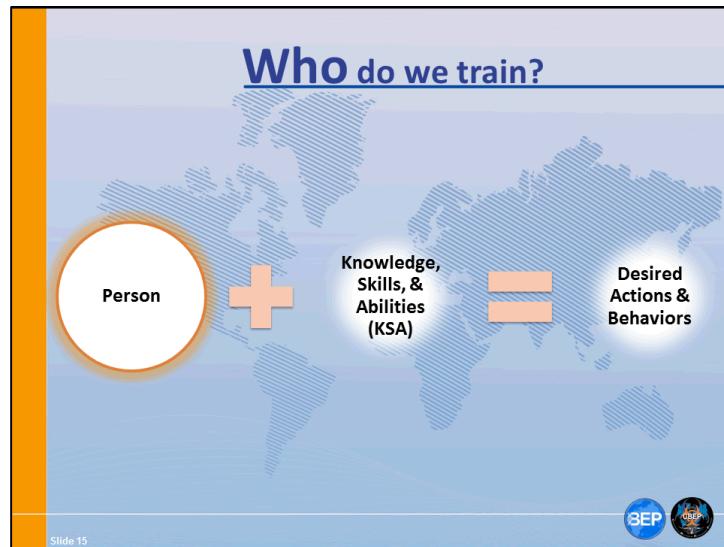
Training for Biorisk Management





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Training for Biorisk Management



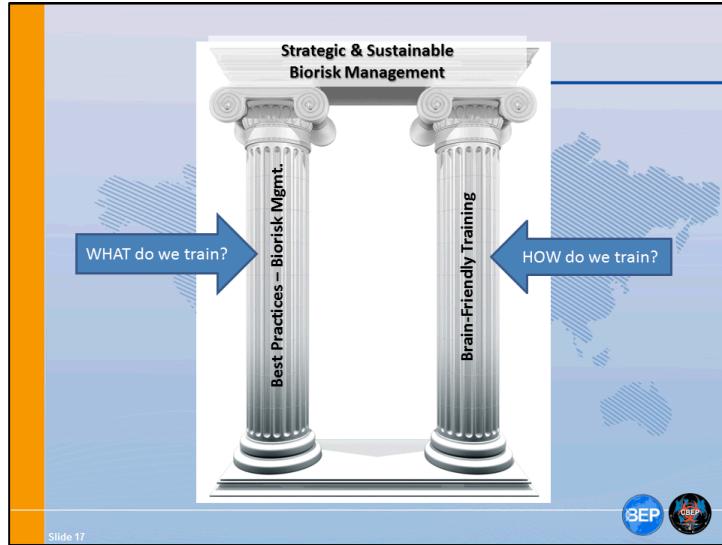
Who do we train?

Question: What roles impact or influence biorisk management?

As a group, take **5 minutes** to brainstorm all the roles **within a facility** that can impact or influence biorisk management. Write each role on a separate sticky note.

Take another **5 minutes** to brainstorm all the roles outside of a facility that can impact or influence biorisk management. Write each role on a separate sticky note.

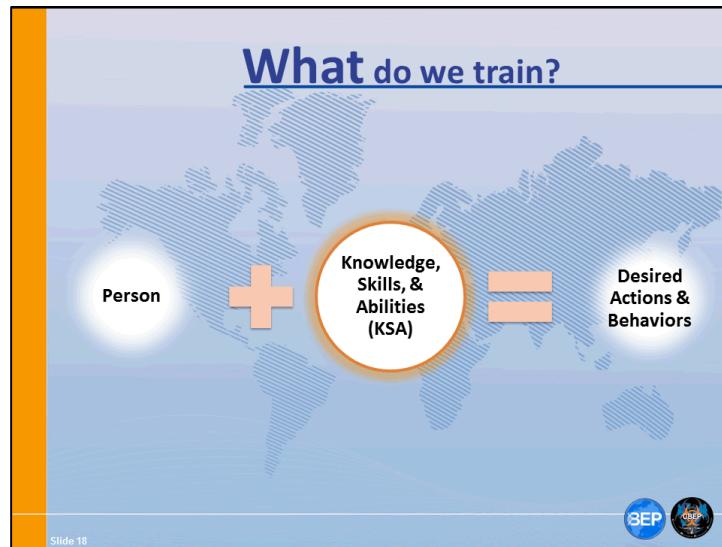
- Roles within a facility
- Roles outside of a facility





**Leadership Skills for Effective Biosafety
Professionals: Effective Training**

Training for Biorisk Management



Biorisk Management Definitions

- Laboratory **biosafety**: containment principles, technologies, and practices implemented to prevent unintentional exposure to pathogens and toxins, or their unintentional release¹
- 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 release²

¹Laboratory biosafety manual, Third edition (World Health Organization, 2004)

² Biorisk management - Laboratory biosecurity guidance (World Health Organization, 2006)



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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).

³Laboratory biorisk management standard (CWA 15793:2011)



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Biorisk Management Resources

- CWA 15793:2011 – Laboratory biorisk management standard (+ CWA 16393 guidance)
- CWA 16395 - 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



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Key References for Training

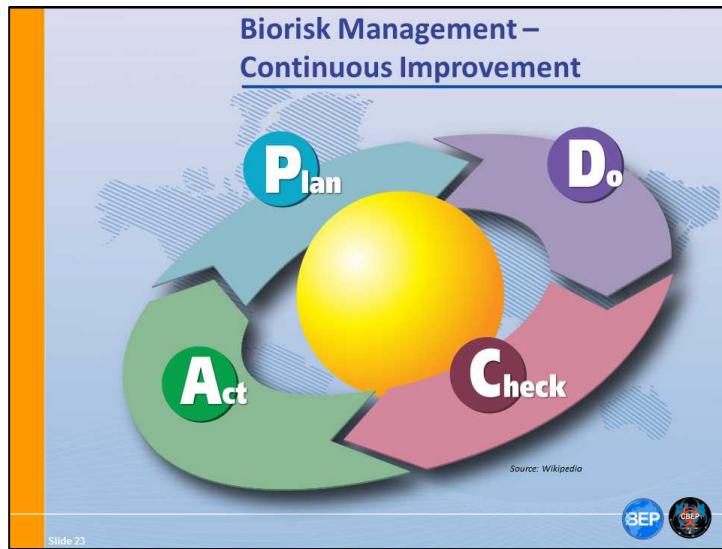
- World Health Organization Laboratory Biosafety Manual, Chapter 21
- World Health Organization Laboratory Biosecurity Manual, Chapter 7
- CWA 15793:2011 – Laboratory biorisk management standard, Section 4.4.2
- Local guidelines & regulations
 - example: U.S. Biosafety in Microbiological and Biomedical Laboratories
- Current best practices



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Training for Biorisk Management



- Plan
- Do
- Check
- Act



- Define biorisk management system:

- Describe an AMP model:

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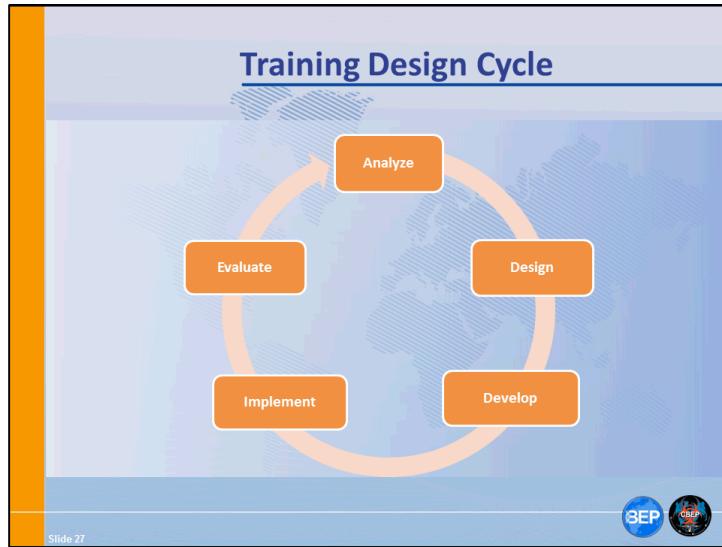
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Using the Training Design Cycle: Analyze



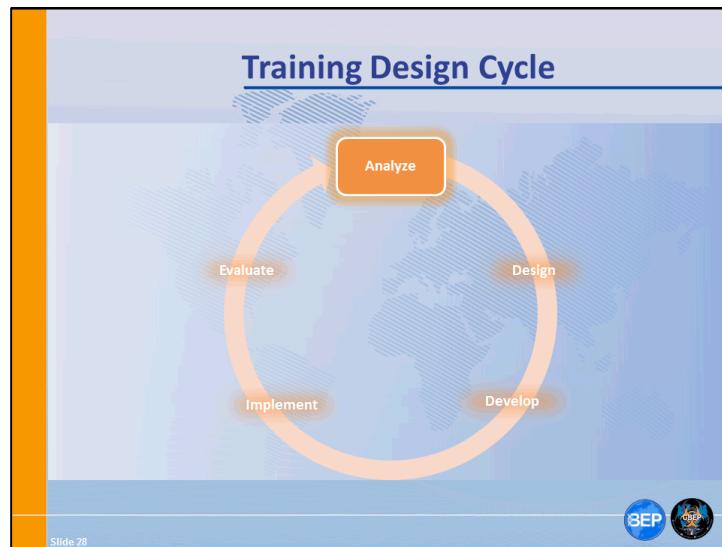


- A = Analyze
- D = Design
- D = Develop
- I = Implementation
- E = Evaluate



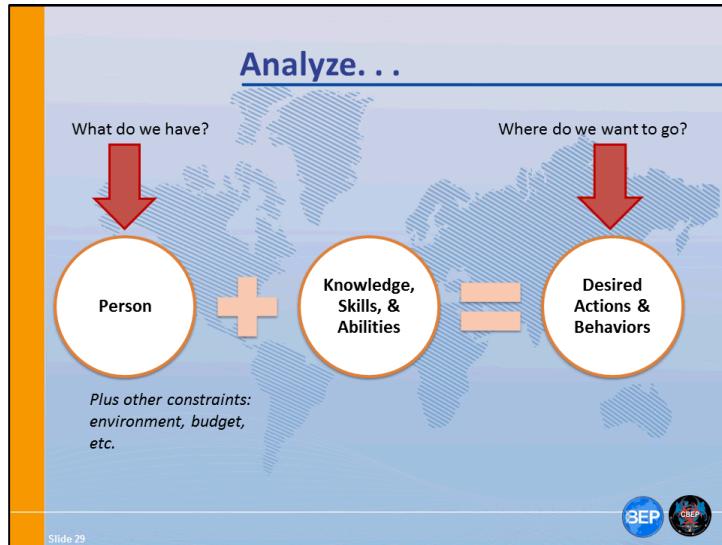
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Using the Training Design Cycle: Analyze



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Analyze



Activity: 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.



