Captone Project Storyboards: Innovation Lab Vinyl Cutter "Level 1 Badge" Course

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IST 699: Capstone Project

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Table of Contents

Course Agenda, Content, and Status

Module 1: Introduction (4 min): Present example projects and introduce Liberatory Design.
Status: Pending creation

Module 2: Course Objectives (3 min): Inform students of the course goals and what they will know and be able to do after completing the course.
Status: Pending creation

Module 3: Vinyl Cutter Uses (3 min): Introduce students to general vinyl cutter uses and types of products that can be made with the vinyl cutter.
Status: Pending discussion with SMEs to confirm inclusion or exclusion

Module 4: Vinyl Cutter Parts and Their Purposes (8 min): Educate students on each of the individual vinyl cutter parts and the purposes of those parts.
Status: Complete

Module 5: Materials You Can Use with the Vinyl Cutter (6 min): Educate students on what materials are appropriate to use with the vinyl cutter.
Status: Complete

Module 6: Vinyl Cutter Safety (6 min): Educate students on important vinyl cutter safety protocols.
Status: Complete

Module 7: Vector Files and the Vinyl Cutter (4 min): Introduce students to the concept of a vector file and provide education on why this type of file is needed to make vinyl cutter products.
Status: Complete, pending SME approval

Module 8: Choose a Vector File (4 min): Provide students with a curated folder of Aquarium style vector files and guide them through selection of a file.
Status: Complete, pending SME approval

Module 9: Design Transfer (4 min): Introduce students to CutStudio and walk them through the steps of transferring a design.
Status: Pending. Video storyboards provided to SMEs, pending approval. Video shoot days are scheduled for 9/19/23, 9/20/23, and 9/21/23.

Module 10: Resize a Design (3 min): Educate students on how to use the vinyl cutter to resize a design with the aid of a pre-cutting preparatory steps checklist.
Status: Pending. Video storyboards provided to SMEs, pending approval. Video shoot days are scheduled for 9/19/23, 9/20/23, and 9/21/23.

Module 11: Basic Vinyl Cutter Use (15 min): Educate students via demonstration how to perform basic vinyl cutter functions.

Status: Pending. Video storyboards provided to SMEs, pending approval. Video shoot days are scheduled for 9/19/23, 9/20/23, and 9/21/23.

Module 12: Sticker Transfer (3 min): Educate students via demonstration how to transfer a sticker.
Status: Pending creation

Module 13: Frequently asked questions (FAQs) and Troubleshooting Tips (15 min)
        a) Adobe Illustrator FAQs
        b) Roland CutStudio FAQs
        c) GS-24 vinyl cutter FAQs
Status: Pending

Module 14: Final Sign-off (24 min): Innovation Lab hands-on demonstration and sign-off with supervision
Status: Pending

Module 15: Resources (3 min): Learning points summary, links to resources introduced in the course, access to further learning resources (e.g., MBA Adobe Illustrator course)
Status: Pending creation

Anticipated course creation completion date: November 15, 2023

Development Tools: Articulate Storyline 360, Adobe Premiere Pro, and Camtasia

Monterey Bay Aquarium (MBA) Brand Look Guidelines

Font: Verdana

Font colors:
#4190C4 for headings
#ff6308 for new science words

Colors for other items (text, lines, borders, etc.), only the following colors to be used:
Primary
#4190C4; RGB 65, 144, 196
#66CCCC; RGB 102, 204, 204
#404040; RGB 64, 64, 64
#FFFFFF; RGB 255, 255, 255
Secondary
#FF6308; RGB 255, 99, 8
#404040; RBB 64, 64, 64 (50%)
#EEEEEE; RGB 238, 238, 238

Guidelines from Monterey Bay Aquarium's content creation course:

"When creating multi-media assets:
- In videos featuring you, wear a top with the Aquarium logo and your name tag
- Use ONLY the colors above, whenever possible
- Whenever possible, use Interstate-Condensed font. When not possible, use Calibri.
- For any presentations (including those in Nearpod), use the MBA slides template
- In Adobe Spark, use either the "Elevate" or "Noir" theme (more details in the Adobe Spark chapter)
- For other questions about the "look" of courses or multi-media assets, as well as grammar and spelling practices, see the full Aquarium style guide."

Module 1 Storyboard ("Introduction")

Slide 1 (Module 1)	Title: Vinyl Cutter Course Introduction Slide	Time: 10 sec.
Media Notes	**Screen Text**	**Media Script**
Slide begins in a paused state. Visual elements: - Picture of GS-24 Vinyl cutter. - Colors: #404040, #EEEEEE, #4190C4, #66CCCC, #FF6308 - Monterey Bay Aquarium Logo displays in runner at top of screen (in accordance with existing Innovation Lab course templates) "Next" button displays at the bottom of the screen. Audio narration	Introduction to the Vinyl Cutter Course	"Welcome to the Monterey Bay Aquarium Innovation Lab initial course on vinyl cutter use! Successful completion of this course will provide you with a 'Level 1 Vinyl Cutter Badge.' This badge allows you to use the vinyl cutter with supervision. When you are ready to continue, please select the 'Next' button."

Media		
Image	Picture of GS-24 vinyl cutter Monterey Bay Aquarium (MBA) running logo Will mimic this example "Module 4" introductory slide 	
Audio	See "Media Script"	

Music/SFX	None		
Video	None OR Talking head in bottom right of screen		
Interaction		**Notes/Feedback:**	
"Next" button			
Branching		**Advance**	
Next:	Slide 2	By User (selection of "Next" button)	
Prev:	N/A		

Slide 2 (Module 1)	**Title:** What Can You Do With a Vinyl Cutter?	**Time:** 40 sec.
Media Notes	**Screen Text**	**Media Script**
Slide begins in a paused state. Visual elements: EITHER: • Video of person interacting the vinyl cutter OR: • Still image of person interacting with the vinyl cutter Included within video or still image: • Example projects Audio narration provides a description of what the vinyl cutter	Title: What Can You Do with a Vinyl Cutter? Vinyl cutter uses may display on screen (list drawn from GS-24 User's Manual): • Cut characters and shapes cleanly (all the way through) • Cut perforated lines (a line of small holes) on a variety of materials	"The vinyl cutter is a powerful tool that allows you to cut designs into a variety of materials. It is great for cutting intricate designs on materials that are less than 0.1mm thick. The most commonly cut material is vinyl. But you can also use the vinyl cutter to cut paper, cardstock, tissue paper, fabric, reflectives, and heat transfer material (iron-ons). We'll review these materials you can use with the vinyl cutter in a future module.

can do (possibly accompanied by video of the narrator speaking).	• Cut simple stickers • Handle large output smoothly (Roland DG Corporation, 2015)	Let's look at a few example products that other Innovation Lab participants have made! Click 'Next' when you are ready to continue."

Media	
Image	If video not used, incorporate still image of person working with the MBA vinyl cutter
Audio	See "Media Script"
Music/SFX	None
Video	Possibly incorporate cut together video clips of people working on the vinyl cutter.

Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			

Branching		**Advance**	
Next:	Slide 3	By User (selection of "Next" button)	
Prev:	Slide 1		

Slide 3 (Module 1)	**Title:** Examples of Vinyl Cutter Products	**Time:** 1-2 min

Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of example vinyl cutter products.		Text: What People Have Made with the Vinyl Cutter! Once examples are identified, short text will identify them on-screen	"Tools help us to make things that we think of in our minds in real life. Can you think of a time that you used a tools to make something in your head real? Perhaps you've used pen and paper to write a letter, a pale to make a sandcastle, blocks to build a fort, or Crayons and paper to draw a picture. If you've done any of these things, you've used tools to design and create! Let's take a look at what people have been able to make with the vinyl cutter tool." *Images of vinyl cutter products shown* Narration possibly continues describing example products (scripting TBD based on available examples). If possible/available, a prior participant of the Innovation Lab might present and speak about their product in video.
Media			
Image	Vinyl cutter example product images		
Audio	See "Media Script"		
Music/SFX	None		
Video	Cut together royalty-free video (or still images) of people using tools to make the provided examples (letter, drawing, block fort, sandcastle). Example project display by volunteer? Innovation Lab participant? I will additionally cut a sticker design and display what I was able to make in a video. (Create a design that is meaningful to me, display w/in context of training)		
Interaction		**Notes/Feedback**	

"Next" Button "Back" Button		*Incorporates the important step of reminding learners of prior experiences, facilitating connection creation*	
Branching		**Advance**	
Next:	Slide 4	By User (selection of "Next" button.)	
Prev:	Slide 2		

