

Introduction

The purpose of this report is to provide a needs assessment and high level design plan for the development of an educational resource promoting the adaptive reuse of designed spaces. This learning resource will be used by We Are The Next, a non-profit organization that promotes the education of youth regarding sustainability. The focus for development of this project will be to encourage interest, promote awareness, and inspire personal connection and support for reuse of finite resources. Although sustainable resource use is a very broad topic, a focus on adaptive reuse of buildings and designed spaces will be used to introduce the concept of sustainability in a tangible way the user can relate to his or her own community.

Problem

Adaptive reuse of designed spaces and buildings is frequently a more cost effective and environmentally friendly approach than the demolition and new construction of designed spaces. Changes to historic and cultural spaces in communities are often made without consideration to this option. Younger generations often do not become involved in community decisions, but as these decisions will directly affect the future of their communities it is essential to encourage them to be involved in the processes.

Target Audience

The target audience for this educational resource will be 16-24 year olds. By focusing on changing the values of the younger generation to value existing natural and designed resources and make sustainable choices, the non-profit organization is hoping to close the gap between what can be done today and what can be done in the future. The audience will access this tool from a variety of geographic locations, and may or may not be familiar with the topic. The participant may think of adaptive reuse as something that does not directly affect them. This learning module may also

be used as a learning resource connecting to a design-challenge sponsored by the non-profit.

Objectives

The main objective of this resource is to promote a change in the attitude and awareness of the participant toward adaptive reuse by emphasizing the sustainability benefits that come from both natural and designed resources and to value designed spaces. The first goal is for the viewer to recognize that adaptive reuse is often a cost-effective and environmentally friendly alternative to demolition of designed spaces. The second goal is for the participant to identify a space in his or her own community that is currently unused, and discuss how that space could be reused. By making a personal connection with the issue, it is hoped that the participant will realize that their decisions and values will have an impact on their respective communities future.

Content Source

The content of this course will be sourced from a subject matter expert on Heritage Conservation. This content will be supplemented by peer reviewed research accessed through internet resources, as well as a variety of related texts. Contemporary publications and blogs will be reviewed to assess current coverage of similar issues and community engagement efforts. Audio clips and stock images will be purchased and downloaded from the Internet. Additional photos of before and after examples of adaptive reuse will be supplied by the SME.

Tech Platform

This content will primarily be accessed through the nonprofit's website so internet connection is assumed. Initial development will be modeled for access through the participant's laptop or desktop computer, with the intent of creating a mobile version in the future. The suggested platform will be Google Chrome, but the content will be tested on Internet Explorer and Safari to anticipate any user issues. The minimum suggested screen resolution is 1024x768. The content will be delivered in audio, text, graphics, and interactive module components. The use of audio will enhance the course, but will not be required to interact if the user does not have speakers available.