Objectives

- Organizational → 
- Instructional → 
- Personal → 
 - Know
 - Feel
 - Do

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Using the Training Design Cycle: Analyze

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



Example: Learning Objectives

- **Know:**
 - Key concepts that make training “stick”
 - Useful models from learning science that will make developing training easier and also more effective
- **Feel:**
 - Excited about creating brain-friendly training sessions
 - Confident in designing and implementing training (and evaluating, etc., etc.)
- **Be Able to Do:**
 - Use validated instructional design processes to plan a biorisk management training session.
 - Design and practice a brain-friendly training activity to highlight an aspect of biorisk management
 - Identify next steps for creating or modifying an existing training with the models and techniques learned

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Activity – Learning Objectives

- Training Topic
- Know:
 - Feel:
 - Do:



Know – Feel - Do

Tasks:

- 1.
- 2.
- 3.
- 4.

After biosafety and biosecurity training, the worker assigned to the tasks above will:

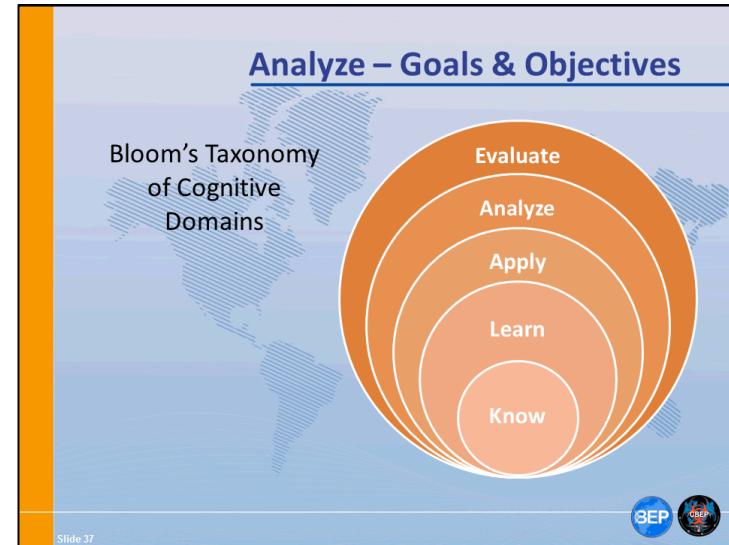
Know	
Feel	
Be Able to Do	

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Using the Training Design Cycle: Analyze

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

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Using the Training Design Cycle: Analyze

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

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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. Write your answer at the top of the worksheet

Take 5 minutes.



Know – Feel - Do

Tasks:

- 1.
- 2.
- 3.
- 4.

After biosafety and biosecurity training, the worker assigned to the tasks above will:

Know

Feel

Be Able to Do

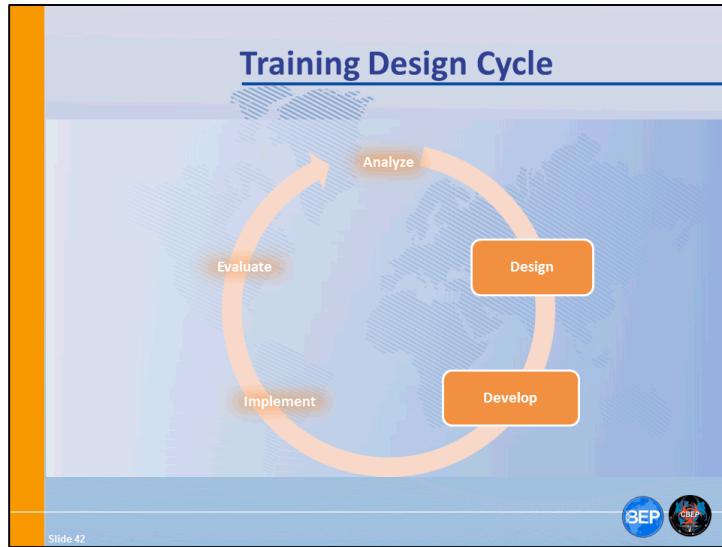
Review of ANALYZE

Review

To wrap-up, let's discuss what we learned about analyzing the needs and goals for our training topic.

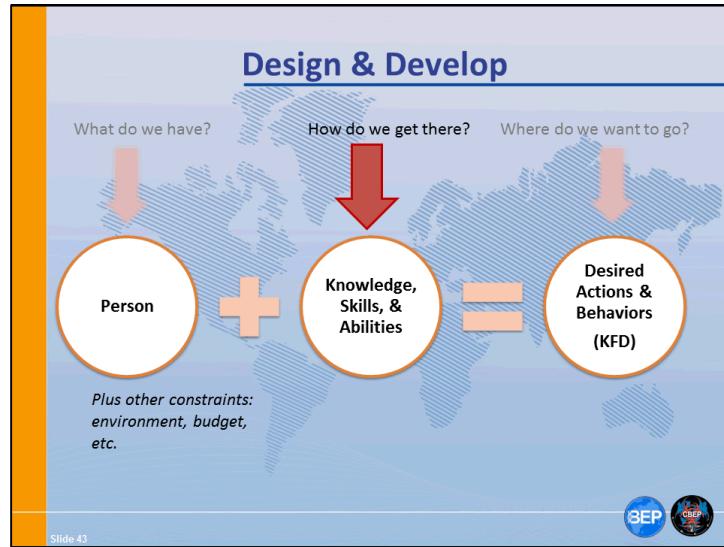
What did we learn?
What does it mean?
Where do we go from here?

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Using the Training Design Cycle: Design & Develop



Design

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

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Develop

- Plan agenda
- Create content

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Using the Training Design Cycle: Design & Develop



Activity – Training Content

Activity:

Using the

- KNOW, FEEL, DO results from the previous exercise,
- the sticky notes with COMMON and UNIQUE training components, and
- the Bloom's level you've determined...

...string together a "course" that you feel will result in the KNOW, FEEL, DO for the trainee.
Post on your flipchart.

Take **10 minutes**.

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Using the Training Design Cycle: Design & Develop



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Using the Training Design Cycle: Design & Develop

Activity – Training Delivery

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Example Activities

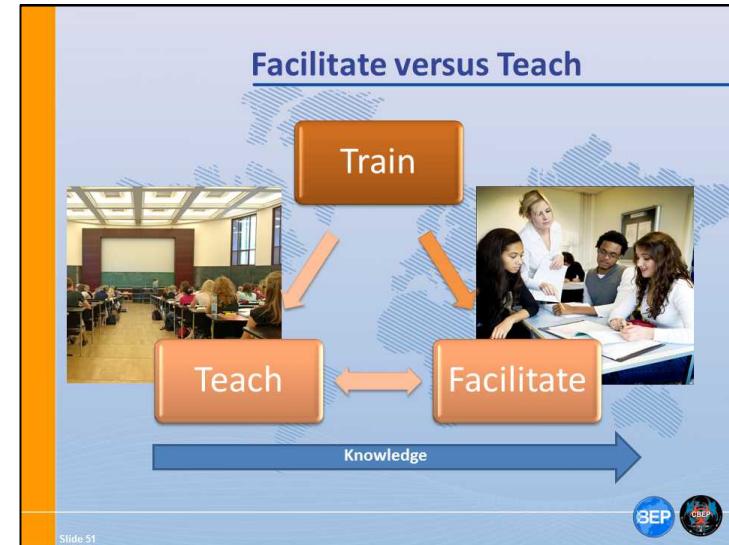
- Individual Work*
- Pair Work
- “Snowballing”*
- “Buzz” Groups
- Small Groups*
- Interactive Lecture*
- “Spin-off” Discussions
- Brainstorming*
- Games*
- Video
- Case Study*
- Role Play

*used during this course

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Using the Training Design Cycle: Design & Develop



Leadership Skills for Effective Biosafety Professionals: Effective Training

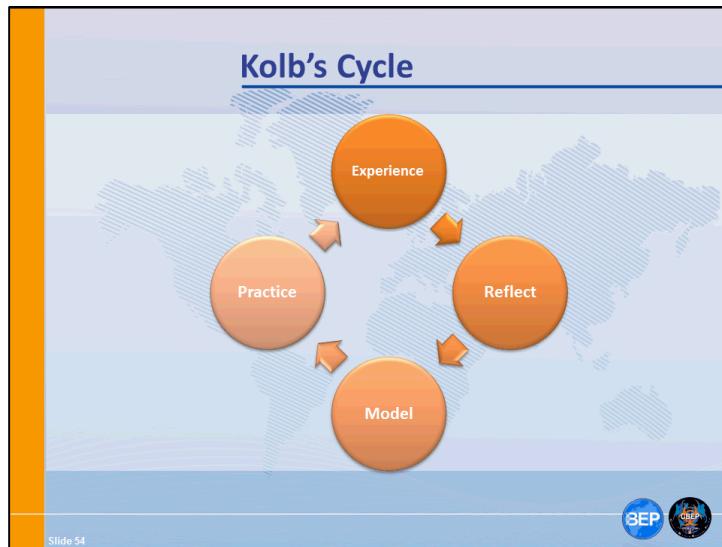
Using the Training Design Cycle: Design & Develop





Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop

Activity - Design

Class Activity: Design a 10 minute training activity that will work with all 4 learning styles and different sensory learners.