Slide 4 (Module 1)		**Title:** Liberatory Design	**Time:** 30 sec
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Visual: Image of the 6 petal Liberatory Design		Title: Liberatory Design Text within Liberatory Design image discussed in audio narration. May include linked "Liberatory Design" Rise course. Students will be offered (but NOT required) to access the link to this Rise course	"The Innovation Lab's guiding philosophy is Liberatory Design. When we approach a challenge from a Liberatory Design stance, we try to see the situation from the perspective of affected people, engage with others to make meaning, and take actions from which we hope to learn. The creators of Liberatory Design break these activities down into: See, Engage, and Act." *Words "See," "Engage," and "Act" appear on the screen as they are narrated* "Liberatory Design can seem challenging. It asks a lot of us! But even small actions
Media			
Image Reference (National Equity Project, n.d.)	Liberatory Design for Equity Process		
Audio	See "Media Script"		
Music/SFX	None		

Video	none		matter. As you learn to use the vinyl cutter (and other tools in the Innovation Lab) we encourage you to start brainstorming ways that you can use tools to help yourself and others. Tools can help you build solutions. If you have ideas you would like to talk about, please feel free to bring them to our Innovation Lab team members."
Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 5	By User (selection of "Next" button)	
Prev:	Slide 3		

Slide 5 (Module 1)		**Title:** Understanding Check-In	**Time:** 1 min
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration guides learner to attempt quiz questions		Title: Understanding Check-In Content: 3 quiz questions Quiz question examples: 1) From the following list, please select all purposes for which the GS-24 vinyl cutter can be used. Feel free to review the previous slides if you need a reminder. (Multiple choice/Multiple answer question): • Stamping clear images on vinyl • Cutting characters and shapes cleanly • Making simple stickers • Etching designs into metal products	"Now that you've learned a little about the vinyl cutter, let's check-in on your understanding of vinyl cutter uses and Liberatory Design. Feel free to review the previous slides if you are unsure of the answers to these questions"
Media			
Image	MBA running logo		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		

		• Producing complex shapes using less material than most manufacturing methods
		
		• Cutting perforated lines on a variety of materials
		
		• Handling large output smoothly
		
		• Stitching pliable materials together
		
		Correct answers:
		
		   - Cutting characters and shapes cleanly
		
		   - Making simple stickers by connecting to a printer
		
		   - Cutting perforated lines on a variety of materials
		
		   - Handling large output smoothly (Roland DG Corporation, 2015)
		
		2) Liberatory Design is the leading philosophy of the Innovation Lab. What are the three overarching activities Liberatory Design asks of its users? (Multiple Choice/One Correct Answer Question)
		
		A. Try, Design, Test
		B. See, Engage, Act
		C. Study, Learn, Apply
		D. Read, Draw, Write
		
		Correct Answer: (B) See, Engage, Act
		
		Explanation: The Innovation Lab's guiding philosophy is Liberatory Design. When we approach a challenge from a Liberatory Design stance, we try to see the situation from the perspective of affected	

		people, engage with others to make meaning, and take actions from which we hope to learn. The creators of Liberatory Design break these activities down into: See, Engage, and Act.	
Interaction		**Feedback/Notes**	
Quiz Questions "Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 6	By User (selection of "Next" button)	
Prev:	Slide 4		

Slide 6 (Module 1)		**Title:** Congratulations and Prep for Next Module	**Time:** 10 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides congratulations for completing Module 1 and provides a brief explanation of what is to come.		Title: Great Job!	"Great job completing 'Module 1: Introduction to the Vinyl Cutter' You are ready to proceed with the knowledge you've gained on vinyl cutter uses and the philosophy of Liberatory Design. When you are ready to continue, select 'Next.' You'll see a list of references, after which you'll be directed to the main menu where you will next select 'Module 2: What
Media			
Image	Image of narrator smiling/striking congratulatory pose		
Audio	See "Media Script"		

Music/SFX	None		to Expect from this Course'."
Video	None (unless still image is replaced by video of narrator speaking this script)		
Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 7	By User (selection of "Next" button)	
Prev:	Slide 5		

Slide 7 (Module 1)		Title: References	Time: 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of resources.		Title: References Resource links will include: • GS-24 User's Manual • Liberatory Design website link • Liberatory Design Rise 360 course	"For more information on the vinyl cutter and Liberatory Design, explore these resources. These links will also be included and available to access in the final 'Resources' module. When you are ready to continue, select 'Complete'. In Module 2 we'll go over what you can expect to know, and know how to do, after completing this course."
Media			
Image	Vinyl cutter image		

Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Complete" Button "Back" Button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 1 by selecting "Complete" button	
Prev:	Slide 6		

Module 2 Storyboard ("Course Objectives")

Slide 1 (Module 2)		Title: Course Objectives	Time: 5 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides introduction to the module's content.		Title: What You'll Learn in this Course Content: Introductory image and narration	"Let's go over what knowledge you will gain and what you will know how to do after completing this course. When you're ready to continue select the 'Next' button."
Media			
Image	Curious person (Adobe Stock Image under Education License to be identified)		
Audio	Please see "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" Button			
Branching		**Advance**	
Next:	Slide 2		

Prev:	N/A	By User (selection of "Next" button)	

Slide 2 (Module 2)		**Title:** What You Will Know	**Time:** 30 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides explanation of declarative objectives/knowledge goals		Title: Knowledge Goals List of declarative objectives, written in layman's terms (Declarative Objectives listed on page 7 of Capstone Proposal document)	"After completing this course, you will know the purposes for which the vinyl cutter can be used, the parts of the vinyl cutter, materials you can cut with the vinyl cutter, and safety protocols for working with the vinyl cutter. When you have completed reviewing the list of knowledge goals for this course, please select the 'Next' button."
Media			
Image	MBA running logo		
Audio	Please see "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Feedback/ Notes**	
"Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 3		

Prev:	Slide 1	By User (selection of "Next" button)	

Slide 3 (Module 2)		Title: What You Will Be Able to Do	Time: 30 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides explanation of procedural objectives/hands-on goals		Title: What You Will Be Able to Do List of procedural goals, written in layman's terms (Procedural Objectives are listed on pages 7 and 8 of Capstone Proposal document)	"This course will prepare you to work with the vinyl cutter and the design software that communicates with the vinyl cutter! Take a look at the full list of activities you will be able to do after this course. When you are ready, select 'Next' to continue."
Media			
Image	MBA running logo		
Audio	Please see "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 4		

Prev:	Slide 2	By User (by selection of "Next" button)	

Slide 4 (Module 2)		Title: Objectives Understanding Check-In	Time: 1-2 minutes
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state Audio narration provides an explanation of objectives understanding check-in quiz questions.		Title: Objectives Understanding Check-In 3-5 quiz questions on course objectives understanding: • Correcting or confirming feedback provided after answering each question.	"Studies show that people learn better when they know what they are planning on learning (Stolovitch & Keeps, 2011). To prepare yourself to learn, let's take a moment to check-in on your understanding of what you expect to gain from this course. Feel free to review the previous slides if you have any questions."
Media			
Image	MBA running logo		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
Quiz Questions "Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 5		

Prev:	Slide 3	By User (selection of "Next" button)	

Slide 5 (Module 2)		Title: Congratulations and Next Module Prep	Time: 10 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of resources.		Title: Congratulations! Content: Celebratory image	"Well done learning about what you will learn in this course! In the next module we'll start getting to know the vinyl cutter as you are introduced to its parts and the purposes of those parts."
Media			
Image	Vinyl cutter image/Celebratory image		
Audio	See "Media Script"		
Music/SFX	Possible integration of celebratory music		
Video	None		
Interaction		**Notes/Feedback**	
"Complete" Button "Back" Button			
Branching		**Advance**	

Complete:	Main menu	Exit Module 2 by selecting "Complete" button	
Prev:	Slide 4		

Slide 6 (Module 2)		**Title:** References	**Time:** 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state.		Title: References Directions to access the "Resources" in the top right corner of the Storyline slides will be provided in large text with bold lettering on important terms to cue the learner. Resource links will include: • GS-24 User's Manual • List of learning objectives in layman's terms (declarative and procedural)	N/A
Media			
Image	Vinyl cutter image		
Audio	N/A		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Complete" Button "Back" Button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 2 by selecting "Complete" button	
Prev:	Slide 6		

Module 3 Storyboard Note ("Vinyl Cutter Uses")

The plan for Module 3 was to address the purposes for which the vinyl cutter can be used and the materials that can be used to create designs. In the process of storyboarding all course modules it was identified that this content is covered overtly in both "Module 1: Introduction" and "Module 5: Materials You Can Use with the Vinyl Cutter." Furthermore, students are provided a thorough introduction to an example project in modules 9, 10, 11, and 12, after which they are provided the opportunity to cut their own identified design.

As this module is unnecessarily redundant, the current plan is to remove Module 3, pending subject matter expert (SME) approval.