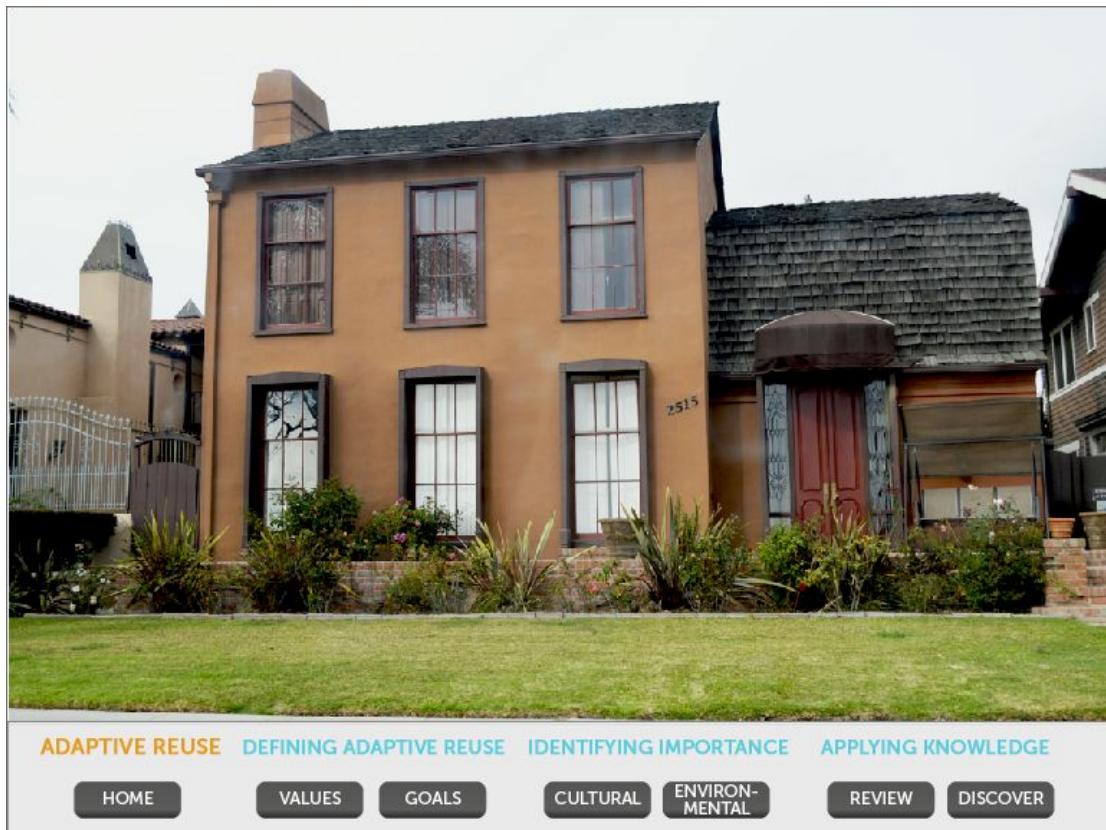
Content Outline and Treatment Plan

The course "home" page will feature an image of a historic home or structure, where different parts of the structure and surrounding environment will link to a respective topic. An audio mix of cityscape, nature sounds, and people talking will be mixed for the homepage. When hovering over an area, a prompting question will pop up that will lead into the appropriate topic when the area is clicked. An essential question, such as "What is Adaptive Reuse?" and an audio clip from the "home" page audio mix will be featured on each topic page. Each main topic will also be accessible through buttons featured on the sides or bottom of the screen, with an additional button for the "home" page. There will also be a hidden button on the door of the house that will lead to an "examples" page, with a text and audio prompt.

<p>Defining Adaptive Reuse</p> <ul style="list-style-type: none"> ● Determining Value of a Structure or Space <ul style="list-style-type: none"> ○ Societal ○ Historical ○ Environmental 	<p>Q: How does our community determine the value of an existing building or designed space?</p> <p>The three sub-topics will be presented in an accordion interaction module, which will feature images and related information on each tab.</p>
<ul style="list-style-type: none"> ● Goals of Adaptive Reuse <ul style="list-style-type: none"> ○ Heritage Conservation ○ Economic and/or Social Revitalization ○ Sustainable Decisions 	<p>Q: What are the goals of adaptive reuse?</p> <p>The three sub-topics will be presented as bubbles branching out from the question "What are the goals of adaptive reuse?" Clicking on the sub-topic bubble will expand it to show more information related to the sub-topic.</p>
<ul style="list-style-type: none"> ● Examples 	<p>Q: What does adaptive reuse look like?</p> <p>"Before" photos of spaces will flip to the "after" photos when hovering over the image. Text about the previous and current use of the space will be featured alongside the images.</p>
<p>Identifying the Importance of Adaptive Reuse</p> <ul style="list-style-type: none"> ● Cultural Preservation <ul style="list-style-type: none"> ○ Develops sense of ownership ○ Connecting with the community ○ Encourages Civic Engagement 	<p>Q: What effect does adaptive reuse have on the community?</p> <p>A process circle module will demonstrate the various potential outcomes of Cultural Preservation, and will support how they are all connected and related.</p>

