

# Museum Care and Handling of Artifacts

Archaeological Adventure: Training Program

By  
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# The Problem:

The problem of damaged artifacts due to mishandling is an issue at all levels of the institution.

## Problem's impact on Business:

The Problem affects the administration's ability to display certain artifacts and affects the employees ability to present programs in a hands-on manner.

Museum prices are constantly increasing due to increased costs of painting and artifact restoration.



# The Solution:



Training of employees on the handling and care of artifacts

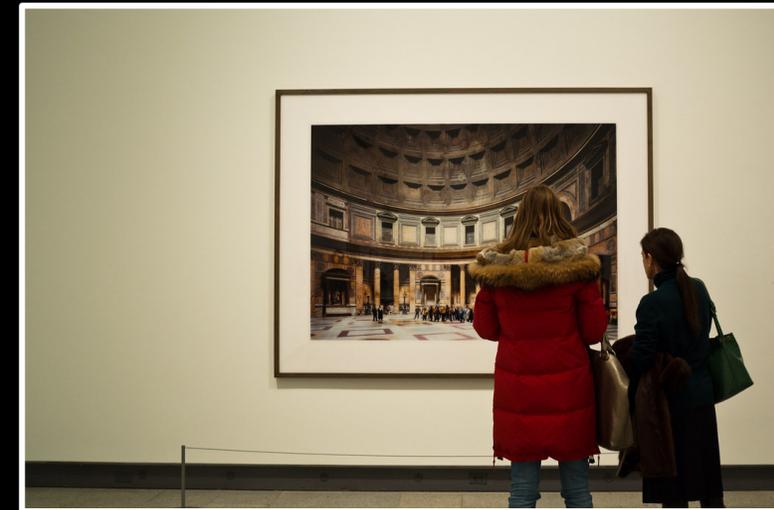
## Positive impact:

Entrance fees will be lower due to less money needed for repairing artifacts. Museum employees will be able to spend more time focusing on museum programming and less time on repairing items.

This will result in a positive museum experience for both patrons and employees.

# The End Learners:

The learners are newly hired museum employees. The employees range in age from eighteen to eighty. The employees' backgrounds are very diverse in education level and knowledge of museum practices.



# Missy:



Missy is 24 years old and is living with her parents in a lower middle class neighborhood near Washington D.C.. Missy has had a passion for writing her whole life. In elementary school, she excelled at writing. She would get A's on all of the book reports that she had to turn in.

After high school, she went to college and now is about to graduate college with a BA in Education. The Smithsonian had just received a grant to help train education professionals for the museum field. She applied and was accepted into the program. Both her parents were ecstatic and would help her in any way they could. Missy is excited to be in the program, but nervous and fears that she does not have the skills to do her best. She is now in the new hire training program for the Education Dept at the Smithsonian.

# Mike:



Mike is an 80 year old man, who lives in a senior center. He loves his life in the senior center. He plays bridge with his friends once a week and even plays in the local senior center's band every Sunday. Mike grew up having very little money. As a child, he would often go to bed hungry.

Mike got a job right out of high school working in the steel mill. Mike married his high school sweetheart and they had two boys, Jack and Frank, who both grew up to work as engineers in manufacturing. After Mike retired from the plant, he still wanted to feel useful.

He loved music and still plays guitar. He noticed an ad at the Smithsonian to work as a presenter talking about the history of music. They were looking for someone who loved music and would be good at presenting information to the public. Mike jumped at the chance to apply and is now in the new hire training program.

# Marcus:



Marcus is 35 years old. He lives in an upper scale neighborhood in the middle of New York. Marcus grew up enjoying a very lavish lifestyle. He was an only child, who went to an elite boarding school from elementary school through high school.

Marcus left high school and attended Harvard University. He double majored in business administration and archeological history. At the university, he met his girlfriend. They both loved history and would often go on archeological digs for fun.

They married and had a lavish multi-million dollar wedding. His dad mentioned to him that he had a lot of business connections and could connect him with whomever he wanted. His dad put in a call to the President of the Smithsonian, who got him a job working as the Vice President of Cultural Affairs. Marcus is now in the new hire training program at the museum.