Module 4 Storyboard ("Vinyl Cutter Parts and Their Purposes")

Slide 1 (Module 4)		**Title:** Vinyl Cutter Parts and Their Purposes	**Time:** 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides introduction to the module on vinyl cutter parts		Title: "Vinyl Cutter Parts and Their Purposes"	"In this module you will be introduced to GS-24 vinyl cutter's parts and the purposes of those parts! Getting to know these pieces will prepare you to work with the vinyl cutter. When you are ready to continue, select the 'Next' button"
Media			
Image	Vinyl cutter image		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" Button			
Branching		**Advance**	
Next:	Slide 2	By User (selection of "Next" button)	
Prev:	N/A		

Slide 2 (Module 4)		Title: Video Tour of the Vinyl Cutter	Time: 40 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins to play video upon navigating to it.		Title: Video Tour of the Vinyl Cutter *On-screen text appears labeling the vinyl cutter parts as they are described*	"This is the Innovation Lab's GS-24 vinyl cutter. Let's take a closer look at each of the parts that make up the vinyl cutter." *Video narration describes each of the vinyl cutter parts and their purposes* (See next section of this document for video storyboard)
Media			
Image	Vinyl cutter image		
Audio	See "Media Script"		
Music/SFX	None		
Video	Video of Innovation Lab team member introducing the vinyl cutter		
Interaction		**Notes/Feedback**	
"Next" button "Back" button			
Branching		**Advance**	
Next:	Slide 3	By User (selection of "Next" button)	
Prev:	Slide 2		

Slides 3 - 5 (Module 4)		Title: Vinyl Cutter Parts and Their Purposes	Time: 1 min 30 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of slide content		Title: GS-24 Labeled Parts **Slide 3**: Front of the Vinyl Cutter **Slide 4**: Side of the Vinyl Cutter **Slide 5**: Operation Panel	"Take your time to review the parts of the GS-24 vinyl cutter. After you review, you'll have the opportunity to check your understanding on the use of each of these parts."
Media			
Image (Roland DG Corporation, 2015)			
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" button "Back" button		None	
Branching		**Advance**	
Next:	Slide 2 (if on slide 3)		

Prev:	Slide 6 (if on slide 5)	By User (selection of "Next" button)	

Slide 6 - 7 (Module 4)		Title: Vinyl Cutter Parts Location Understanding Check-In	Time: 1-3 minutes
Media Notes		Screen Text	Media Script
Slide begins in a paused state. Audio narration provides description of interactive understanding check-in activity.		Title: Check Your Understanding of the Where to Find the Vinyl Cutter Parts Content: Drag-and-drop quiz for the vinyl cutter parts **Slide 6**: Front of the Vinyl Cutter drag-and-drop **Slide 7**: Side of the Vinyl Cutter drag-and-drop	"Let's play a game to check your understanding of vinyl cutter parts. Drag-and-drop the vinyl cutter part names to their correct location on the unlabeled vinyl cutter. If you need help or a chance to review, navigate to the previous slides to study the labeled pictures."
Media			
Image	Vinyl cutter image		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		Notes/Feedback	
Drag-and-drop quiz for the vinyl cutter parts "Next" button "Back" button			

Branching		Advance	
Next:	Slide 8 (if on slide 7)	By User (selection of "Next" button)	
Prev/Review:	Slide 5 (if on slide 6)		

Slide 8 - 11 (Module 4)		Title: The Purposes of the Vinyl Cutter Parts, Understanding Check-In	Time: 3 minutes
Media Notes		Screen Text	Media Script
Slide begins in a paused state. Audio narration provides description of interactive quiz activity.		Title: What Do the Parts Do? An Understanding Check-In Content: Multiple choice questions and Hot Spot clickable questions	"Now that you've checked your understanding of where the vinyl cutter parts are located, let's check-in on your understanding of the purposes of those parts. If you would like to take a look at the guide again, select the "Review" button to navigate to the information slide. When you have completed this activity and are ready to continue, select the 'Next' button."
Media			
Image	Vinyl cutter image		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		Notes/Feedback	

"Next" button "Back" button "Review" button Matching quiz			
Branching		**Advance**	
Next:	Slide 12 (if on slide 11)	By User (selection of "Next" button)	
Prev:	Slide 7 (if on slide 8)		
Review:	Slide 3 (Vinyl Cutter Parts and Purposes)		

Slide 12 (Module 4)		**Title:** Congratulations and Prep for Next Module (Materials that You Can Use with the Vinyl Cutter)	**Time:** 10 seconds
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides congratulations for completing Module 4 and what to expect in Module 5.		Title: Congratulations! Content: Celebratory Innovation Lab image	"Well done completing 'Module 4: Vinyl Cutter Parts and Their Purposes.' You and the GS-24 vinyl cutter have now been introduced. In the next module you will learn what materials can be used to make vinyl cutter designs."
Media			
Image	Celebratory image		
Audio	See "Media Script"		

Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Complete" button "Back" button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 4 by selecting "Complete" button	
Prev:	Slide 11		

Slide 13 (Module 4)		Title: References	Time: 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state.		Title: References Directions to access the "Resources" in the top right corner of the Storyline slides will be provided in large text with bold lettering on important terms to cue the learner. Resource links will include: • GS-24 User's Manual • Main points document • Video script document	N/A
Media			
Image	Vinyl cutter image		
Audio	N/A		

Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Complete" Button "Back" Button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 4 by selecting "Complete" button	
Prev:	Slide 6		

Module 4 Video Storyboard ("Vinyl Cutter Parts and Their Purposes")

Visuals	Script
Narrator stands to side of vinyl cutter: - Indicates the vinyl cutter - Medium shot (waist to top of head) - "Rule of thirds" (Person in left 1/3 of screen, eyeline in upper 1/3 of screen) Vinyl cutter to right side of screen *Note:* The upper right-hand 1/3 of the screen creates the most interest/energy in English-speaking countries; the lower left-hand third is the weakest (b/c we read left to right)	This is the GS-24 vinyl cutter. To create designs, you'll need to know the parts and the purposes of those parts. Let's take a closer look.
Camera moves closer take in the whole vinyl cutter including: - Loading lever - Left and right pinch rollers	Two important parts for loading material are: - The "loading lever" and - The "left- and right-pinch rollers] "
Loading lever	This is the "loading lever." You'll operate it when you are putting the material you want to cut into the vinyl cutter.

Left and right pinch rollers - Narrator indicates the rollers on the left and right	There are two "pinch rollers," one on the right and one on the left. When you lift the loading lever, the pinch rollers will clamp the material you loaded into place on the left- and right-hand edges.
Guide lines (show at front and back of machine)	The series of small vertical lines you see here are called "guide lines." You will use them to line up material you are loading into the vinyl cutter
Cutting carriage	This part is called the "cutting carriage." It holds the blade and moves it left and right to cut a design. The blade is held here."
Grit rollers	These are called "grit rollers." The "grit rollers" help to move the material out toward the front of the machine while it is cutting the material.
Camera moves to side of machine to take in: USB Connector and Power-cord Connector	Here on the side of the vinyl cutter you'll see two connectors: - A USB connector and - A power-cord connector The USB connector lets you connect the vinyl cutter to other devices by plugging in a USB cable to both. This connection lets you give design instructions to the vinyl cutter. The power cord connector allows you to power the machine when the power cord is connected to an outlet.

Operation panel and narrator	On the right-hand side of the vinyl cutter, you'll find the "operation panel." It lets you perform several operations. Let's take a closer look.
Zoom in on the operation panel, finger points out each of the sections as they are addressed.	In the bottom right-hand corner, you'll find the "power button." Pressing this button to turn on the machine will make the "power button" light up blue.
Starting with: POWER button	To turn off the vinyl cutter, hold the "power button" down for one second or longer.
Display	The "Display" at the top displays menus, settings, and notifications.

The user manual is a helpful resource to look up the meaning of notifications you receive. |
| TEST key | This is the "test key." Pressing and holding this key for one second or longer will tell the vinyl cutter to cut a pre-set test pattern |
| ORIGIN key | Here in the middle is the "origin key." Pressing and holding this key for one second or longer sets the origin point where the blade (in the "cutting carriage") is currently located. Be sure the "cutting carriage" is where you want it to be before setting the origin with this key. |

PAUSE key	This is the "pause key." If you press it once, vinyl cutting will pause. If you press it a second time, cutting will start up again.
MENU key	This is the "menu key." Pressing the menu key will cycle you through the cutting conditions that are currently set up as options, the menu mode, and the width-display screen.
FORCE key	This is the "force key." Selecting this button will take you to the menu that allows you to adjust the force of the blade.
PEN FORCE Slider	This is the "pen force slider." The "pen force slider" lets you fine-tune the blade force. You can even make adjustments while cutting is in progress[AP5] .
Cursor keys	Here in the middle of the "operation panel" you'll find the "cursor keys." These allow you to select and set menu items. They can also be used to direct the cutting carriage or the material that you are cutting to move.
ENTER key	This is the "enter key." When you have found the menu item you would like to select, use the "enter key" to select it.

Zoom out to initial shot of narrator and vinyl cutter	Now you've been introduced to the parts of the GS-24 vinyl cutter and what they do! As you go through this course, you'll be guided through the process of actually cutting a design with the vinyl cutter. You'll become more familiar with the vinyl cutter parts as you progress. Be safe and have fun!