DESIGN

For Training Topic:

Describe the training activity	Experience		
	Reflect		
	Model		
	Practice		
What key message or objective is addressed by this activity?			
What part of the activity works for these learners?			
Reflector		Visual	
Theorist		Auditory	
Activist		Kinesthetic	
Pragmatist			

Review of DESIGN

Review

To wrap-up, let's discuss what we learned about designing specific training activities for your training topic.

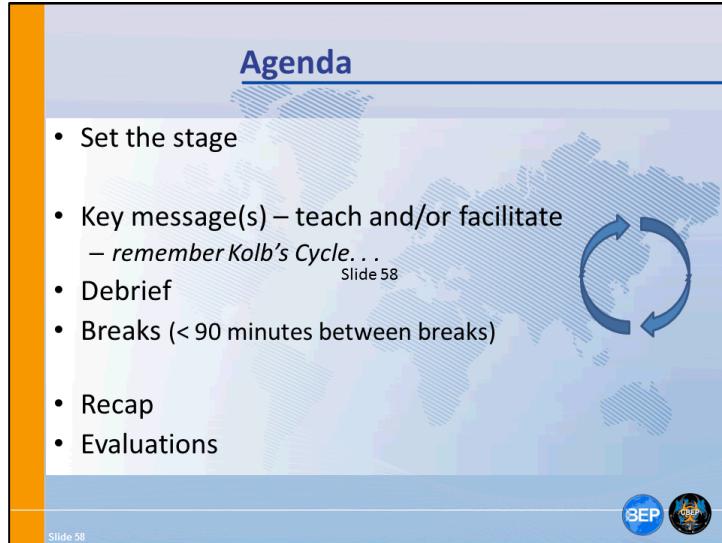
What did we learn?
What does it mean?
Where do we go from here?

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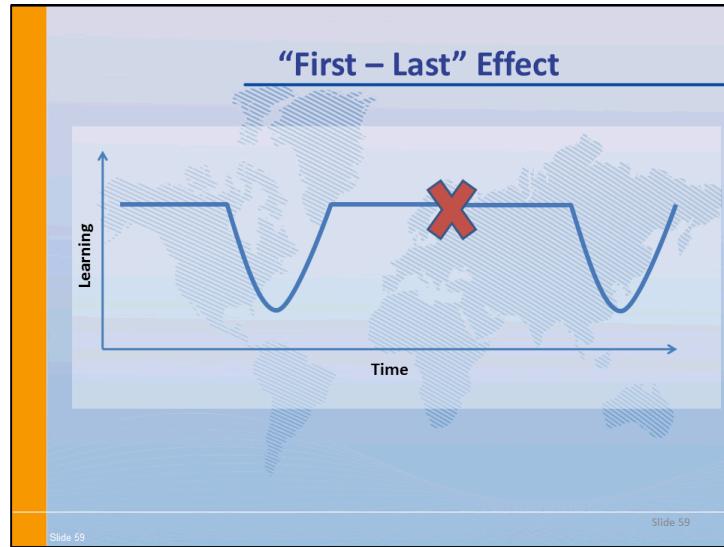
Agenda

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

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BEP **CBP**



Notes:

Chunking and Anchoring

- Chunking:
 - Our brains work best when asked to learn in “chunks”.
 - 7 pieces of information (plus or minus 2)
- Anchoring:
 - Hook training to something familiar
 - “Looks like. . .”

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Types of Content

- Input (Teaching)
- Activities
- Movement
- Recap
- Debrief
- BREAKS
- Sleep
- Color - Visual
- Sounds
- Reflecting
- Etc.

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Set the stage

- Welcome
- Housekeeping
- Objectives
- Agenda
- Activity to get students ready to learn and to open the door to the topic
- New day or topic – new stage-setting activity or recap from previous day or topic.

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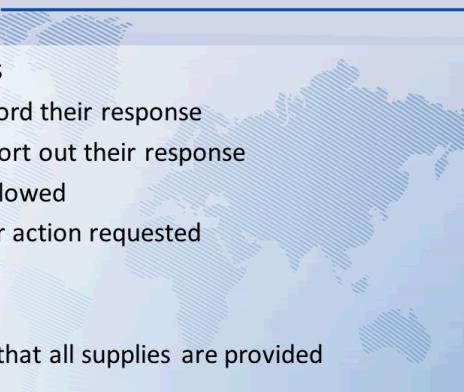
Key Message: Input & Activity

- 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**

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Directions to Students for Activities



- For students
 - How to record their response
 - How to report out their response
 - The time allowed
 - Question or action requested
 - Make sure that all supplies are provided

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Debrief

- To own the training, students need to know:
 - What?
 - Recap key message(s)
 - So What?
 - Why is this important to the student?
 - What's Next?
 - How can the student use this new information in their work?

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Recap

- Over time, the brain will “snip” memories that it thinks are unimportant.
- Recapping helps the brain decide to keep the memory.
- This should happen before and after significant breaks (lunch and overnight).
- Reconstruct, through an activity, the key terms, timeline, and/or models of the previous section.

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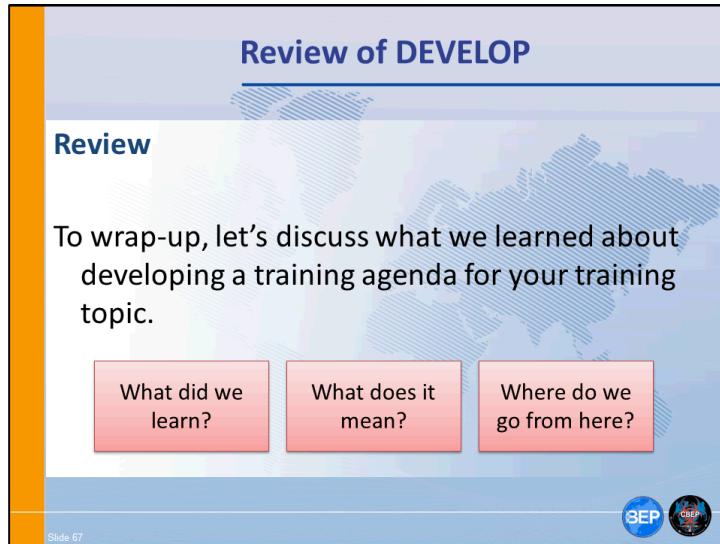
Review of DEVELOP

Review

To wrap-up, let's discuss what we learned about developing a training agenda for your training topic.

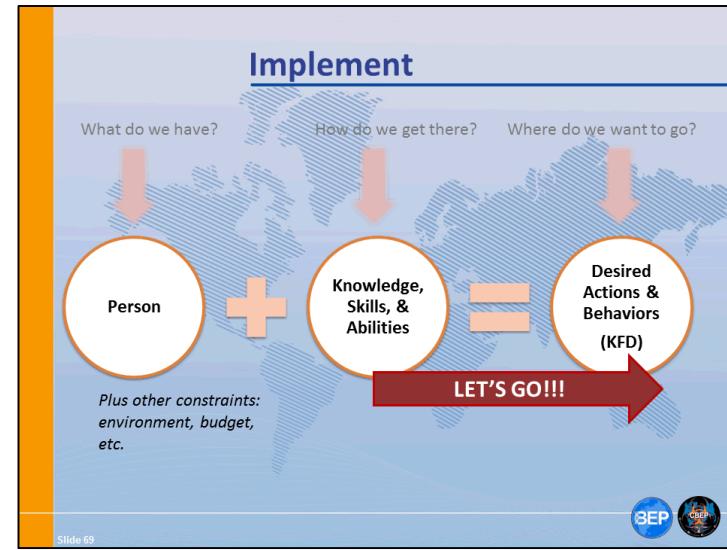
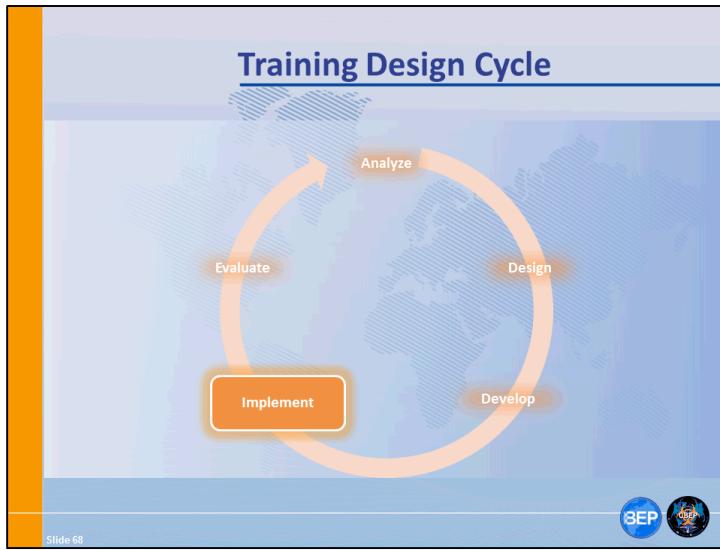
What did we learn?
What does it mean?
Where do we go from here?