# Matt:



Matt is 18 years old and a recent high school graduate. Matt has applied to several trade schools and is waiting to hear back. He grew up in a middle class neighborhood. Growing up, Matt was a bit of a troublemaker. In elementary school, he was a bully and would pick on other students. His parents worked all the time and were not able to monitor his behavior very closely.

Matt graduated from high school with a very low GPA. Matt applied for every job he could. He got no responses for any jobs, other than restaurants. He wanted something that was working with his hands.

He applied for the building and grounds department at the Smithsonian Museum and was accepted. He did not really care too much for museums, but liked the fact that he would be outdoors and working with his hands. Matt will be going through the new employee training programs at the Smithsonian Museum.

# Mary:



Mary is 50 years old. She has a Master's in Museum Studies and has been working in the museum field. She has just been accepted into the museum administration dept. She has been interested in the museum field since she was a child. Mary grew up an only child in a small town on the outskirts of Pennsylvania. Her parents did not have much money and worked at low wage jobs to make ends meet.

Mary made it through community college and transferred to the university where she majored in history. From there, she got a full scholarship to study at George Washington University where she completed a Master's Degree in Museum Studies and Administration.

Mary never married, and never had children, but has many friends that she socializes with on her time off. She took a job at a local historical site and quickly rose up the ranks to be leader of the administration Dept. She applied to the Smithsonian and was accepted into their administration leadership program. She will soon be enrolled in the new employee training program at the Smithsonian Institute.

## Learning Goal:

To increase employee knowledge and instruct them how to properly care for artifacts. The employees will be provided with background information on artifact care and instructing employees on the best tactics for explaining these rules to the public.



## Learning Outcome:

Learners will apply their knowledge of artifact care to their daily jobs at the museum and instruct the public regarding the museum's policies on artifact handling.

# Module Outline:

## Module One:

Introduction days  
activities

## Module Two:

**Gloves and Artifact  
Handling**

## Module Three

**Packing and unpacking  
Artifacts**

## Module Four :

**Cleaning and Handling  
artifacts**

## Module Five:

**Dealing with the public  
and other employees**

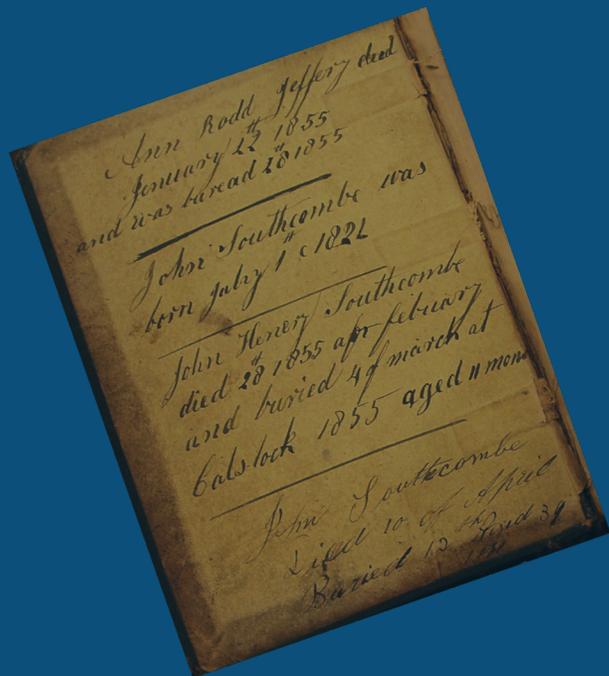
## Module Six:

**Delivering Public  
Presentations**

# Module One: Archaeological Adventure Challenge

## Outcomes

Demonstrate procedural knowledge of the flow of the day's activities.



## Content Overview

The process and procedures of the trainings activities will be learned.

- A. Introduction of Day's activities
  1. Archaeological Adventure Escape Room Concept
  2. Adventure Response and Assessment Guide
  3. Content to be learned
    - a. Gloves and artifact handling
    - b. Packing and moving
    - c. Cleaning artifacts
    - d. Dealing with the public
  4. Presentation and wrap-up, awards

# Module One: Archaeological Adventure Challenge

## Activities

Instructor will read information or play a 30 second intro video with adventure theme music explaining the Escape Room Scenario

### Facilitator Led Scenario:

All students will participate in an archaeological adventure in which they will visit several rooms and have to solve challenges to get out of the room.