Module 5 Storyboard ("Materials You Can Use with the Vinyl Cutter")

Slide 1 (Module 5)		**Title:** Materials You Can Use with the Vinyl Cutter	**Time:** 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of anticipated module content		Title: Introduction to Using Appropriate Materials	"The vinyl cutter lets you make products with certain materials of certain sizes. When you are ready to learn more, select 'Next'."
Media			
Image	Picture of appropriate materials fanned out		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" button			
Branching		**Advance**	
Next:	Slide 2		

Prev:	N/A	By User (selection of "Next" button)	

Slide 2 (Module 5)		**Title:** Materials Video	**Time:** 40 seconds
Media Notes		**Screen Text**	**Media Script**
Learner selects to "play" embedded YouTube video when ready.		Title: Materials Compatible with the Vinyl Cutter Content: Video introduction to appropriate materials	"Hello! When you hear the term 'vinyl cutter' you are correct to think that it can cut designs out of…vinyl. But it can also cut other materials: paper, cardstock, tissue paper, fabric, reflectives, and heat transfer material (iron-ons)." *Narrator displays each material, or an example product made with that material, as they state it. Text labels of stated materials appear on-screen in video.* "The Innovation Lab's GS-24 vinyl cutter can cut these materials when they are: • Less than 0.1 mm thick • Between 50 - 700mm wide *These dimensions displayed on-screen in the video* Audio Narration after video: "When you are ready to continue, select the 'Next' button."
Media			
Image	None		
Audio	See "Media Script"		
Music/SFX	None		
Video	Innovation Lab member introduction to materials		
Interaction		**Notes/Feedback**	Full video script provided in next section of this document.
"Next" button "Back" button			
Branching		**Advance**	

Next:	Slide 3	By User (selection of "Next" button)	
Prev:	Slide 1		

Slides 3 - 7 (Module 5)		Title: Review Slides	Time: 2 min 30 sec
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides description of slide contents.		Title: Review Slides	"In the following slides we'll review key points on materials that are compatible with the vinyl cutter. When you are ready to continue, select the 'Next' button."
Media			
Image	Image of vinyl cutter materials		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" button "Back" button			
Branching		**Advance**	

Next:	Slide 8 (if on slide 7)	By User (selection of "Next" button)	
Prev:	Slide 2 (if on slide 3)		

Slide 8 - 11 (Module 5)		Title: Understanding Check-In: Materials That Can be Used with the Vinyl Cutter	Time: 3 min
Media Notes		Screen Text	Media Script
Slide begins in a paused state. Audio narration provides description of quiz activity		Title: Understanding Check-In: Materials that can be Used with the Vinyl Cutter 4 interactive questions	"Let's check in on your understanding of what materials can be cut with the vinyl cutter. If you need to review, select the "Back" button to navigate to the review slides and video. When you are ready to continue, select the 'Next' button."
Media			
Image	MBA running logo		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		Notes/Feedback	

Multiple choice quiz questions "Next" button "Back" button		
Branching		**Advance**
Next:	Slide 12 (if on slide 11)	By User (selection of "Next" button)
Prev/Review:	Slide 7 (if on slide 8)	

Slide 12 (Module 5)		**Title:** Congratulations and Prep for Next Module	**Time:** 10 seconds
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides congratulations, direction on how to proceed, and prep for the next module's content.		Title: Congratulations! Content: Celebratory image	"Well done completing 'Module 5: Materials That Can Be Used with the Vinyl Cutter.' You now know what materials are compatible with GS-24. In the next module you will learn important safety protocols to follow when working with the vinyl cutter."
Media			
Image	Congratulatory image		
Audio	See "Media Script"		
Music/SFX	None		

Video	None		
Interaction		**Notes/Feedback**	
"Complete" button "Back" button			
Branching		**Advance**	
Complete:	Slide 13		
Prev:	Slide 11		

Slide 13 (Module 5)		**Title:** References	**Time:** 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state.		Title: References Directions to access the "Resources" in the top right corner of the Storyline slides will be provided in large text with bold lettering on important terms to cue the learner. Resource links will include: • GS-24 User's Manual • Main points document • Video script document	N/A
Media			
Image	Vinyl cutter image		
Audio	N/A		
Music/SFX	None		

Video	None		
Interaction		**Notes/Feedback**	
"Complete" Button "Back" Button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 5 by selecting "Complete" button	
Prev:	Slide 12		

Module 5 Video Storyboard ("Materials You Can Cut with the Vinyl Cutter")

Visuals	Script
The narrator stands beside vinyl cutter examples laid out in order that they will be addressed. Vinyl cutter sits behind products (as contextual reminder). (Narrator situated such that wall decal can enter the shot shortly)	Let's take a look at what materials the vinyl cutter can use to make products.
Narrator continues speaking beside products	The vinyl cutter is great for cutting intricate designs on materials that are less than 0.1mm thick – materials like vinyl, cardstock, and fabric. This is the main purpose for which we use the vinyl cutter in the Innovation Lab.
Narrator indicates roll of Glossy waterproof 651 vinyl Narrator holds up example "waterproof vinyl" product (on a water bottle?) while speaking about it	There are three main types of vinyl that we use: glossy, waterproof" vinyl, matte vinyl that can be used for wall decals, and heat transfer vinyl. The glossy, waterproof vinyl can be attached to surfaces like your water bottle or your computer.
Narrator indicates roll of Matte 631 vinyl.	Matte vinyl can use be used to make wall decals…like this one.

Narrator indicates wall with vinyl decal design.	
	You'll find the rolls of vinyl here. This is the glossy, waterproof, vinyl - great for water bottle designs. This is the matte vinyl for wall decals. When getting vinyl for your design, first try looking through the remnants (found here) to find a piece that might work for your design. We want to make sure we are using our resources wisely and wasting nothing. You'll be able to identify the type of vinyl in the remnants by looking at the back. The 651 vinyl is the glossy, waterproof vinyl. The 631 vinyl is matte wall decal vinyl.
Narrator holds up clothing product(s) with vinyl heat pressed on	Heat transfer vinyl can be cut and then pressed onto fabrics – like this T-shirt – with the heat press. If you are interested in pressing designs you cut with the vinyl cutter onto fabric, you can learn more about the heat press through the Fabric Creation badge training.
If available, narrator holds up example products	The vinyl cutter also cuts designs out of non-vinyl materials like paper, cardstock, fabric, and thin cardboard. Not all materials can be cut with the vinyl cutter. Always be sure to ask an Innovation Lab staff member to confirm if a material is compatible.

Narrator holds up material 0.1 mm thick and 700mm wide Narrator walks over to and shows audience where to find correctly sized material	It is important to ensure that only materials of the appropriate size are used with the vinyl cutter. Material must be less than 0.1mm thick and between 50 to 700mm wide. Always check with an Innovation Lab staff member to be sure a non-vinyl material is the right size.
Narrator walks back over to displayed examples; camera shot takes in example products, including wall decal	As you can see, there are a variety of materials you can cut with a vinyl cutter! Have you thought of anything you would like to make?

Module 6 Storyboard ("Vinyl Cutter Safety")

Slide 1 (Module 6)		Title: Vinyl Cutter Safety	Time: 20 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration introduces the safety module.		Title: Vinyl Cutter Safety	Media script drawn from the MBA Innovation Lab general safety introductory course and approved by SMEs.
Media			
Image	Vinyl cutter		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" Button			
Branching		**Advance**	
Next:	Slide 2	By User (selection of "Next" button)	
Prev:	N/A		

Slide 2 (Module 6)		Title: Vinyl Cutter Safety Video	Time: 40 sec
Media Notes		**Screen Text**	**Media Script**
Learner selects to "play" embedded YouTube video when ready.		Title: Vinyl Cutter Safety Content: Safety "Do's" addressed in video Do's • Keep your fingers away from the carriage • Only adjust the blade force in small increments • Do a test cut before cutting a large project. • Read the Manual if you get confused • Read the Manual if you want to do any kind of special cutting Don'ts • Cut in the middle of a piece of material. Always set the origin at the lower left corner of the cuttable area of the material. • Adjust the blade force if you don't know what you are doing. • Cut anything that is thicker than 0.1mm and is not made of paper or plastic	"The highest priority when you work with the vinyl cutter is your safety and the safety of those around you." *Video narration lists and expands on the safety* The following section in this document provides the full video script.
Media			
Image	None		
Audio	See "Media Script"		
Music/SFX	None		
Video	Safety "Do's" Video		
Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			
Branching		**Advance**	
Next:	Slide 3		

Prev:	Slide 1	By User (selection of "Next" button)	