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Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Implement



Activity - Implement

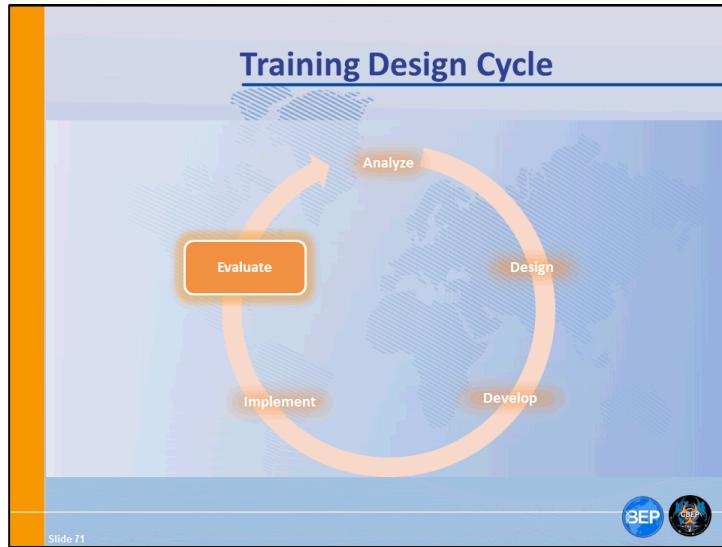
Activity: (Snowball)

1. INDIVIDUALLY, think of all the things that you must do to make sure you are ready to train. List them in your workbook. Take **5 minutes**.
2. AS A SMALL GROUP, share your individual lists and come up with a group list. Take **5 minutes**.
3. AS A CLASS, make a master list of all the things that must be in place BEFORE training begins. Take **5 minutes**.

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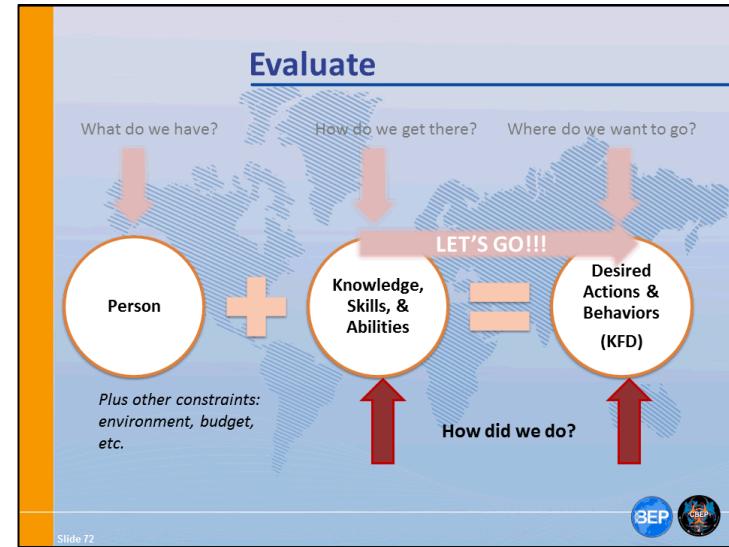


Leadership Skills for Effective Biosafety Professionals: Effective Training



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Using the Training Design Cycle: Evaluate



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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.

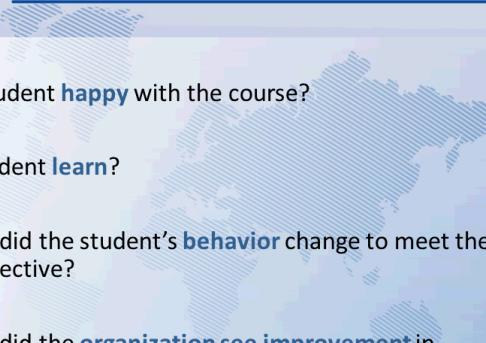


Evaluate – Four Levels*

- 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

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Activity - Evaluate

Look at the sticky notes from the previous exercise.

Determine what Fitzpatrick level they address and write this on the sticky note.

Spend some additional time thinking of ways to evaluate all the Fitzpatrick levels. Add sticky notes to the class listings.

Take **10 minutes.**

- Level 1:
- Level 2:
- Level 3:
- Level 4:

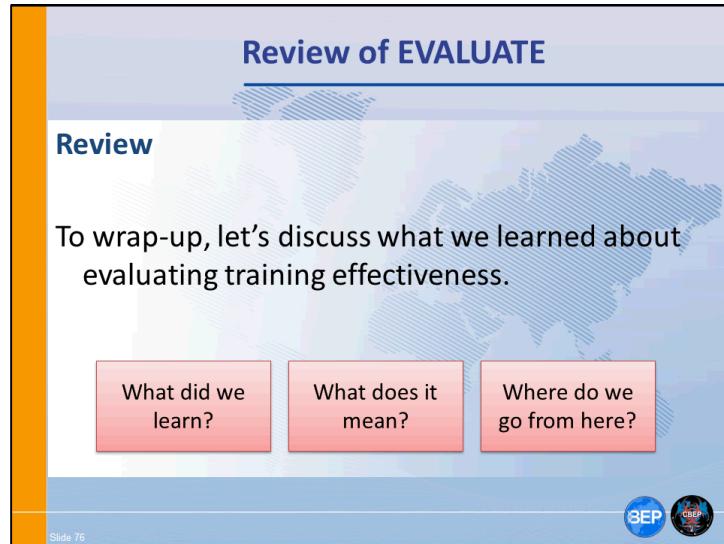
Review of EVALUATE

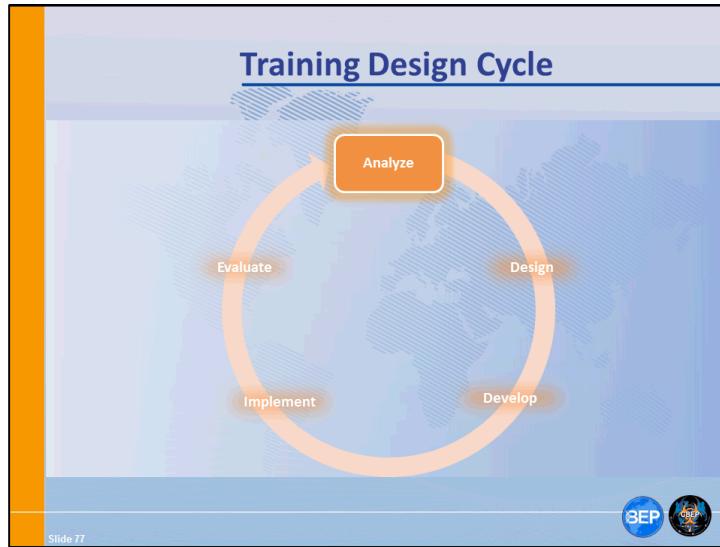
Review

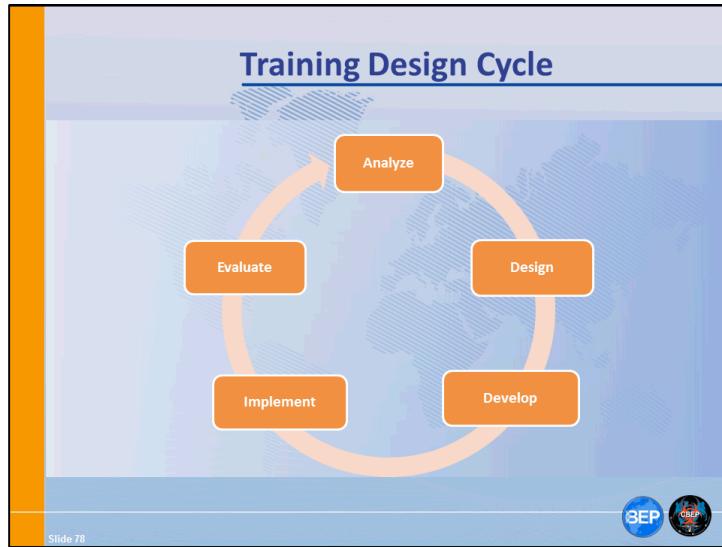
To wrap-up, let's discuss what we learned about evaluating training effectiveness.

What did we learn?
What does it mean?
Where do we go from here?

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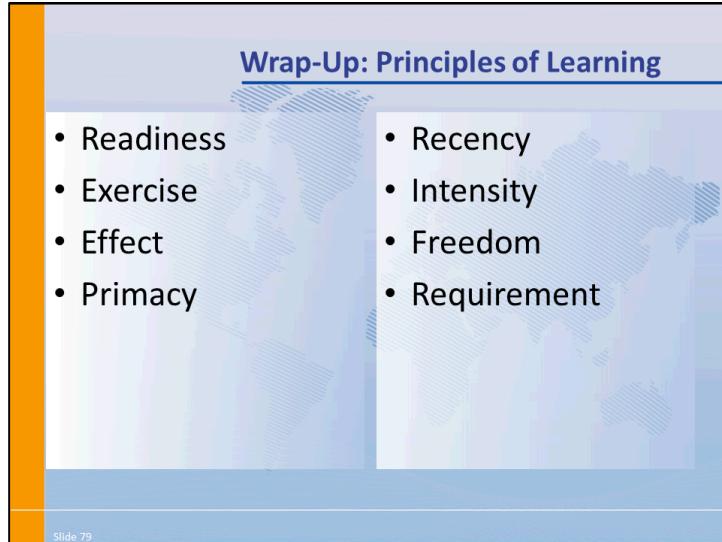




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Using the Training Design Cycle: Evaluate

Wrap-Up: Principles of Learning



• Readiness	• Recency
• Exercise	• Intensity
• Effect	• Freedom
• Primacy	• Requirement

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- Readiness
 - Instructor and student meet half-way
- Exercise
 - Things most often repeated are best remembered
- Effect
 - A good experience increases learning
- Primacy
 - First impressions
- Recency
 - Things most recently learned are best remembered
- Intensity
 - Sharp, vivid, clear, dramatic experiences are retained longer
- Freedom
 - Things freely learned are best learned
- Requirement
 - Need a starting point; context; anchor

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GBRMC

- What is the Global Biorisk Management Curriculum?
- GBRMC Pillars:
 - Biorisk Management
 - Brain-Friendly Training Methods
- GBRMC Configuration & Customization
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A

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Welcome to the GBRMC Library!