Participants will be split into teams of 4. If an activity is completed, they

## Assessment

Use performance based assessment to assess if everyone in the training knows what to do and where to go..

**Facilitator Led Assessment:** The instructor will check for understanding through observation of the groups. The groups are sent to their first adventure room.

The participants will be given a **rubric and adventure response guide** to check off and assess the activities they completed as they gather points.

# Module Two: Gloves and Artifact Handling

**Time:** 25 Minutes

## Outcomes

Demonstrate putting on cotton and nitrile gloves by correctly fitting them on the hand.

Apply knowledge by choosing the proper gloves to use when handling a given type of artifact.



## Content Overview

### **Part One:**

The procedure for putting on gloves

- A. How to hold the gloves
- B. How to fit the gloves

### **Part Two:**

The process of handling artifacts.

- A. Determine type of gloves to use, nitrile vs cotton
- B. Steps to handling artifacts based on their condition: brittle smooth, metal

# Module Two: Gloves and Artifact Handling

## Activities

### Part One:

The instructor will show a diagram of the proper way to put on the gloves. The instructor demonstrates putting on the gloves.

### Part Two:

The instructor will demonstrate the process of handling artifacts. Condition of artifacts will be discussed.

***Instructor led Scenario:*** A group of archaeologists have just discovered an archaeological dig with artifacts in various conditions.

***Debate:*** Each group will be given one artifact that is metal, brittle or smooth In their groups. They need to debate *which gloves will be needed and why?*

***Pick up Artifact: Learners*** Pick up artifact with the specific gloves needed.

## Assessment

Performance based will be used to assess demonstrated skill of a glove being applied to the hand. Knowledge will be applied through written essay questions detailing the specific type of glove to use in a given situation Declare information through selecting multiple choice answers

### Activity Assesment

#### Part One:

Participants practice putting on the gloves and check the task off on their rubric that they completed within 5 minutes.

#### Part Two

#### **Individual Assessment-**

Each participant responds to questions in the adventure guide and responds to a short essay question about artifacts and gloves.

# Module Three: Packing and Moving Artifacts

**Time:** 25 Minutes

## Outcomes

Demonstrate proper procedures for packing and moving by physically moving objects.

Describe various ways to move and pack objects by classifying objects into categories of fragile and non-fragile objects



## Content Overview

A. The procedure for packing, and unpacking boxes

1. **Classifying fragile vs non-fragile:** objects that need basic vs special support.
2. Technique of proper packing and unpacking boxes
3. Practice packing and unpacking artifacts in boxes

# Module Three: Packing and Moving Artifacts

## Activities

**Video:** The students will watch a 5 minute video on the proper procedures for packing, unpacking, and moving fragile and non-fragile objects.

### **Instructor Led Scenario:**

Your archaeological team has been working hard to transport the different artifacts from the archaeological dig site to a warehouse to get them ready to be transported to the museum for display.

Your team must properly unpack three boxes. At the bottom of one of the three boxes is instructions of what to do next.

### **Group Problem Solving**

Learners will unpack objects. Learners must pack two other items: one in a box marked fragile and one in a non-fragile box. They must carry the box successfully to the next location.

## Assessment

Performance based assessment will be used to present and demonstrate moving and packing of artifacts.

Utilize knowledge to determine how to correctly classify artifacts by analyzing and interpreting a case study.

### Activity Assesment

#### **Individual Response**

**Assessment:** Students are given a case study to respond to in their adventure journals.

# Module Three Materials: Packing and unpacking

## Packing and Unpacking Video Storyboard



The video will be 5 minutes in length and will cover the process for packing and unpacking artifacts.