<ul style="list-style-type: none"> ● Environmental Effects <ul style="list-style-type: none"> ○ Square Footage Demolished Every Year ○ Impact on Natural Environment ○ Impact on People 	<p>Q: What effect does adaptive reuse have on the environment?</p> <p>An interactive graphic with elements that will function as buttons and lead pop-ups related to a sub-topic. For example, clicking the bulldozer will prompt a pop-up that shares the the total square footage demolished each year. Audio clips will play when hovering over different areas to prompt user to click.</p>
<p>Reviewing the Main Concepts</p> <ul style="list-style-type: none"> ● Questions and Answers 	<p>Q: What did you learn?</p> <p>A drag and drop module will be used to connect questions to the correct answer. There will be 5 questions, one for each topic in the Defining and Identifying sections (everything but the examples section).</p>
<p>Applying Knowledge and Making Connections</p> <ul style="list-style-type: none"> ● Identify Opportunities <ul style="list-style-type: none"> ○ Discover Abandoned Spaces ○ Research History 	<p>Q: What designed spaces are unused in your community?</p> <p>A form will be available for download which will guide the participant in organizing the information they discover in their research. A list of suggested web resources regarding adaptive reuse will be available.</p>
<ul style="list-style-type: none"> ● Design Challenge <ul style="list-style-type: none"> ○ Significance ○ Purpose ○ Social Share 	<p>Q: How would you choose to adapt the space?</p> <p>Participants will be encouraged to share their findings and suggestions on social media and/or blogs and to tag the non-profit in the posts.</p>

Interface Design



Functionality

The main user interface will be a footer that is present on the bottom of each page. Buttons will be grouped based on objective, with an additional button to navigate back to the “home” screen. The following features will be visible/accessible on all pages.

Prompt Area

Course Title

3 Objective Titles

6 Topic Buttons

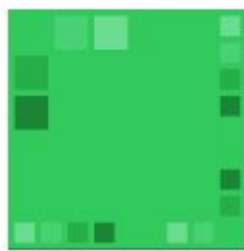
1 Home Button

Standards/Styles

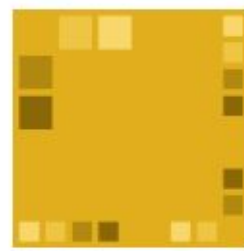
The non-profit does not have any existing models or templates for educational resources. Main concept and style will be developed to align with the non-profit’s website and the style of images provided from the organization. Logo is not required for the main interface, but it will be included in the social media sharing section. The main fonts used on the website are Museo Sans 300 and Museo Sans 500 font. It is not required to use these fonts in the course, but it can be included if it is a good fit for the design. The following colors from the logo can also be included the design of the course, but are also not required.



39c3d8 color="#39c3d8"



10c75e color="#10c75e"



e8ac10 color="#e8ac10"

Graphics standards

Some photos have already been purchased by the non-profit, and additional photos will be purchased from the same photographer to keep a consistent visual language and style throughout the course. Illustrations and buttons do not have a required look

but will be developed to match the images provided by the company and best reflect the style of the non-profit website.

508 Compliance Ideas

If 508 compliance becomes a requirement, a series of podcasts with audio versions of the information in the course will be developed.