GBRMC = Global Biorisk Management Curriculum

Mission

- Biosafety & Biosecurity training materials...
 - Strategic
 - Sustainable
 - Anywhere, anytime
 - Well-branded
 - Well-managed

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BEP **CBEP**

GBRMC

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**Strategic & Sustainable
Biorisk Management**



Best Practices – Biorisk Mgmt.
Brain-Friendly Training

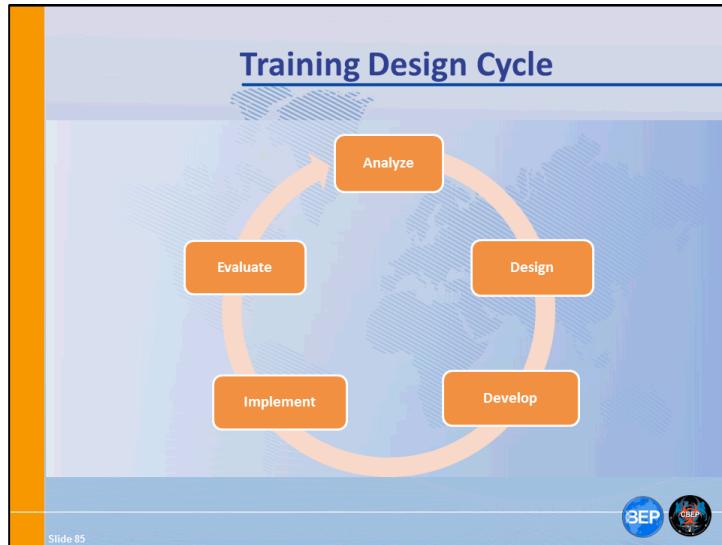
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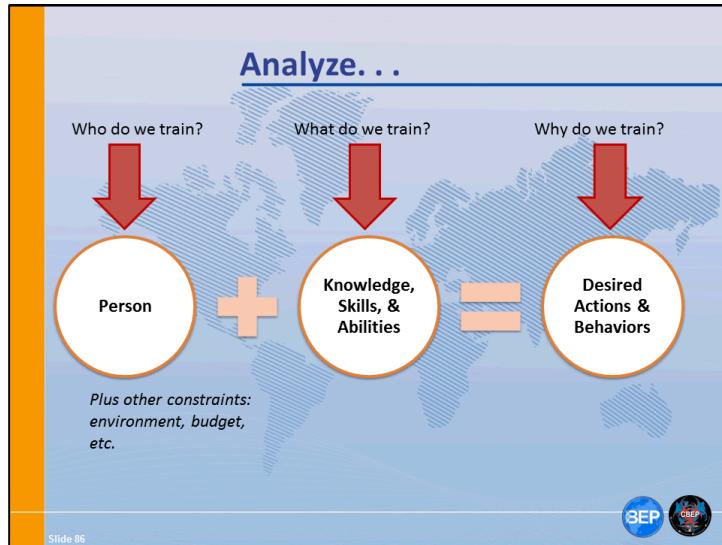


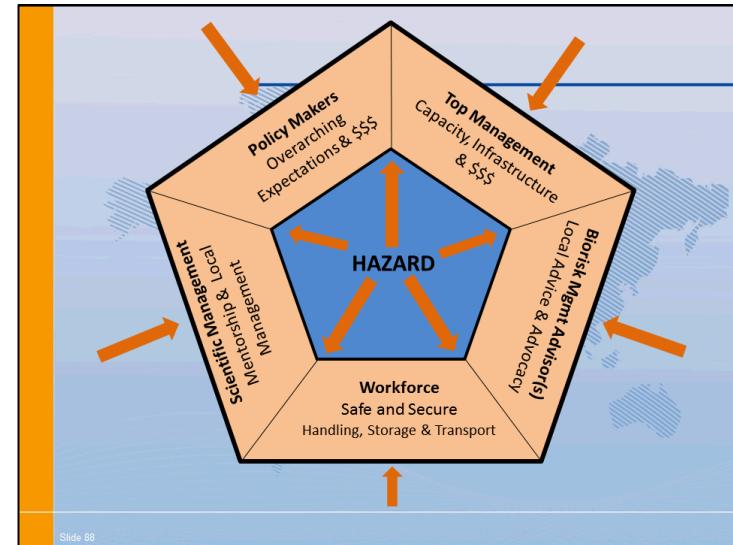
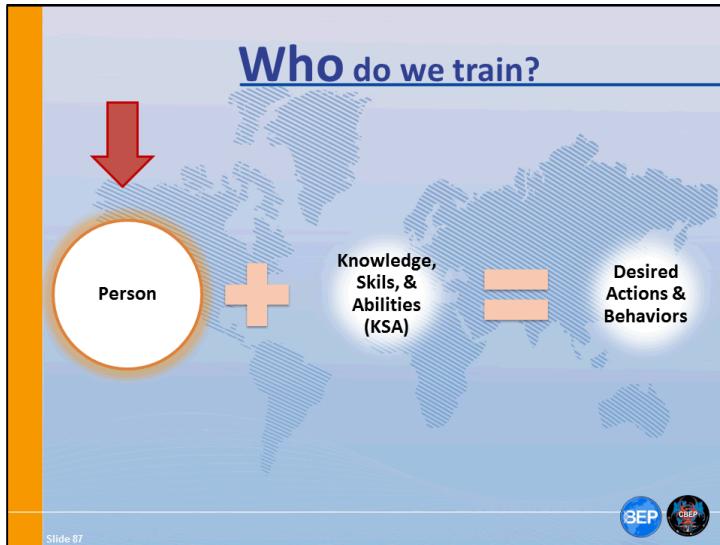


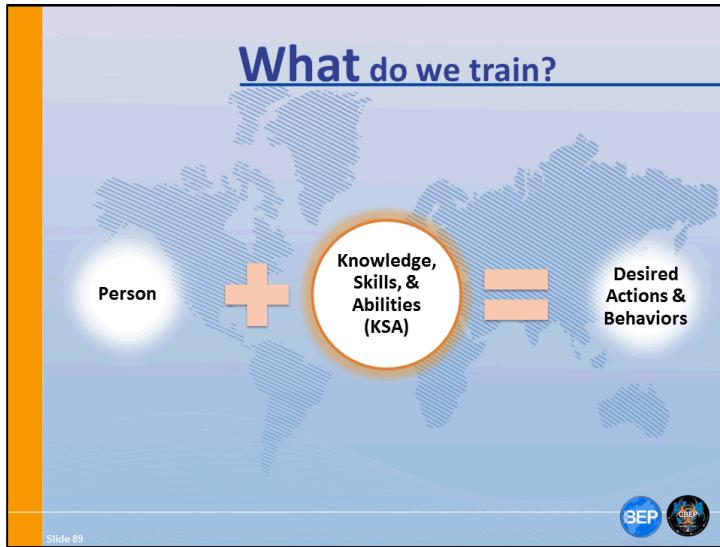
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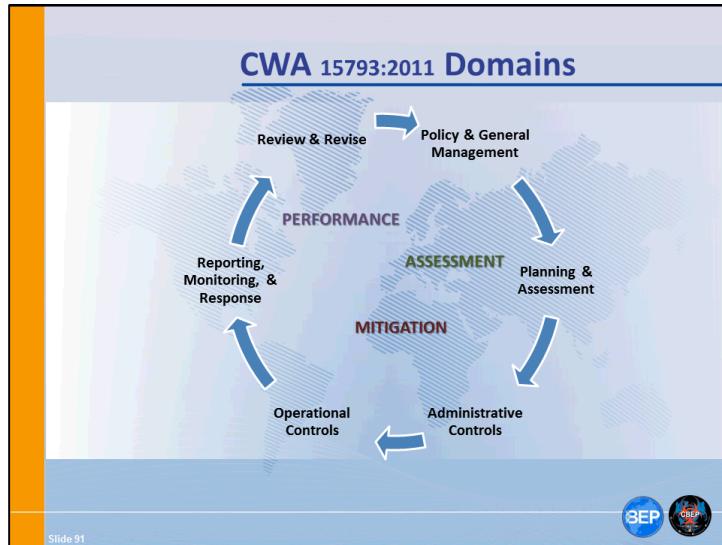
GBRMC

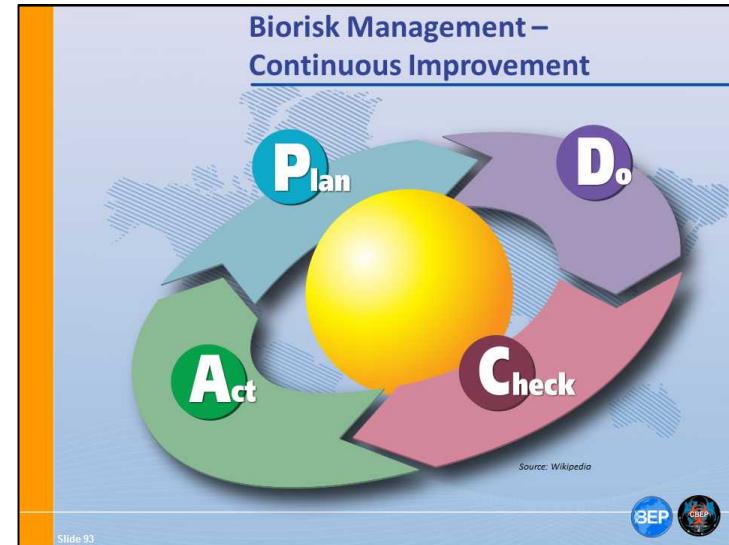
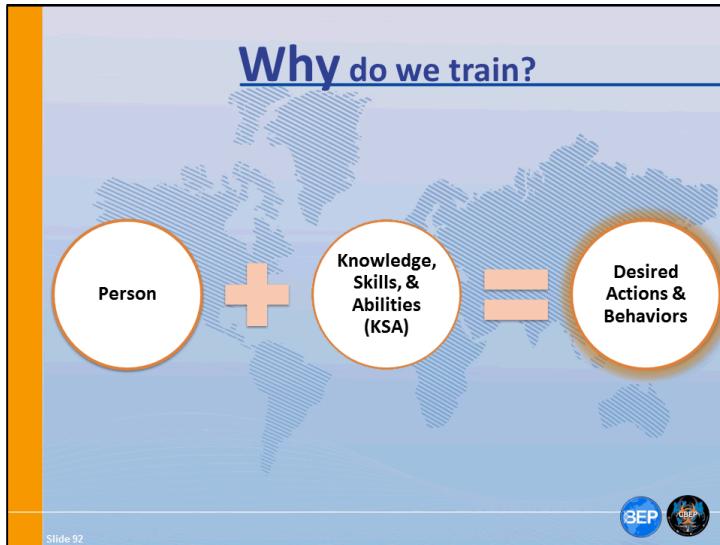