### Introduction Screen One

<b>Audio:</b> <b>Voiceover:</b> Museum Adventure Training Packing and unpacking unit. <b>Music:</b> intro music underneath and music underneath whole video	<b>Video:</b> Picture of artifacts with the words: Museum Care and Handling, Packing and unpacking session.
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### Size of Boxes and Crates Screen Two

<b>Audio:</b> <b>Voice over:</b> Boxes and crates are adequate ways of transporting objects. you must pick a box that fits the size of the artifact best.	<b>Video:</b> <b>Voiceover:</b> Pictures of different types of boxes used for packing. Large boxes, small boxes, hard Boxes Soft Boxes, Crate
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### Box Materials Screen Three

<b>Audio:</b> <b>Voiceover:</b> Boxes made of corrugated cardboard work well for lighter objects that are locally transport.	<b>Video:</b> Picture of Cardboard
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### Crate Materials Screen Four

<b>Audio:</b> <b>Voiceover:</b> Crates made of wood, fiberglass or high-density plastic are good for heavy objects and long distance travel.	<b>Video:</b> Picture of a crate made of plywood, fiberglass or high-density plastic
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### Packing Materials Screen Five

<b>Audio:</b> Different types of packing materials can be used. Bubble wrap styrofoam bubble pellets can be used with some objects.	<b>Video:</b> Pictures of different types of packing materials: Bubble wrap styrofoam bubble pellets
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### Packing Materials Screen Six

<b>Audio:</b> <b>Voiceover:</b> Packing materials also include: vapor barrier films, bubble packs polyethlen foam sheets, masking tap, or other special tape	<b>Video:</b> Picture of vapor barrier films, bubble packs polyethylene foam sheets, masking tap, or other special tape.
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### Non-Fragile Artifacts Screen Seven

<b>Audio:</b> <b>Voiceover:</b> non-fragile, not easily breakable objects can be packed utilizing foam core, bubble packs.	<b>Video:</b> Show examples steel, thick wood, and non-breakable artifacts.
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### Fragile Artifacts Screen Eight

<b>Audio:</b> <b>Voiceover:</b> fragile objects, Ancient glass, charcoal and pastel paintings need to be packed with more care.	<b>Video:</b> picture of Ancient glass charcoal, pastel painting
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### Fragile Artifacts Screen Nine

<b>Audio:</b> <b>Voiceover:</b> Acid free glassine paper should be used to cover paintings, bottles with labels objects with oily surfaces.	<b>Video:</b> Picture of Acid free glassine being placed over paintings during packing.
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# Module Three Materials: Packing and unpacking

## Packing and Unpacking Video Storyboard: 2



This is the second storyboard for the packing and unpacking video.

### Decide How to Pack Screen Ten

<b>Audio:</b> <b>Voiceover:</b> First decide if an artifact is fragile or non-fragile, heavy or light. Each object should be packed uniquely. Decide if you need to use gloves	<b>Video:</b> picture heavy light, fragile and non-fragile objects
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### Decide How to Pack Screen Eleven

<b>Audio:</b> <b>Voiceover:</b> Second, choose packing material, remembering fragile objects might need special treatment. Heavy objects needs stronger crates.	<b>Video:</b> Close up of special artifacts. with title special treatment Close up of non-fragile object with title non-fragile. Video of different boxes and crates
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### Packing Non-Fragile Artifacts Screen Twelve

<b>Audio:</b> <b>Voiceover:</b> Check shape and size of object, then line the box with padding. For extra support you can double box objects with padding in between. Wrap object with cotton knit for added protection.	<b>Video:</b> Picture lining box and double boxing with padding in between each box and padding lining the bottom where the object will go.
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### Non-Fragile Artifacts Screen Thirteen

<b>Audio:</b> <b>Voiceover:</b> The artifact can be wrapped with cotton knit, blankets or other material depending on the situation.	<b>Video:</b> Show wrapping artifacts with cotton knit, blankets or other material.
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### Non-Fragile Artifacts Screen Fourteen

<b>Audio:</b> <b>Voiceover:</b> At least 2 inches of protection between the object and the box. Try and pack as few artifacts in box as possible. Do not mix fragile and non-fragile objects in same box.	<b>Video:</b> Close up of object in box
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### Fragile Artifacts Screen Fifteen

<b>Audio:</b> <b>Voiceover:</b> For fragile artifacts, follow the same steps except use acid free paper or other special material depending on the situation. Close the box and tape it up.	<b>Video:</b> Show packing objects with acid free paper.
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### Carrying Artifacts Screen Sixteen

<b>Audio:</b> <b>Voiceover:</b> Pick up the packed object carefully bending at the knees. Slowly carry the packed artifact to its destination.	<b>Video:</b> Show packed artifact being carried.
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### Unpacking Artifacts. Screen Seventeen