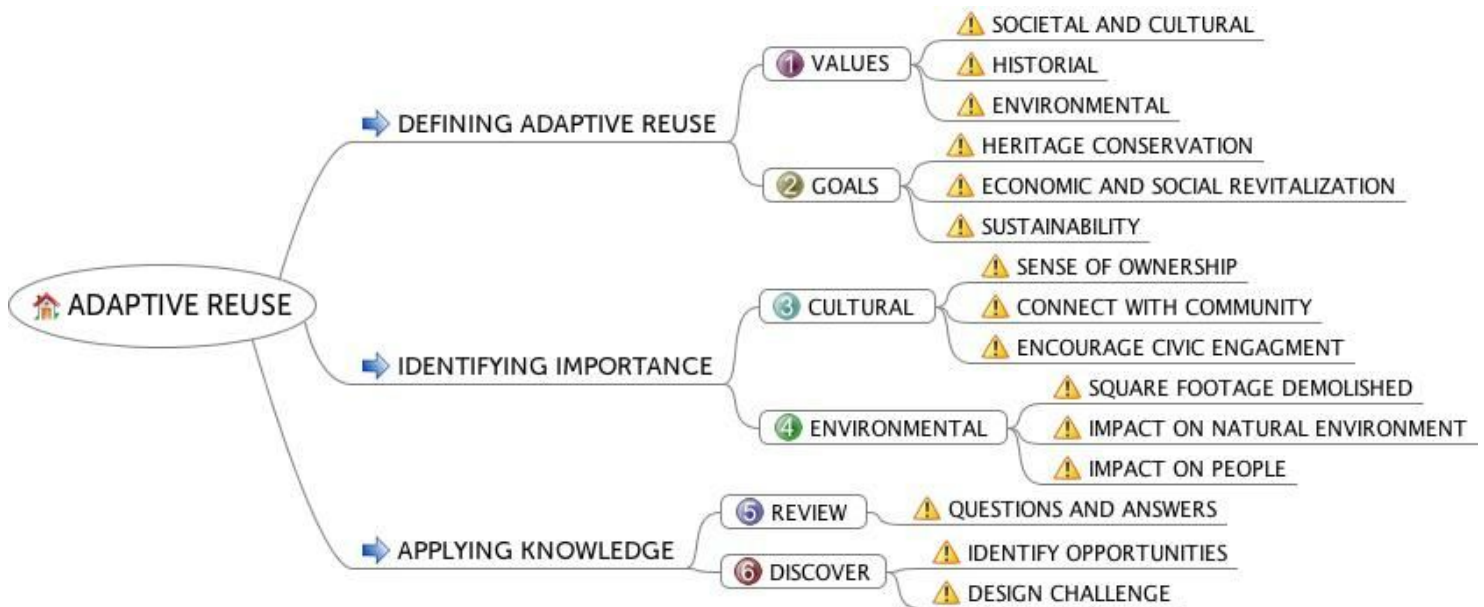
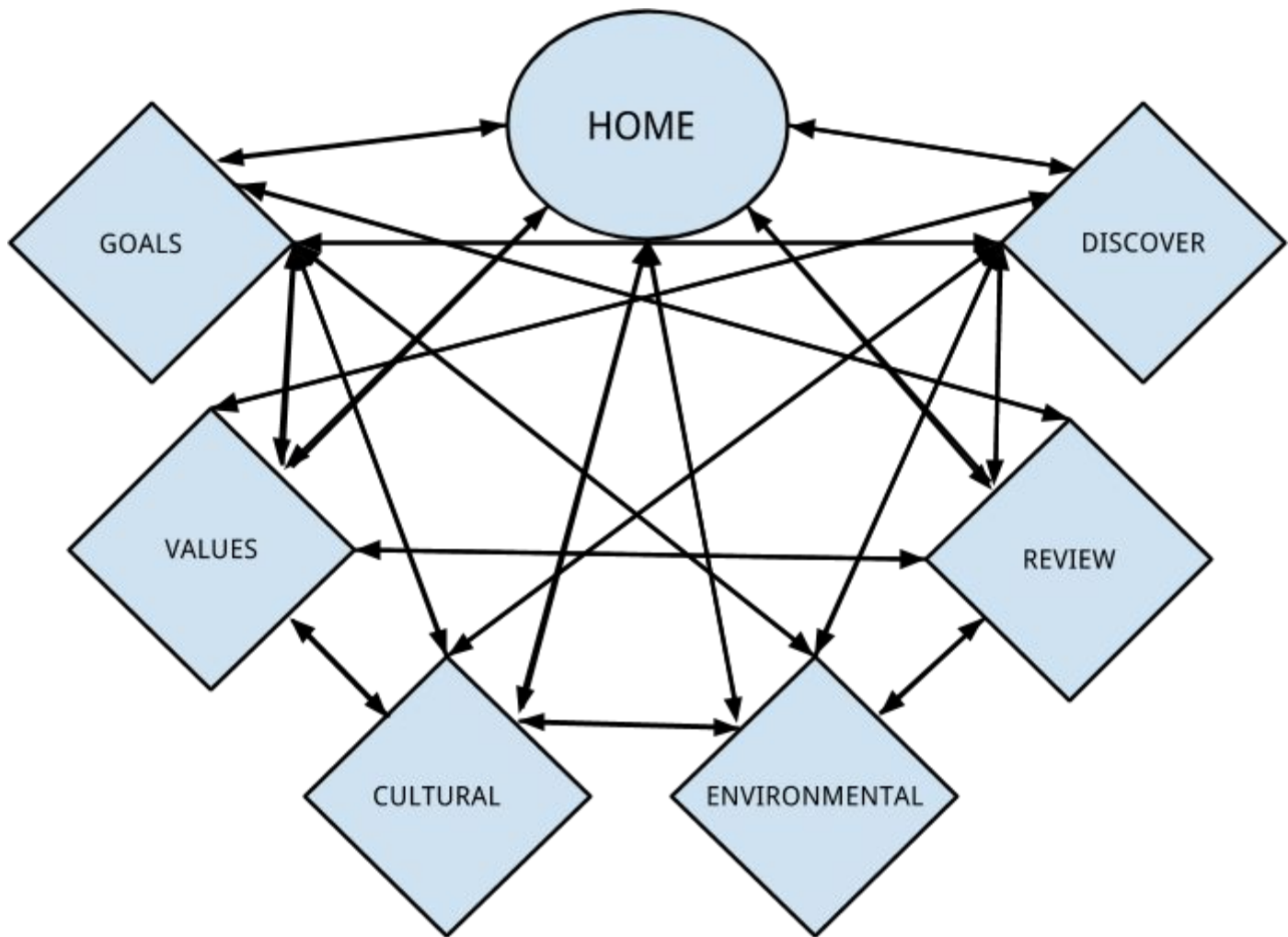
Production Pathway