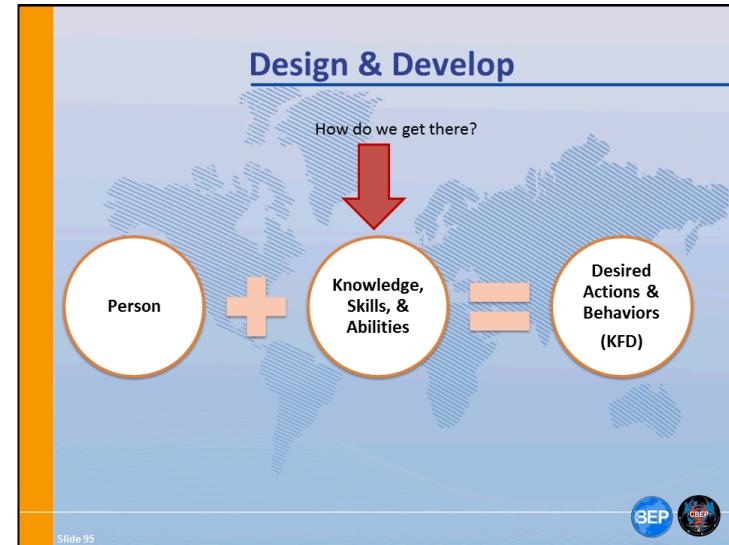
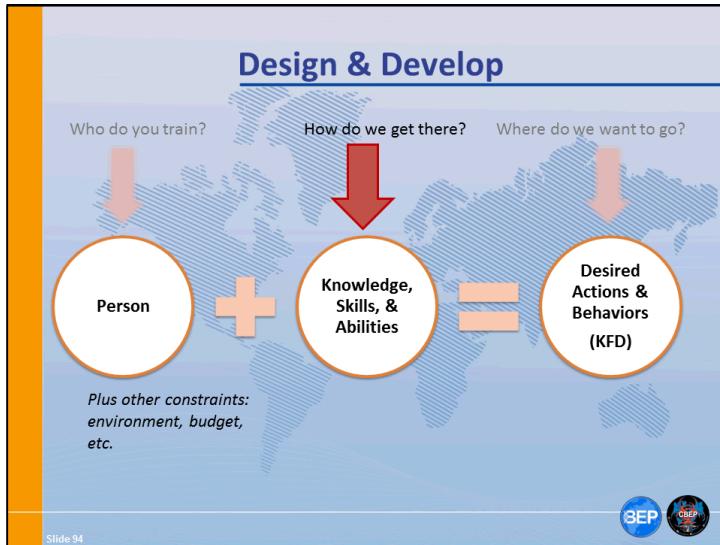












GBRMC Pillars – Training Techniques

- So what's different?
 - Experiential learning
 - Small group and plenary activities
 - Breaks
 - Movement & colors
 - Debriefs, recaps
 - Outcome based
 - What do you have?
 - Where do you want to go?

Slide 96

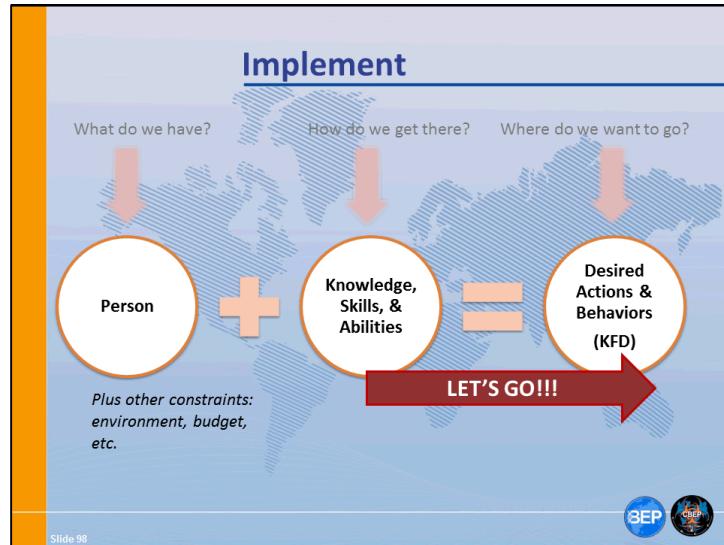


GBRMC Pillars – Training Techniques

- So what's different, continued?
 - Implementation "Blind"
 - No specific training scenarios anticipated
 - Comprehensive Toolkit
 - Detailed design document and instructor guide
 - Student guide and key references
 - Evaluations
 - Leave your fingerprints
 - Trainers' Network to capture feedback, solutions, configurations, customizations, revisions, translations, etc.

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GBRMC: Agenda

- What is the Global Biorisk Management Curriculum?
- GBRMC Pillars:
 - Biorisk Management
 - Brain-Friendly Training Methods
- GBRMC Configuration & Customization
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A

Slide 99



Configuration & Customization

Configuration
matching objectives between training needs and GBRMC courses



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



Slide 100



Configuration Example

- Training Need:
 - 2 day course introducing biorisk management , risk assessment, biorisk mitigation strategies, and biorisk management performance indicators

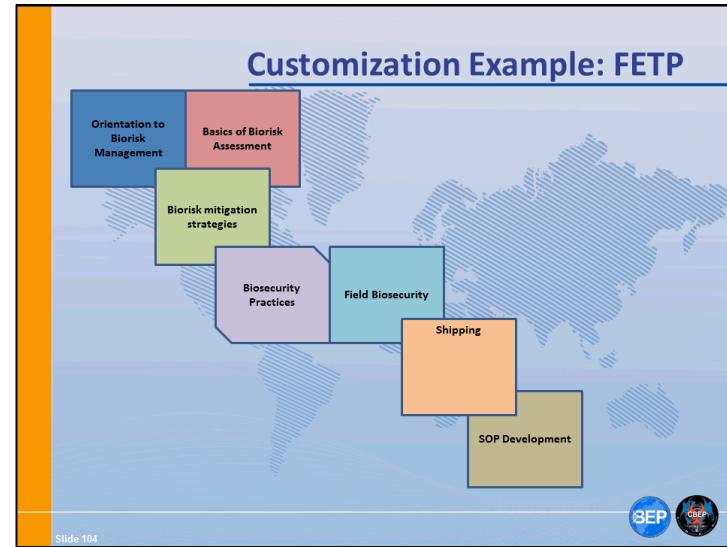
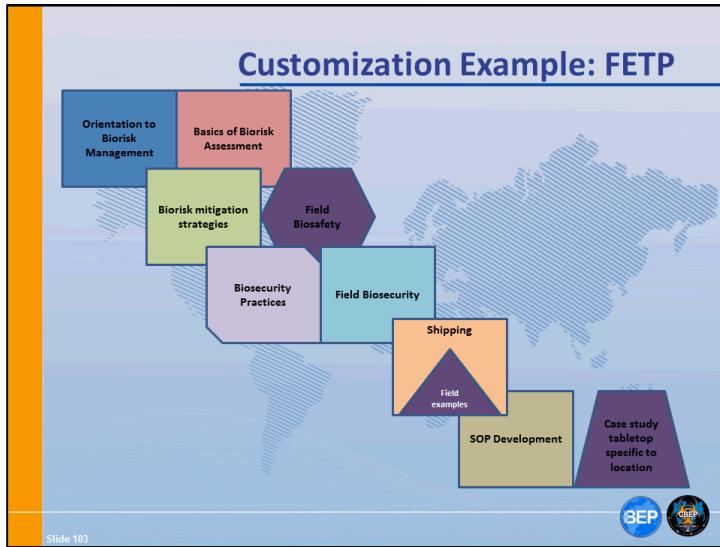
Orientation to Biorisk Management	Basics of Biorisk Assessment	Biorisk mitigation strategies	Establishing BRM performance indicators
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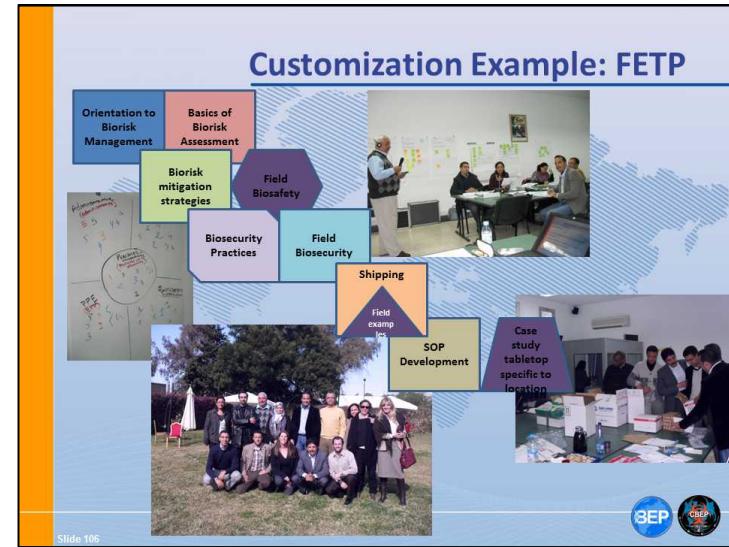
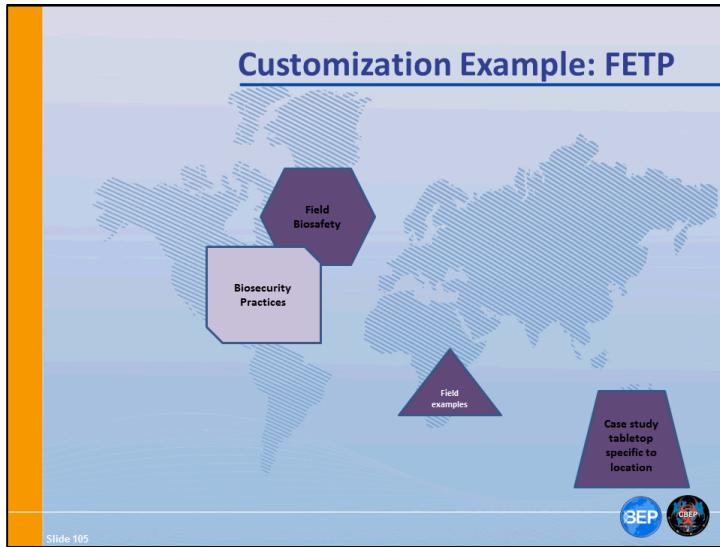
Slide 101