Slide 3 – 7 (Module 6)		Title: Vinyl Cutter Safety Review Slides	Time: 3 min.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Review list of Safety "Do's" and "Don'ts"		Title: Vinyl Cutter Safety Review Slides Do's • Keep your fingers away from the carriage • Do a test cut before cutting a large project. • Read the Manual if you get confused • Read the Manual if you want to do any kind of special cutting Don'ts • Cut in the middle of a piece of material. Always set the origin at the lower left corner of the cuttable area of the material. • Adjust the blade force if you don't know what you are doing. • Cut anything that is thicker than 0.1mm and is not made of paper or plastic	"Here you can review the important safety 'Do's' and 'Don'ts' that must be followed when using the vinyl cutter. Take your time reviewing and select the 'Next' button when you are ready to continue."
Media			
Image	Vinyl cutter safety image, MBA running logo		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
"Next" Button "Back" Button			
Branching		**Advance**	

Next:	Slide 8 (if on slide 7)	By User (selection of "Next" button)	
Prev:	Slide 2 (if on slide 3)		

Slide 8 - 14 (Module 6)		Title: Vinyl Cutter Safety Understanding Check-In Questions	Time: 3 minutes
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides guidance on interactive quiz.		Title: Understanding Check-In Questions Content: 7 understanding check-in questions • Confirming or correcting feedback provided after each answer. • Participant must answer all questions correctly before proceeding.	"Let's check in on your understanding of the safety rules for the vinyl cutter. As you answer the following questions, please review the feedback you receive. Full understanding of the safety 'Do's' and 'Don'ts' is required before proceeding. When you have accurately answered all questions and are ready to proceed, select the 'Next' button."
Media			
Image	Vinyl cutter images as relevant to questions		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	

7 quiz questions "Next" Button "Back" Button		
Branching		**Advance**
Next:	Slide 15 (if on slide 14)	By User (selection of "Next" button)
Prev:	Slide 7 (if on slide 8)	

Slide 15 (Module 6)		**Title:** Congratulations and Prep for the Next Module	**Time:** 10 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state. Audio narration provides congratulations and prep for next module		Congratulations!	"Well done completing the 'Vinyl Cutter Safety Module'! In the next module, you'll learn about vector files – the language we use to provide design instructions to the vinyl cutter. See you soon!
Media			
Image	Vinyl cutter image		
Audio	See "Media Script"		
Music/SFX	None		
Video	None		

Interaction	Notes/Feedback	
"Complete" Button "Back" Button		

Branching		Advance	
Next:	Slide 16	Next button	
Prev:	Slide 14		

Slide 16 (Module 6)		Title: References	Time: 8 sec.
Media Notes		**Screen Text**	**Media Script**
Slide begins in a paused state.		Title: References Directions to access the "Resources" in the top right corner of the Storyline slides will be provided in large text with bold lettering on important terms to cue the learner. Resource links will include: • GS-24 User's Manual • Main points document • Video script document	N/A
Media			
Image	None		
Audio	N/A		
Music/SFX	None		
Video	None		
Interaction		**Notes/Feedback**	
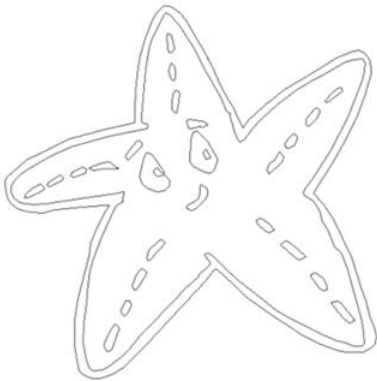
"Complete" Button "Back" Button			
Branching		**Advance**	
Complete:	Main menu	Exit Module 6 by selecting "Complete" button	
Prev:	Slide 12		

Module 6 Video Storyboard ("Vinyl Cutter Safety")
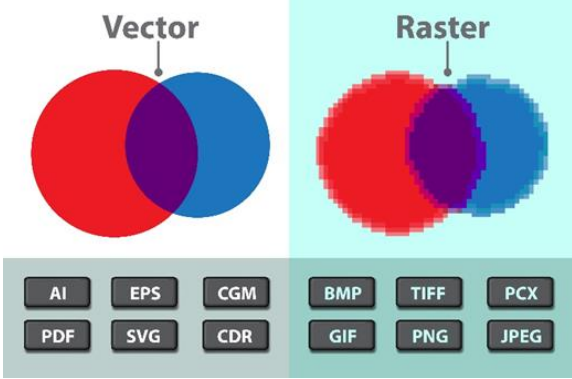
Visual	Script
Narrator standing beside vinyl cutter (and physical manual if available… I'm assuming just virtual access)	It is important to be safe when working with the vinyl cutter. Safety guidelines help to protect you, your peers in the Innovation Lab, the vinyl cutter, and the environment. Let's go over important "Do's" and "Don'ts."
Points to the blade and cutting carriage	The vinyl cutter makes cuts with a sharp blade. This blade is held in the cutting carriage here. When the vinyl cutter is cutting, the cutting carriage will move the blade back and forth across this whole area like this. Never put your fingers in this area while cutting is in progress. If anything doesn't go as expected during cutting, you may be tempted to make adjustments, but instead, always hit the pause button. This will stop the cutting process and you'll be able to make adjustments safely. When you are ready to proceed again you'll be able to select the pause button once again to resume cutting.
"Do"	In addition to protecting yourself, be sure to protect the vinyl cutter by always handling it with care and never exerting excessive force..
Narrator standing next to the right side of vinyl cutter ("Do")	If the vinyl cutter isn't making cuts as desired and the blade force needs to be adjusted, find an Innovation Lab staff member to help you. They will be able to adjust the blade's force safely in small increments.

("Do")	Before starting to cut a project, always perform a test cut to ensure that your settings are correct. We'll walk you through the steps of how to perform a test cut later on in this course.
Narrator demonstrates location to cut	When you are setting up to cut, always set the origin so that the vinyl cutter will start cutting at the lower left corner of your material. The origin is typically programmed to start cutting here unless it's been adjusted. You'll learn how to adjust the origin back to the lower left corner if needed later in this course. By setting up cuts to start at the corner - and not the middle of a piece of vinyl - you are helping to prevent waste and ensuring we are using our resources wisely.
"Do"	Always ensure that the material you want to cut can be cut by the vinyl cutter. If you are thinking about using a non-vinyl material, check with an Innovation Lab staff member before proceeding. You'll need to make sure that the material - and the size of that material - are appropriate.
"Do"	If you get confused, or if you want to do any kind of special cutting, you can reference the vinyl cutter manual, which is linked in this course. Always reach out to Innovation Lab staff members for support.
	Using good judgment and following these safety rules supports your safety and that of those around you, while also protecting the vinyl cutter tool and minimizing waste. Be safe as you explore what the vinyl cutter can do for you.

Module 7 Video Storyboard ("Vector Files: The Language of the Vinyl Cutter")

Script	Visuals
You would like to cut a sea star jellyfish sticker to put on your water bottle! But how do you let the vinyl cutter know? Just as you might need to speak to a person from a different country in their language, you need to speak to the vinyl cutter in the language it understands. The language of the vinyl cutter? Vector files!	Narrator speaking - Points to design - Holds up water bottle - Thinking, puzzling On screen text: Vector files!
Vector file images are made up of straight and curved lines. The vinyl cutter cuts these straight or curved lines into the material you ask it to. Because the lines in vector files are made up of mathematical formulas they can be resized without losing any quality.	 Drawing by Mandy Harris (Philbrick), vectorized in Adobe Illustrator
Raster file images – like those you take with your camera – are made up of tiny squares called pixels. The vinyl cutter CANNOT use raster file images to make straight- and curved-line cuts.	 Education Licensed Adobe Stock Image

The last 2-3 letters of a saved image will often let you know what kind of file it is. Vector files formats – compatible with the vinyl cutter – include .ai, .eps, .pdf, and .svg.	 Education licensed Adobe Stock Image
When we give directions to the vinyl cutter in the Innovation Lab, we typically use .ai or .svg vector files to do so.(SVG stands for scalable vector graphic; .ai stands for Adobe Illustrator)	Narrator speaking On-screen text: .svg = scalable vector graphic)
Now that you know the language you'll need to communicate with the vinyl cutter, let's find a vector file image to cut!	Narrator speaking

Module 7 Storyboard Notes ("Vector Files: The Language of the Vinyl Cutter")

Module 7 has been created and provided to SMEs for review. The module layout mimics that of the first three modules that were created (modules 4, 5, and 6). It begins with an introductory slide followed by an embedded YouTube video (created with Adobe Premiere Pro after SME approval of above script). Review slides follow the video, after which the user is provided four interactive understanding check-in questions. A "main points" review slide precedes congratulations for module completion. The final slide provides access to linked resources.

Module 8 Storyboard Notes ("Choose a Vector File!")