ELEMENT	PROCESS	TOOLS	NOTES
Design Documents	Create/Edit/Organize	Google Docs	Need to create file system for projects created on google docs, and download copies to be backed up on hard drive.
Graphics/Photos	Source Images	Personal Computer	Will source images from the SME and the non-profit, and purchase and download additional stock images.
Graphics/Illustrations	Create/Export	Adobe Illustrator	Will create home screen, interactive graphic/buttons and export to jpgs for import to Captivate.
Audio	Source Audio Clips	Personal Computer/Web	Will source audio files from free sound websites and purchase additional as necessary.
Audio	Edit/Export	Garageband	Audio files will be stored on my home computer hard drive and backed up on my external drive
Courseware Dev	Create Courseware	Captivate	I will use Captivate to assemble the course information, graphics, and audio.
LMS	Upload	Bluehost	Need to create file system for final project on FTP site.

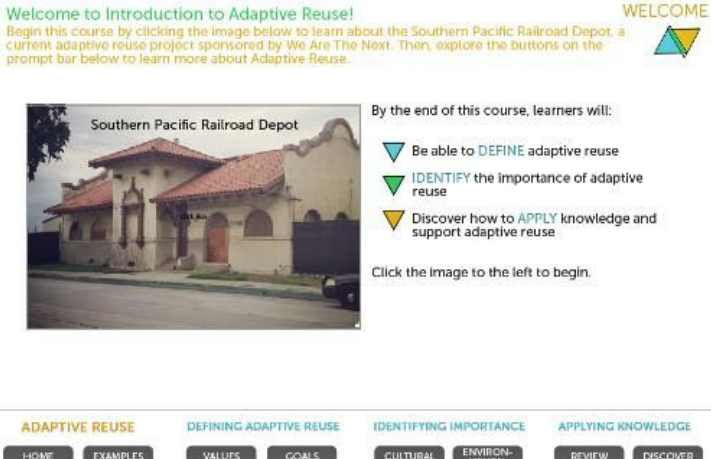
LMS	Distribute	Non-Profit Website	Need to develop non profit website page linking to the course files.
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Navigation Strategy/Flowchart

A “Web” navigation model will be used for the learner to use the course in an explorative nature, choosing which topics they would like to learn more about. All main topic pages will be accessible from the prompt bar at the bottom of the screen, with additional sub-topic and contextual information accessible through learning interactions or interactive graphics.