Customization Example: FETP

- Training Need:
 - 1 week biosafety and biosecurity module for Field Epidemiology Training Program





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.



Activity – Identifying Gaps

Activity:

Using the

- leftover sticky notes

... identify areas for potential customization.

Take 5 minutes.





Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

GBRMC: Agenda

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- Using the GBRMC
- Q & A

Slide 109



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 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)

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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
- 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

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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?



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Activity – Customize

Activity:

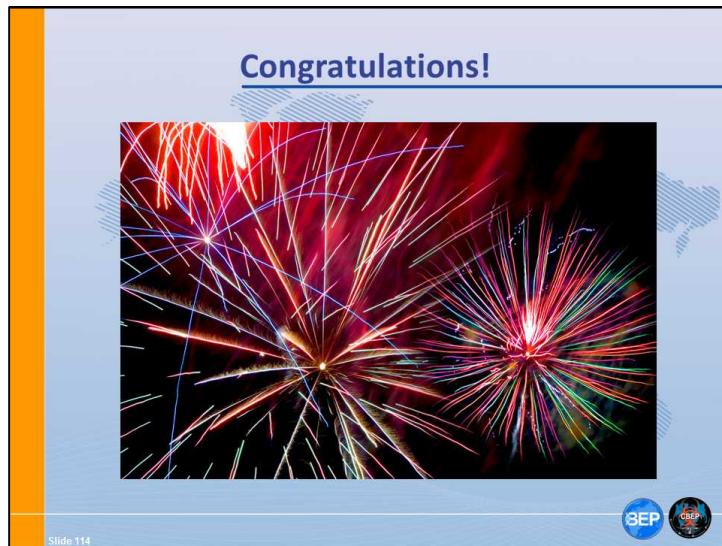
Using the

- 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**.





GBRMC Course Components

- Design Document
 - Course objectives, prerequisites (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 etc.
- Instructor and Student Evaluation materials
- References & resources
- Other materials as needed



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GBRMC Components: Design Document (DD)



Orientation to BiRisk Management
Design Document - draft1 - February 2011

Part I: Lesson Overview	
Lesson Description	Overview Orientation to BiRisk Management is intended as the basic introduction to the concepts of BiRisk Management. It provides an overview of the concepts of BiRisk Management and its application to the field of International BiRisk Management.
Scope	This lesson will provide learners with an understanding of the concepts of BiRisk Management and its application to the field of International BiRisk Management. It will also introduce learners to the basic concepts of BiRisk Management and its application to the field of International BiRisk Management.
Learning Level	Assume learners have a basic understanding of the concepts of BiRisk Management and its application to the field of International BiRisk Management.
Length of Course	45 minutes
Lesson Objectives	<p>At the end of this lesson, learners will be able to:</p> <ul style="list-style-type: none"> • Define what "BiRisk management" is. • Explain the basic concepts of BiRisk Management. • Identify the key components of BiRisk Management. • Describe the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management.
Instructional Objectives	<p>At the end of this lesson, learners will be able to:</p> <ul style="list-style-type: none"> • Define what "BiRisk management" is. • Explain the basic concepts of BiRisk Management. • Identify the key components of BiRisk Management. • Describe the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management.
Personal Objectives	<p>At the end of this lesson, learners will be able to:</p> <ul style="list-style-type: none"> • Define what "BiRisk management" is. • Explain the basic concepts of BiRisk Management. • Identify the key components of BiRisk Management. • Describe the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management. • Define the basic concepts of BiRisk Management.

- Part I:
 - Lesson Overview
 - Student Description
 - Instructional Environment, Resources
- Part II:
 - Course Outline

GBRMC Components: Evaluations (EVAL L1 & EVAL L2)

Course & Student Evaluation (EVAL S)					
Orientation to Brain Management					
Course Name:					
Course Location:					
Individual:					
How easy was it to follow the teacher's instructions?	Very Good	Good	Ok	Poor	Very Poor
How do you feel about the course material?	Very Good	Good	Ok	Poor	Very Poor
How do you feel about the course objectives?	Very Good	Good	Ok	Poor	Very Poor
How good was the teacher's knowledge of the subject?	Very Good	Good	Ok	Poor	Very Poor
How good was the teacher's ability to explain the subject?	Very Good	Good	Ok	Poor	Very Poor
How good was the teacher's ability to answer your questions?	Very Good	Good	Ok	Poor	Very Poor
How good was the teacher's attitude towards your request?	Very Good	Good	Ok	Poor	Very Poor
After the course, I can:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Understand the brain management approach	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my daily life	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my studies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my work	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my leisure time	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my family life	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my social life	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my hobbies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my sports	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my health	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my spirituality	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Use the brain management approach in my spirituality	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
How good was the course?	Very Good	Good	Ok	Poor	Very Poor
This course has no application.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my daily life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my studies.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my work.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my leisure time.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my family life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my social life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my hobbies.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my sports.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my health.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my spirituality.	Very Good	Good	Ok	Poor	Very Poor
How good was the course?	Very Good	Good	Ok	Poor	Very Poor
This course has no application.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my daily life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my studies.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my work.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my leisure time.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my family life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my social life.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my hobbies.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my sports.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my health.	Very Good	Good	Ok	Poor	Very Poor
I can use this information and the skills learned in this course in my spirituality.	Very Good	Good	Ok	Poor	Very Poor

Level 2 Evaluation – Measurement of learning (as measured by course objectives) during course (improvement by institution)						
Level 3 Evaluation – Contribution to Student Management						
Level 4 Evaluation – Contribution to Brain Management						
Level 1	Level 2	Level 3	Level 4	Integrated	Integrated	
Score	Score	Score	Score	Score	Score	
Value	Value	Value	Value	Value	Value	
What is management system	Participation in course exercises and assignments					
What is the course objective	Participation in course exercises and assignments					
What is the course objective	Participation in course exercises and assignments					
Context about using the brain management approach	Questions on levels of evaluation plus participation in learning activities					
Confidence that I can use and understand the brain management approach	Questions on levels of evaluation plus participation in learning activities					
Decide on the next steps	Completion of reflection activity and the brain management approach					

*Evaluation fees to be paid by a student and not the institution for the course learning objectives. Please note that the fees are not to be paid by the student regarding communication below (unless it is related to the 'theory' network).

Name of student	Comments regarding demonstration of learning objectives

Evaluation fees that there is something about the course that prevents the student from demonstrating the desired objectives, please comment here:

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

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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

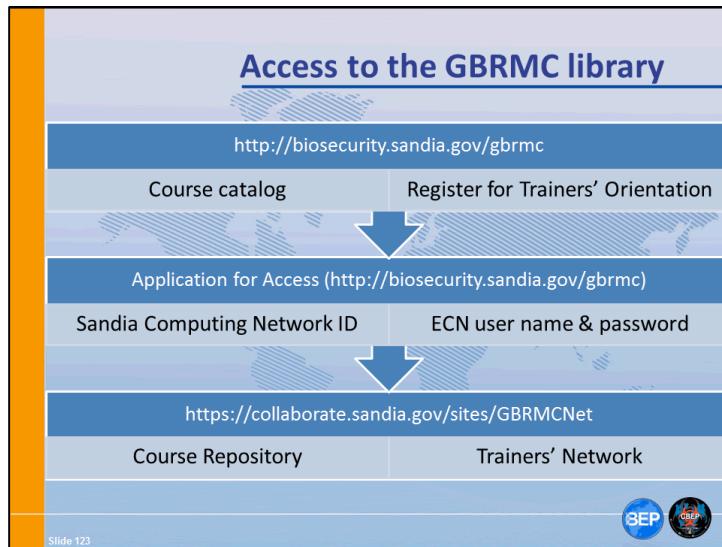
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Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC



Slide 123



Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

Public Access Site

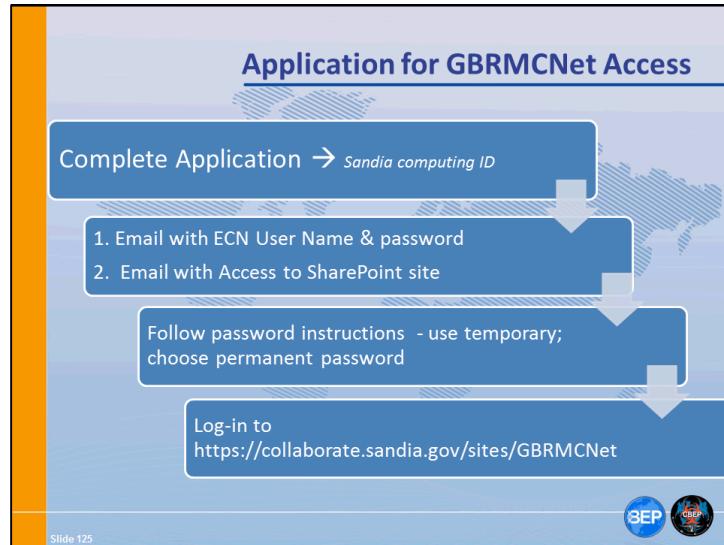
- <http://biosecurity.sandia.gov/gbrmc>

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Leadership Skills for Effective Biosafety Professionals: Effective Training