<b>Audio:</b> <b>Voiceover:</b> unpack the artifact in the reverse order. Make sure to take as much care as you did packing it. Utilize special gloves when necessary. Use both hands.	<b>Video:</b> picture showing unpacking object and carefully placing it on shelf.
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### Review Screen Eighteen

<b>Audio:</b> <b>Voiceover:</b> when packing and unpacking, analyze the artifact, choose proper materials, pack the object and unpack the object in reverse.	<b>Video:</b> Picture of the entire process.
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# Facilitator Instruction card for Module Three

## Activities

**Video:** The students will watch a 5 minute video on the proper procedures for packing, unpacking, and moving fragile and non-fragile objects.

### **Instructor Led Scenario:**

Your archaeological team has been working hard to transport the different artifacts from the archaeological dig site to a warehouse to get them ready to be transported to the museum for display. Your team must properly unpack three boxes. At the bottom of one of the three boxes is instructions of what to do next.

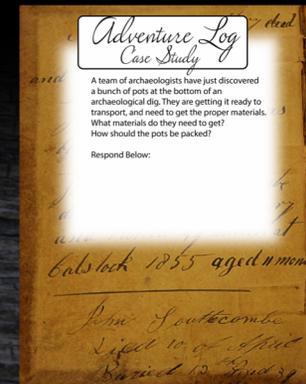
### **Group Problem Solving**

Learners will unpack objects. Learners must pack two other items: one in a boxed marked fragile and one in a non-fragile box. They must carry the box successfully to the next location.

## Training Presenter Information For activity facilitation

### Activity Assesmnet

**Individual Response Assessment:**  
Students are given a case study. To respond to in there adventure journals.



## Module Three Assessment:

## Module Three: Activity Card

### Adventure Log Case Study

A team of archaeologists discovered clay pots at the bottom of an archaeological dig. An archaeology intern was asked to pack them and transport them to the museum. The intern packed the artifacts using a thin layer of bubble wrap and packed them into a cardboard box. When the pots arrived at the museum they were broken.

What should the intern have done differently?  
How could the pots have been packed better?

Respond Below:

Your group must repack two boxes. One with a fragile item inside and one with a non-fragile item. Your team must carry it to the next room without damaging the items.

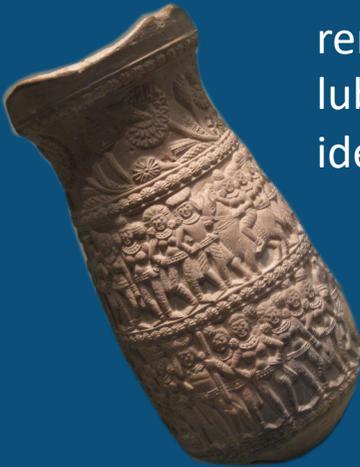
# Module Four: Cleaning and Handling Artifacts

**Time:** 25 Minutes

## Outcomes

Classify different types of cleaning and handling methods

Locate specific facts about dust removal, grime, grease, and lubricants through identification of information



## Content Overview

### Gloves and Artifact Handling

- A. Different principles of cleaning and handling will be examined.
  - 1. Objects that can be polished
  - 2. Objects that cannot be polished
- B. factual information on caring for metal, ceramics, stone, glass. and special artifacts

# Module Four: Cleaning and Handling Artifacts

## Activities

Instructor will read information or play a 30 second intro video with adventure theme music explaining the *Escape Room Scenario*

### Facilitator Led Scenario:

All students will participate in an archaeological adventure in which they will visit several rooms and have to solve challenges to get out of the room.

Participants will be split into teams of 4. If an activity is completed, they

## Assessment

Use performance based assessment to assess if everyone in the training knows what to do and where to go..

**Facilitator Led Assessment:** The instructor will check for understanding through observation of the groups. The groups are sent to their first adventure room.

The participants will be given a **rubric and adventure response guide** to check off and assess the activities they completed as they gather points.

# Module Five: Dealing with the Public and Other Employees

**Time:** 25 Minutes

## Outcomes

Decide what information to impart to the public through analysis of presentation content.