Module 8 has been created and provided to SMEs for review. The style and basic layout mimics existing modules. The first slide provides an audio introduction to module content. The learner is then directed to select from one of ten .svg files:
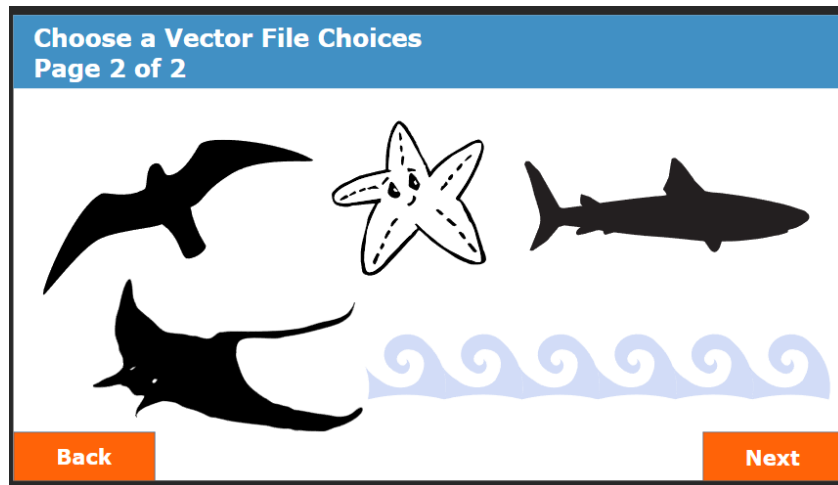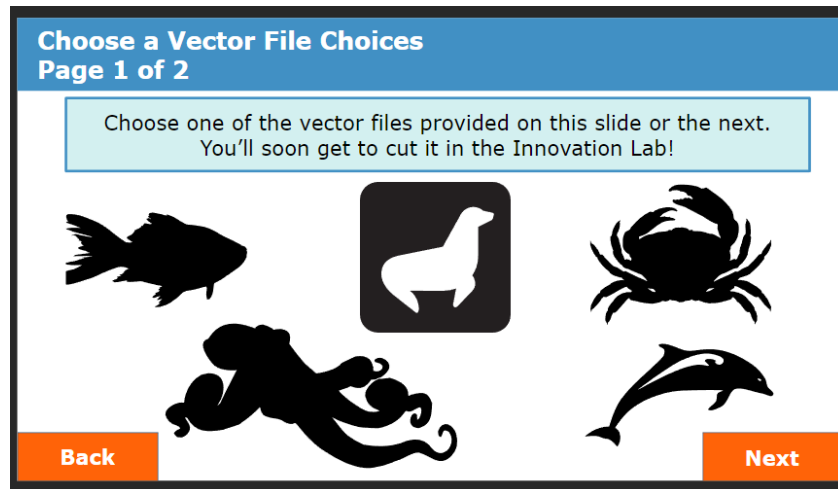
A "Next Steps" slide notifies the learner of what to expect next:
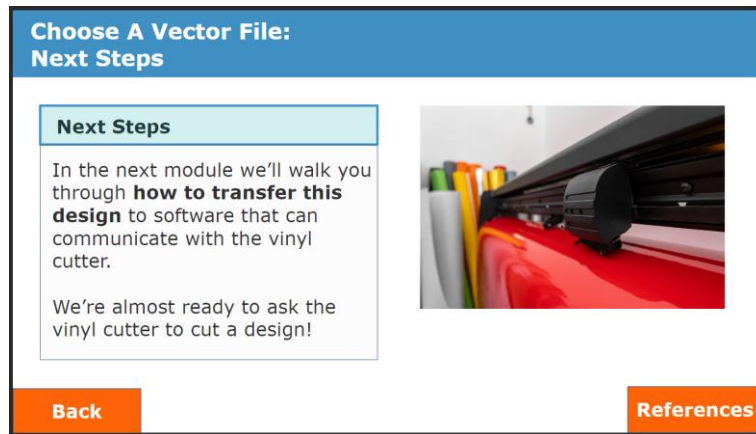
A final "References" slide provides guidance on how to access linked "Resources:"
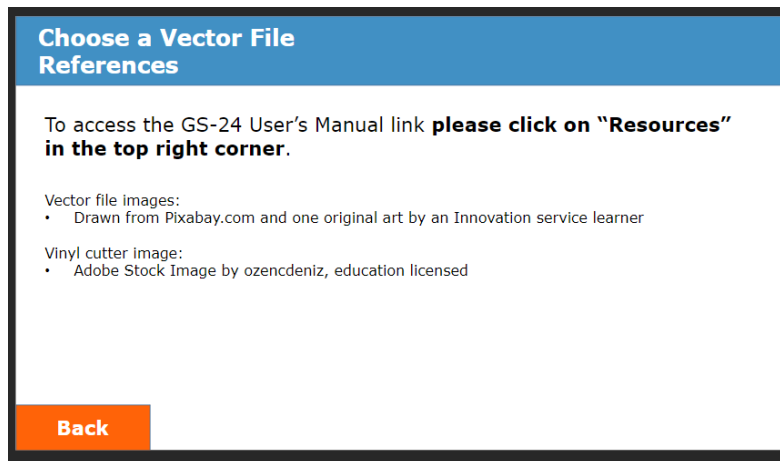
Vector file images linked below pending approval by SMEs. Whether to provide learner access to files within module or after module's completion to be decided by SMEs.

Stingray: https://pixabay.com/vectors/fish-silhouette-stingray-ray-skate-161146/

Fish: https://pixabay.com/vectors/fish-animal-silhouette-sea-2779707/

Dolphin: https://pixabay.com/vectors/dolphin-fish-jumping-animal-mammal-152992/

Shark: https://pixabay.com/vectors/shark-sea-fish-ocean-underwater-2883758/

Sea gull: https://pixabay.com/vectors/seagull-gull-bird-soaring-fly-304421/

Octopus: https://pixabay.com/vectors/octopus-kraken-squid-tentacle-303738/

Seal: https://pixabay.com/vectors/seal-pinniped-wildlife-black-99302/

Crab: https://pixabay.com/vectors/animal-crab-crustacean-ocean-sea-2029728/

Smiling sea star: Drawn by me (Mandy Harris)

Modules 9 and 10 Videos Storyboard ("Design Transfer" and "Resize a Design")

Resources (from GS-24 Vinyl Cutter User's Manual):

Simple Basic Cutting
- Simple Cutting Step 7-1: Create Cutting Data
- Simple Cutting Step 7-2: Create Cutting Data
- Simple Cutting Step 7-3: Enter Characters and Shapes
- Simple Cutting Step 7-4: Save Cutting Data

Printing and Cutting Procedure (CutStudio)
- Step 1: Set the Printing and Cutting Areas
- Step 2: Import the Sample Data
- Step 3: Draw the Cutting Lines
- Step 4: Perform Printing
- Step 5: Load the Printed Material
- Step 6: Set the Alignment Method (Sensor Mode)
- Step 7: Perform Cutting (Sensor Mode)

Visuals	Audio
Narrator speaking to camera	Now that you've selected the vector file image you would like to cut, let's get to know the software that will send that image to the vinyl cutter to cut.
Start of directions drawn from "Simple Cutting Step 7-1: Create Cutting Data" CutStudio (Manual page with image) 	In the Innovation Lab we use "Roland CutStudio"
 (CutStudio icon)	Double click on the "CutStudio" icon on your computer screen to open the application.