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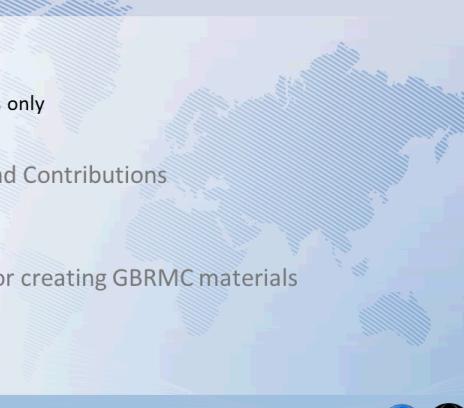
Leadership Skills for Effective Biosafety Professionals: Effective Training

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GBRMC Trainers' Network

- Phase I
 - Repository
 - Downloads only
- Phase II
 - Feedback and Contributions
 - Uploads
- Phase III
 - Templates for creating GBRMC materials
 - Calendar
 - Chat room

Slide 126





Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

GBRMC Trainers' Network

A world map background with a blue-to-white gradient. Overlaid on the map are two circular icons: one blue with 'BEP' and one orange with 'CBRN'.

- <https://collaborate.sandia.gov/sites/GBRMCNet>

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Tips for preparing GBRMC courses

- Request final materials (if GBRMCNet materials state "draft" or are only in PDF).
- Review Instructor Guide and Slide Deck.
- If multiple courses are to be configured together, remove touch stones (welcome, reviews, etc.) from slide deck.
- Remove touchstones from student guide, as necessary (Word Table format).
- Carefully review activities and assure that all materials (or suitable substitutes) are available. Understand the logistics for conducting the activity.
- Suggested timing is provided in the IG.

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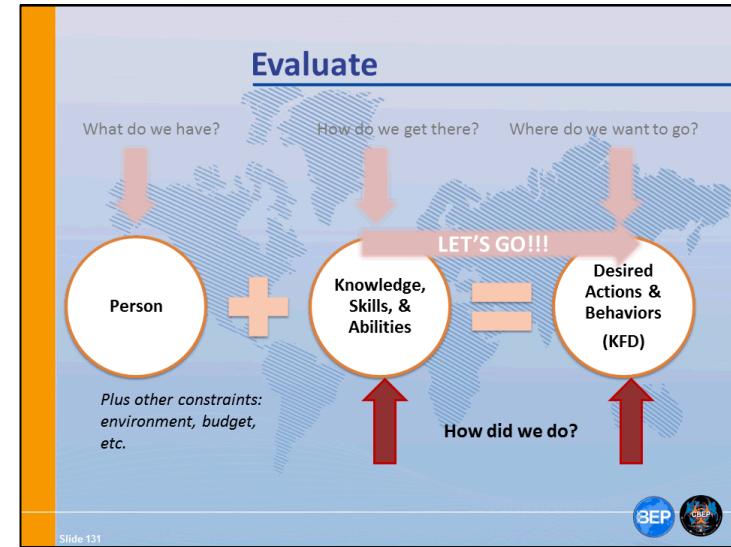
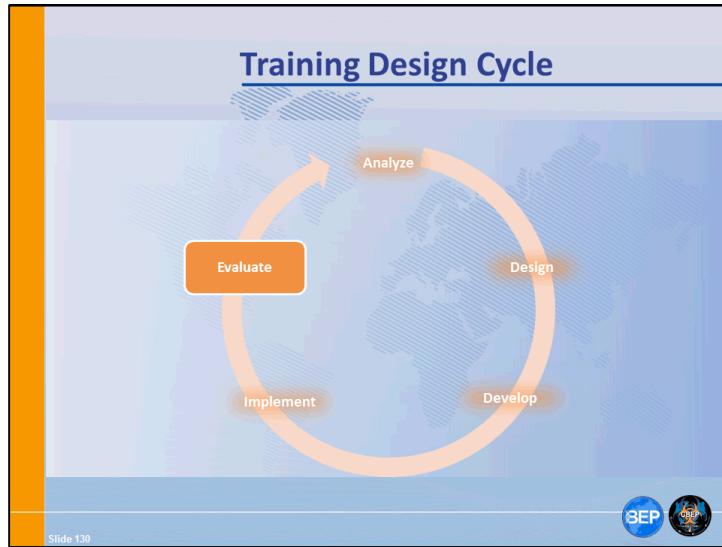


Tips for teaching GBRMC courses

- Be aware of the timing – do not try to teach the course in a smaller time slot.
- Be sure to communicate the means for students to record and report their small group discussions.
- Follow-up with expected answers and add in new answers from students in the space provided in the IG.
- Understand what key messages are addressed by which slides and exercises. If time is tight, determine which key message to minimize or eliminate rather than just cutting the course short.

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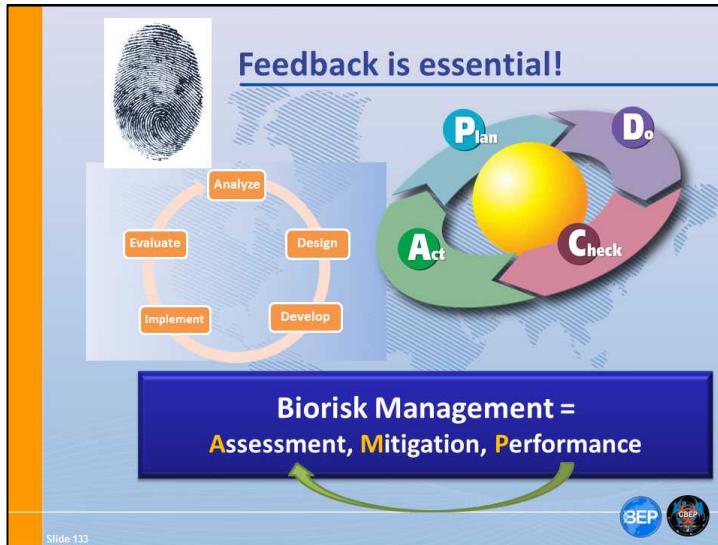




Evaluations & Instructor Debrief

- EXTREMELY critical to ongoing success of biorisk management training and capacity building
- Changes and additions to training materials will be based on these documents
- *“When you’ve seen one training session, you’ve seen one training session.”*

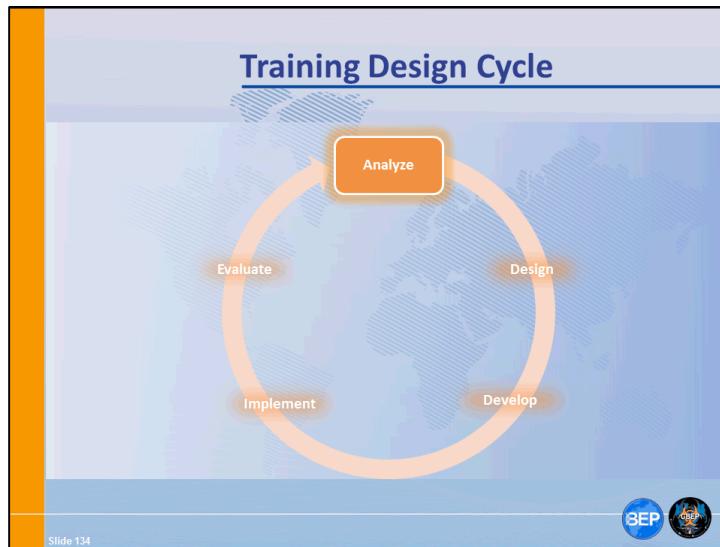
Slide 132

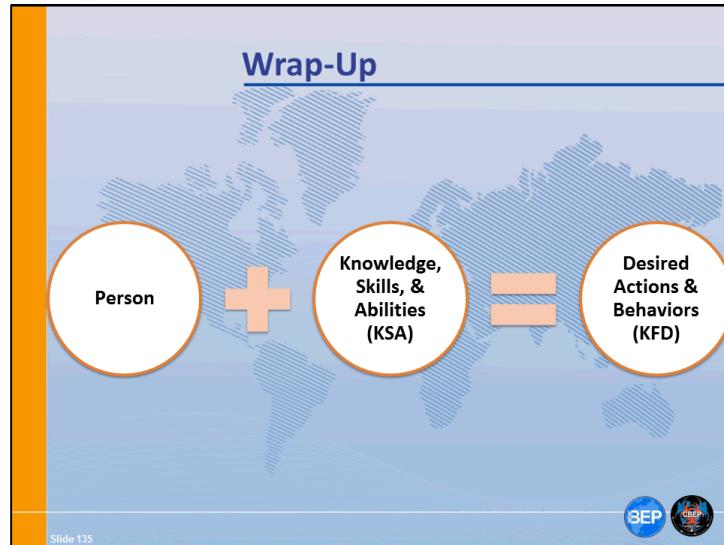




Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC







Leadership Skills for Effective Biosafety Professionals: Effective Training

Wrap-Up & Summary



- Make an action plan!
 - A one page strategy, in visual form, of points to focus on when returning home

Recap Timeline

- Pick a card randomly from the Timeline Deck.
- Be prepared to say what you learned about the topic on your card.
- As a class, construct a timeline for this course using the cards.