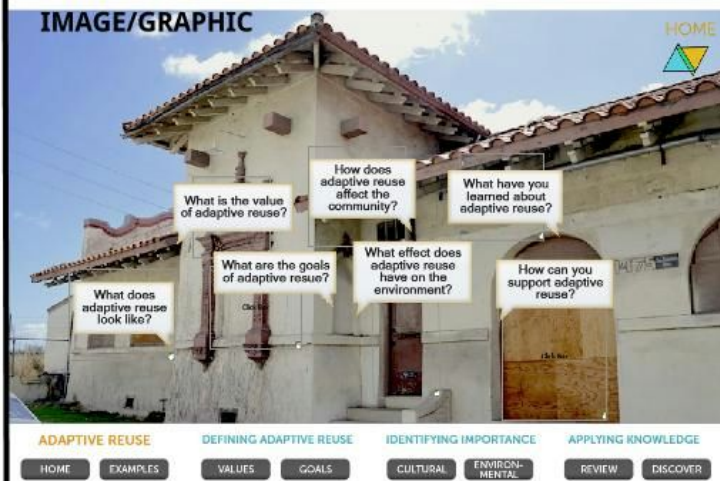
Storyboard

COURSE TITLE: ADAPTIVE REUSE	SLIDE NAME: WELCOME
<p>NAVIGATION</p> <p>Buttons:</p> <ol style="list-style-type: none"> 1. Home - On click will go to "Home" 2. Examples - On click will go to "Examples" 3. Values - On click will go to "Values" 4. Goals - On click will go to "Goals" 5. Cultural - On click will go to "Cultural" 6. Environmental - On click will go to "Environmental" 7. Review - On click will go to "Review" 8. Discover - On click will go to "Discover" <p>Interactions: Student begins course by clicking the image of the Southern Pacific Railroad Depot, which leads to a timeline that outlines the history and future plans for the building and discusses this adaptive reuse project.</p>	<p>IMAGE/GRAPHIC</p>  <p>NAVIGATION</p> <p>Buttons:</p> <ol style="list-style-type: none"> 1. Home - On click will go to "Home" 2. Examples - On click will go to "Examples" 3. Values - On click will go to "Values" 4. Goals - On click will go to "Goals" 5. Cultural - On click will go to "Cultural" 6. Environmental - On click will go to "Environmental" 7. Review - On click will go to "Review" 8. Discover - On click will go to "Discover" <p>Interactions: Student begins course by clicking the image of the Southern Pacific Railroad Depot, which leads to a timeline that outlines the history and future plans for the building and discusses this adaptive reuse project.</p>
<p>AUDIO</p> <p>Description: Audio mix of sounds from natural and urban environments.</p> <p>File Names: AR_environmental1.mpeg AR_environmental2.mpeg AR_environmental3.mpeg</p> <p>Playback: Hover Playback, Loop</p>	<p>CONTENT</p> <p>Main Topic: Welcome</p> <p>Subtopic 1: How to Begin the Course</p> <p>Subtopic 2: Learning Objectives</p> <ul style="list-style-type: none"> *Define Adaptive Reuse *Identify Importance *Apply Knowledge

COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: HOME****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: The graphic will have interactive elements that function as additional buttons leading to the content accessed by the prompt area. Each of the windows will link to a main topic page.

**AUDIO**

Description: Audio mix of sounds from the city, natural environment, and people talking.