Screen record (possible narrator in circle in bottom right of screen)	
	Once you double click on the icon, CutStudio will start up.
	We want to let CutStudio know the machine we will be sending design data to. In our case we're going to let CutStudio know that we are going to send design data to the Roland GS-24 vinyl cutter. Select "File" in the top left corner of the screen. From the menu that appears, select "Cutting Setup…"
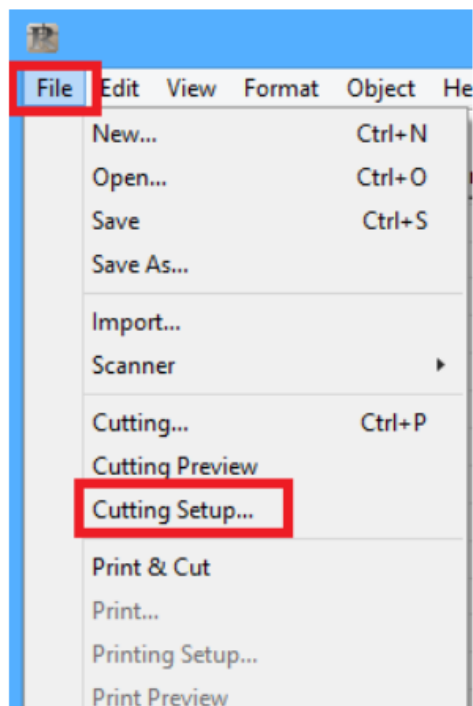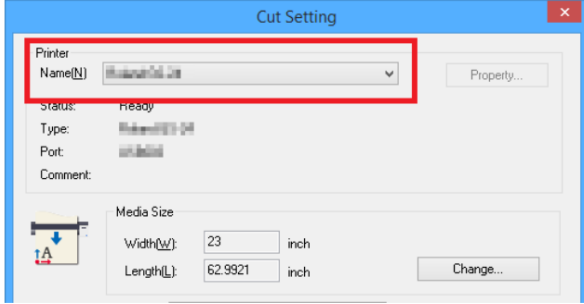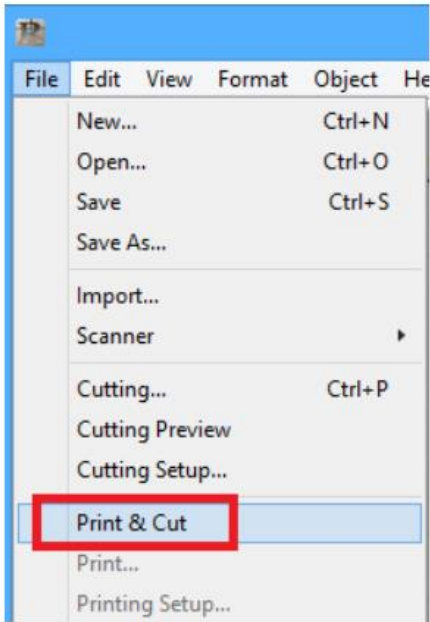
End of directions drawn from "Simple Cutting Step 7-1: Create Cutting Data"	The "Cut Setting" window will appear. Under "Name" select "Roland GS-24" (The type of vinyl cutter we have in the Innovation Lab)
Start of directions from "Step 1: Set the Printing and Cutting Areas" (starting from Step 4; steps 1-3 match above; from CutStudio directions)	To confirm your plan to use the GS-24 vinyl cutter, click "OK"
	Click "File" on the top left of the screen. From the menu that appears select "Print & Cut"
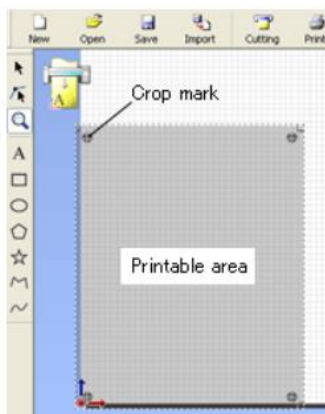
	You'll see the printing area within crop marks displayed on the screen. These circles you see at the edges of the "Printable area" are referred to as "crop marks." By default, "printable area" (which is depicted by dotted lines) lies within the crop marks. If you make adjustments to the crop mark locations, always ensure that they still lie within the "Printable area." The printing area is derived from the paper size selected in "Set up the printer," excluding the margins specified in "Printing Setup"
	Select "File" in the top left of the screen again. From the menu that appears, select "Printing Setup…"
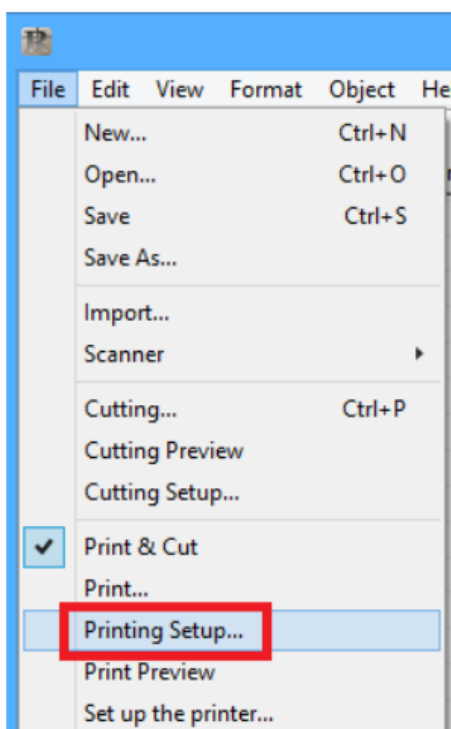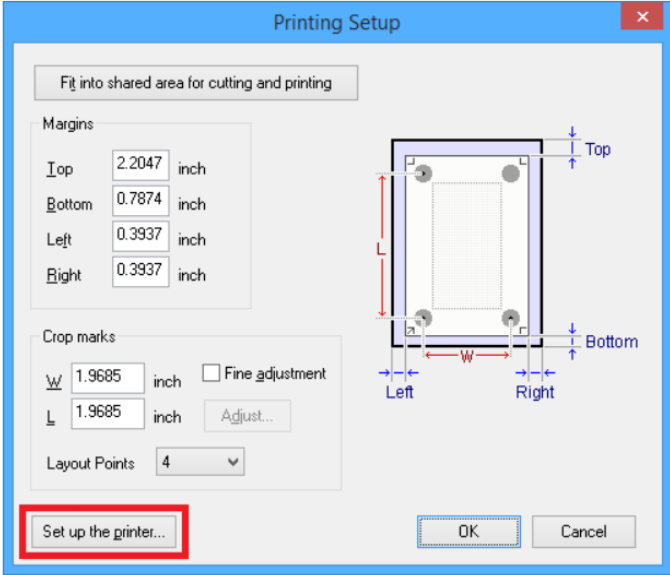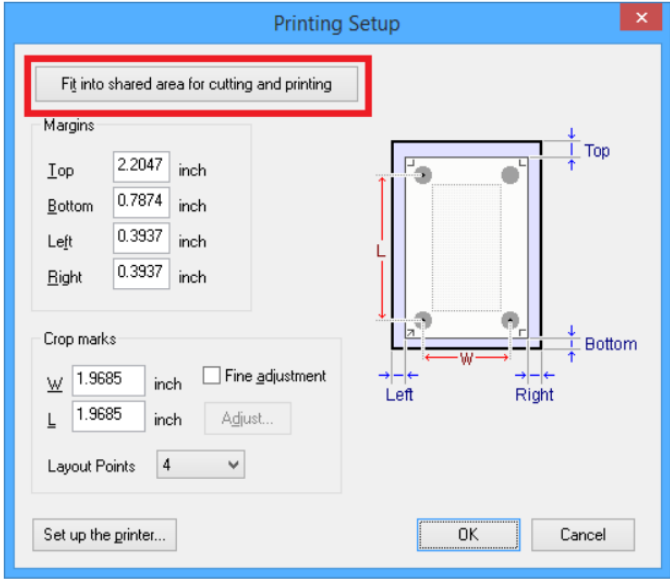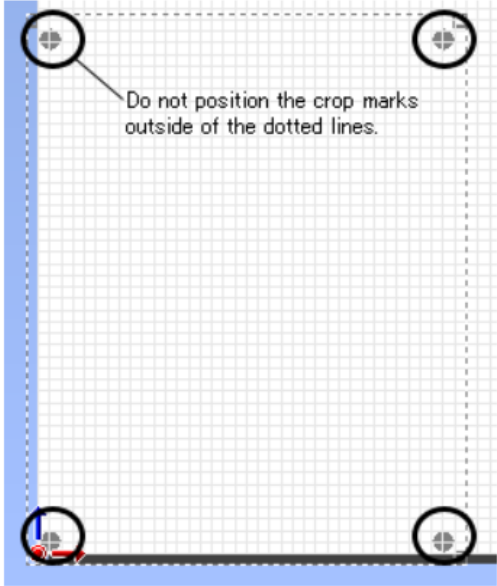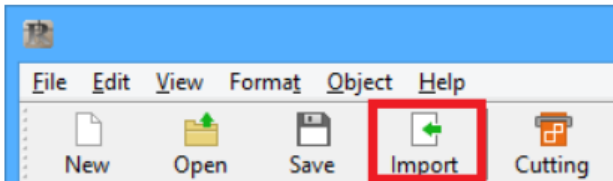
	The "Printing Setup" window will appear. Select "Set up the printer…" in the bottom left corner.
(Step 8 under "Step 1: Set the Printing and Cutting Areas")	Set the document size. To confirm your document size, select "OK"
Step 9 of Step 1 above	In the "Printing Setup" window that appears select "Fit into shared area for cutting and printing." The cropmark location is set automatically
(Step 10 of "Step 1: Set the Printing and Cutting Areas)	Select "OK" to confirm your settings. After you set the values, check that the crop marks are within the printing area.

Do not position the crop marks outside of the dotted lines.