Deliver artifact handling informational by practicing hands-on presentations



## Content Overview

- A. Presentation Creation: How to prevent artifacts from breaking
  - 1. Proper technique for presenting to the public
    - a. Proper level of knowledge for patrons
    - b. Basic presentation skills
    - c. Reviewing previously learned content

# Module Five: Dealing with the Public and Other Employees

## Activities

### **Instructor Lead Discussion:**

The instructor leads a discussion on basic presentation skills.

Speak clearly, present appropriate level of information depending on the situation.

### **Group Role Play:**

Participant in the group are given cards indicating a problem with the public mistreating or getting too close to artifacts.

Participants must prepare a minimum 30 second responses. They must utilize their prior knowledge from previous sessions.

They will have to evaluate the specific level of knowledge needed and practice presenting the information to group members.

## Assessment

Evaluate appropriate level of application of information through observation of problem solving and presentation skills.

### Activity Assessment

**Instructor assessment**-level of knowledge by walking around to groups and observing the presentations being practiced.

# Module Six: Delivering Public Presentations

**Time:** 25 Minutes

## Outcomes

Deliver artifact handling informational by presenting hands-on presentations



## Content Overview

### Review of all skills learned from all modules

- A. Presentation skills- Learner review proper ways To present information.
  
- B. .Quick Review-review of content from all modules:
  1. Recall information on glove and artifact handling: Nitrile vs cotton
  
  2. Review and recall packing and moving: Fragile vs Non-fragile
  
  3. Review and recall Cleaning and Handling: Polish vs never polish, and artifact conditions.
  
  4. Dealing with the public's concerns

# Module Six: Delivering Public Presentations

## Activities

### Instructor led instruction

Instructor asks four volunteers to present their 30 second responses.

All of the group participants evaluate if the proper level of information was used to address the issue.

### Review Game:

participants play a gigantic game of memory. Large sheets of paper with different facts are placed on the floor.

Participants will have to match different facts and information with each other.

## Assessment

Evaluate appropriate level of application of information through observation of problem solving and presentation skills.

### Activity Assesment

**Program Evaluation** is delivered and facilitator answers questions from participants.

# Program Evaluation: Expert Review

Who: Museum collections expert and public relations expert familiar with the museum's procedures.

What: The entire program will be evaluated during the creation process. From the standpoint of the learner, the SME's and designer will make sure activities, outcomes, and assessments meet the needs of all learners.



When: There will be six meetings and one wrap up meeting with both SMEs attending the meetings together. Contingency plans will be made in case of time conflicts

## Types of Questions:

*Open ended and closed questions:*

Do you think the outcomes, activities and assessments are aligned and will lead to a smooth and efficient flow of the program?

Are there any mistakes in the processes and procedures of the information presented?

# Program Evaluation: One on One

Who: Participants will be chosen that closely represent the different types of personas created for the course. The participants will range in age from 18-80 and have a variety of career and museum experiences.

What: The participants will review a sample of the program from end to end. They will review the outcomes, activities and assessments. Participants will also evaluate testing methods.

They will be given a rubric to mark down their thoughts as they complete each section of the training.



When: Interviews will be scheduled after the entire training is completed.

The six interviews will occur a day apart from each other giving the design team time to record and reflect on the data collected after each interview.

Types of Questions:

*Open ended and closed questions:*

Was the video demonstrating the proper packing and unpacking procedures engaging and easy to understand?

Were test items clear and understandable?

# Program Evaluation: Pilot Test

Who: A group of eight learners will participate in the pilot of the training.

Participants will be chosen that represent the different types of personas created for the course. The participants will range in age from 18-80 and have a variety of career and museum experiences.

What: The participants will review a sample of the program from end to end. They will review the **outcomes, activities** and **assessments**. They will be given a rubric to mark down their thoughts as they complete each section of the training.

Participants will be given an **attitude survey**. They will review how they liked and felt about the program as a whole.



When: The evaluation will be scheduled one week after the completion of the individual one on one interviews. This will give designers enough time to reflect back on the content and make any changes necessary before the pilot tests begin.

Types of Questions :

*Open ended and closed questions will be asked.:*

What was your favorite part of the program and why?

In the introduction module, were directions presented in a clear and concise manner?

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