File Name: AR_homepage.mpeg

Playback: Auto Play, Loop

CONTENT

Main Topic: Introducing Adaptive Reuse

Subtopic 1: Defining Adaptive Reuse

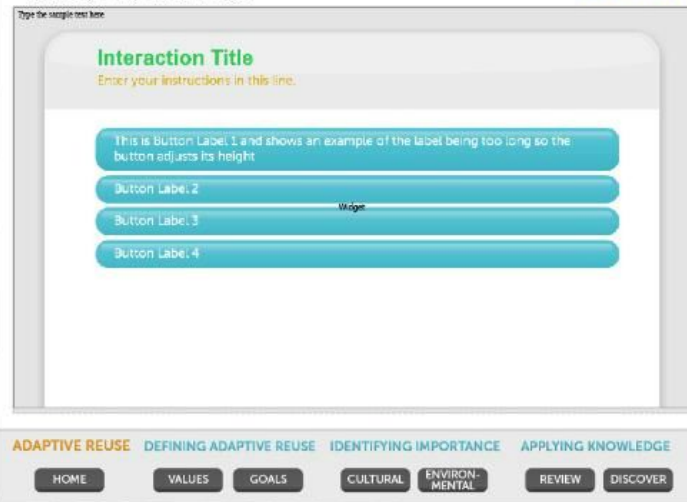
Subtopic 2: Identifying Importance

Subtopic 3: Applying Knowledge

COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: VALUES****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: The three sub-topics will be organized in an accordion interaction module which will feature images and related content for each tab.

IMAGE/GRAPHIC**LESSON TITLE****AUDIO**

Description: Audio mix of sounds from the city, natural environment, and people talking.

File Name: AR_values.mpeg

Playback: Auto Play, Loop

CONTENT

Main Topic: How is the value of an existing structure or space determined?

Subtopic 1: Societal Value

Subtopic 2: Historical Value

Subtopic 3: Environmental Value

COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: GOALS****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: The three sub-topics will be organized in an expanding mind-map that will have photos imbedded within each sub-topic node.

AUDIO

Description: Audio mix of sounds from the city and people talking.

File Name: AR_goals.mpeg

Playback: Auto Play, Loop

IMAGE/GRAPHIC

What are the goals of adaptive reuse?

Discover the goals of adaptive reuse by clicking the arrows below.

GOALS

**Economic Revitalization**

Finding a new use for an unused or underused structure or space can bring new revenue and life to the neighborhood and surrounding community. When a structure or designed space is underused, it is not contributing to the economic health of the community it resides in.

Think about the businesses in your area that have closed down. How has that affected the people in your neighborhood?



ADAPTIVE REUSE

DEFINING ADAPTIVE REUSE

IDENTIFYING IMPORTANCE

APPLYING KNOWLEDGE

HOME

EXAMPLES

VALUES

GOALS

CULTURAL

ENVIRONMENTAL

REVIEW

DISCOVER

CONTENT

Main Topic: What are the goals of adaptive reuse?

Subtopic 1: Heritage Conservation

Subtopic 2: Economic and/or Social Revitalization

Subtopic 3: Sustainability

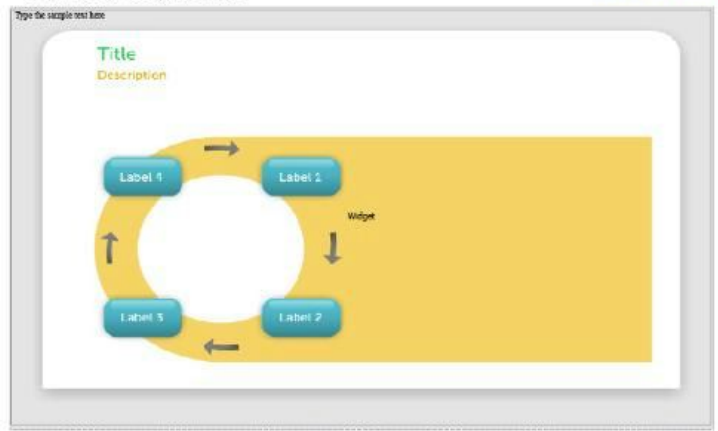
COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: CULTURAL****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: The sub-topics will be featured in an interactive process circle to demonstrate the various potential outcomes and support how they are all connected and related. When rotated, each sub-topic will feature a related image and text.

IMAGE/GRAPHIC

LESSON TITLE



ADAPTIVE REUSE DEFINING ADAPTIVE REUSE IDENTIFYING IMPORTANCE APPLYING KNOWLEDGE

HOME VALUES GOALS CULTURAL ENVIRONMENTAL REVIEW DISCOVER

AUDIO

Description: Audio clip of people talking and conversing.

File Name: AR_cultural.mpeg

Playback: Auto Play, Loop

CONTENT

Main Topic: What effect can adaptive reuse have on the community?

Subtopic 1: Develops sense of ownership

Subtopic 2: Connects residents to the community

Subtopic 3: Encourages civic engagement

COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: ENVIRONMENTAL****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: Animated video featuring 05 Reasons to Support Adaptive Reuse featured in Captivate Youtube Widget.

IMAGE/GRAPHIC

What effect does adaptive reuse have on the environment?
Watch the video below to learn about how adaptive reuse can affect the environment.

ENVIRONMENTAL



Now that you have defined and identified the importance of adaptive reuse, are you ready to apply the information you have learned to your community? Click on the REVIEW button below to test your knowledge.

ADAPTIVE REUSE

DEFINING ADAPTIVE REUSE

IDENTIFYING IMPORTANCE

APPLYING KNOWLEDGE

HOME

EXAMPLES

VALUES

GOALS

CULTURAL

ENVIRONMENTAL

REVIEW

DISCOVER

VIDEO

Description: Powtoon Animation hosted on Youtube.

File Names: 05 Reasons to Support Adaptive Reuse

Playback: User controls for play, stop, volume etc.

CONTENT

Main Topic: What effect does adaptive reuse have on the environment?

Subtopic 1: 05 Reasons to Support Adaptive Reuse

COURSE TITLE: ADAPTIVE REUSE**SLIDE NAME: REVIEW****NAVIGATION****Buttons:**

1. Home - On click will go to "Home"
2. Examples - On click will go to "Examples"
3. Values - On click will go to "Values"
4. Goals - On click will go to "Goals"
5. Cultural - On click will go to "Cultural"
6. Environmental - On click will go to "Environmental"
7. Review - On click will go to "Review"
8. Discover - On click will go to "Discover"

Interactions: A drag and drop module will be used to connect questions to the correct answer. Incorrect answers will not be accepted by the drop target, and after the student clicks CONTINUE they will jump to a congratulations page with encouragement to discover how to apply knowledge in their own community.

IMAGE/GRAPHIC**AUDIO**

Description: Audio mix of sounds from the natural environment.

File Name: AR_values.mpeg

Playback: Auto Play, Loop

CONTENT


Main Topic: What have you learned about adaptive reuse?

Drop Target 1: Values of Structures

Drop Target 2: Cultural Effects

Drop Target 3: Goals of Adaptive Reuse

Drop Target 4: Environmental Effects

COURSE TITLE: ADAPTIVE REUSE	SLIDE NAME: DISCOVER
<p>NAVIGATION</p> <p>Buttons:</p> <ol style="list-style-type: none"> 1. Home - On click will go to "Home" 2. Examples - On click will go to "Examples" 3. Values - On click will go to "Values" 4. Goals - On click will go to "Goals" 5. Cultural - On click will go to "Cultural" 6. Environmental - On click will go to "Environmental" 7. Review - On click will go to "Review" 8. Discover - On click will go to "Discover" <p>Interactions: Four steps to supporting adaptive reuse will be browsed by clicking the arrow buttons. Links to outside organizations and pages will be featured to encourage the student to begin research.</p>	<p>IMAGE/GRAPHIC</p> 
<p>AUDIO</p> <p>Description: Audio mix of sounds from the city and students talking.</p> <p>File Name: AR_discover.mpeg</p> <p>Playback: Auto Play, Loop</p>	<p>CONTENT</p> <p>Main Topic: How can you support adaptive reuse in your community?</p> <p>Subtopic 1: Research</p> <p>Subtopic 2: Connect</p> <p>Subtopic 3: Volunteer</p> <p>Subtopic 4: Share Your Findings</p>

Assessment Strategy

This course will be assessed informally, with a drag and drop interaction for the user to categorize subtopics of adaptive reuse. The interaction will not allow the user to drop an incorrect answer, and it is meant to be a brief review of the main concepts of adaptive reuse. What the learner does with the information following experiencing the course will be the true assessment of the course's ability to change how the learner perceives finite resources and adaptive reuse.