Start of directions drawn from "Step 2: Import the Sample Data"	Now it's time to import the design you would like to cut!
	The vinyl cutter needs vector files to cut designs. File formats that can be imported into CutStudio include: • .JPEG (CMYK format, however, cannot be imported) • .BMP • .AI • .EPS
Click to import image data. 	Select "Import" from the top menu bar.
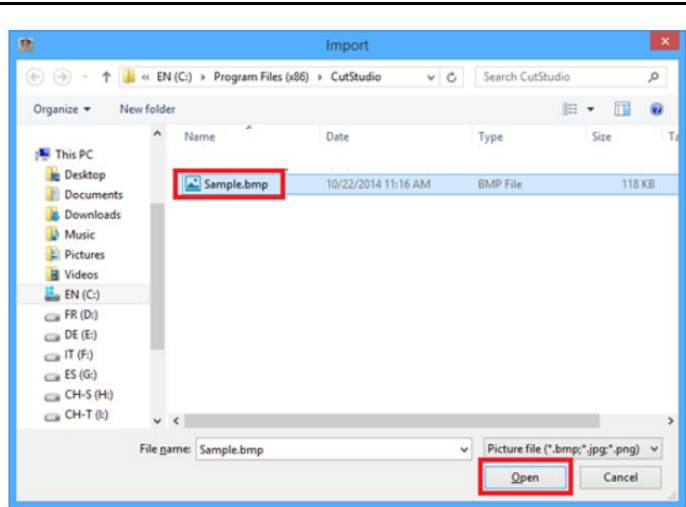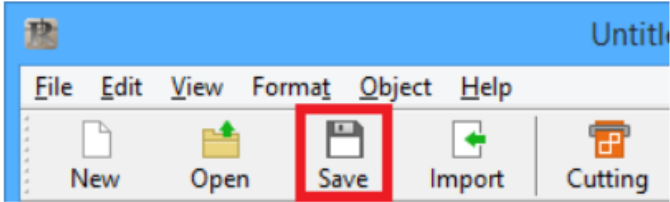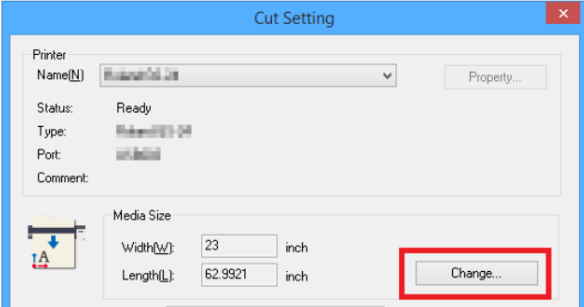
	Click on your desired image file to select it. Then select "Open" in the bottom right of the window.
  	Your selected design will appear on the screen. Drag the image data into the area within the crop marks.
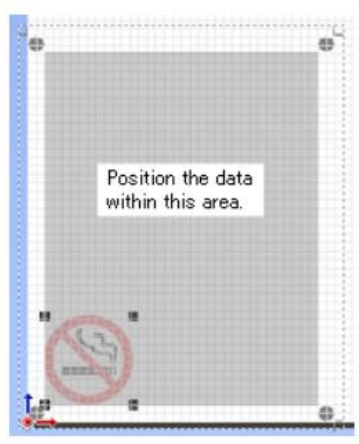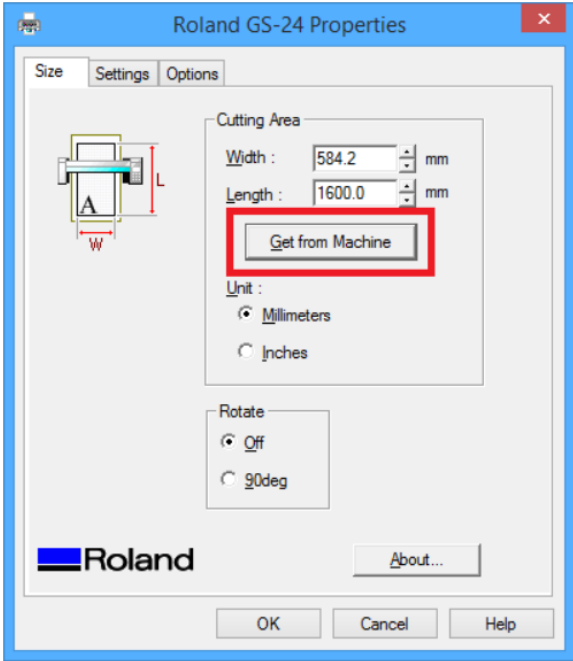
Start of directions drawn from "Step 3: Draw the Cutting Lines"	You're now ready to draw the cutting lines.
Select ○, and draw the cutting lines. If using the sample data, draw the line as shown below. Cutting Line	Select the circle icon and draw lines around your design.
File Edit View Format Object Help New Open Save Import Cutting	Select "Save" from the top menu bar to save your data.
Incorporate these "Step 5: Load the Printed Material" instructions?	Incorporate these instructions here, in Module 11, or not at all?
MODULE 10 Content Start (?)	
Start of directions drawn from "Simple Cutting Step 7-2: Create Cutting Data" **Set Material Size (On-screen title)** Cut Setting Printer Name(N): ...... Property... Status: Ready Type: ...... Port: ...... Comment: Media Size Width(W): 23 inch Length(L): 62.9921 inch Change...	Before telling the vinyl cutter to cut your design, we need to let it know the size of the design and in what part of the material it should cut. In CutStudio, select "File." From the menu that appears, select "Cutting Setup…" In the "Cut Setting" window that appears, select "Change…" in the bottom right corner

	In the "Roland GS-24 Properties" window that appears, you will see the size of the "Cutting Area" displayed. Select "Get from Machine" under those displayed dimensions
	If after you select "Get from machine," you receive a message that states, "The machine is not responding," simply let an Innovation Lab staff member know. There are simple troubleshooting measures they can take to correct this issue.
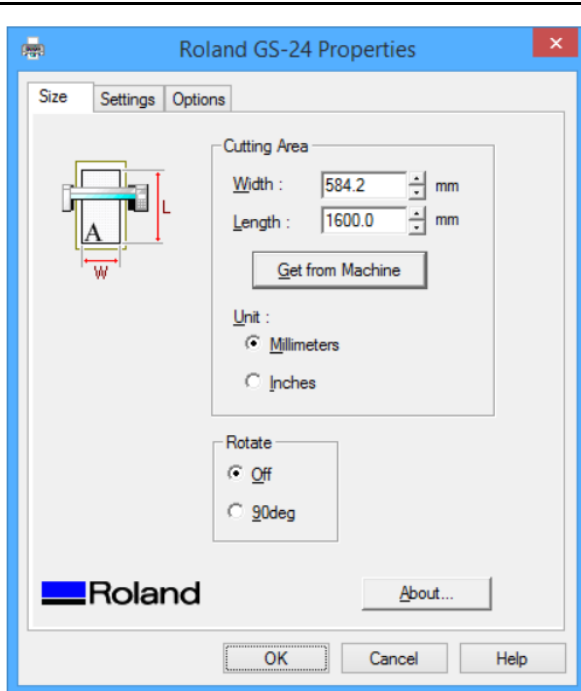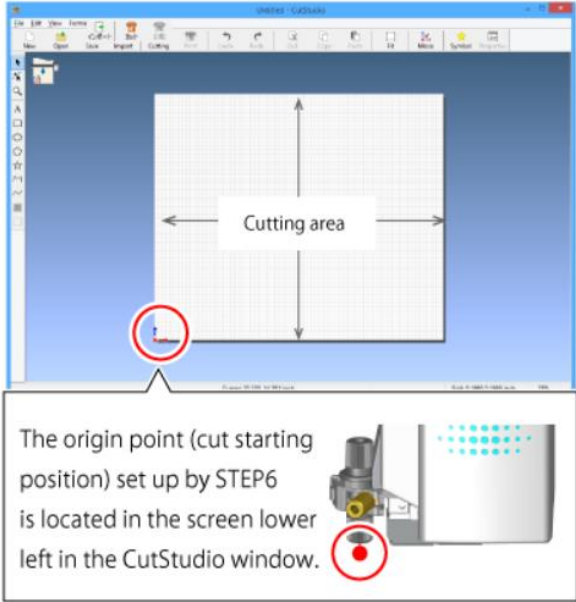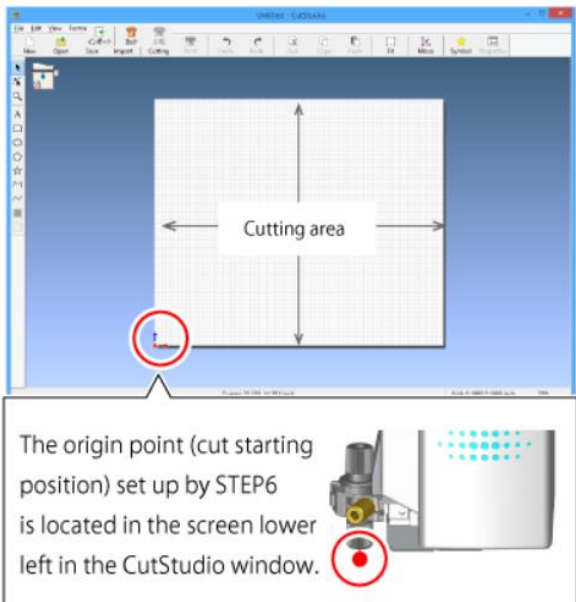
	After selecting "Get from Machine," select "OK" from the menu at the bottom of the "Properties" window.
	The "Cut Setting" window will appear. Select "OK" at the bottom of that window.
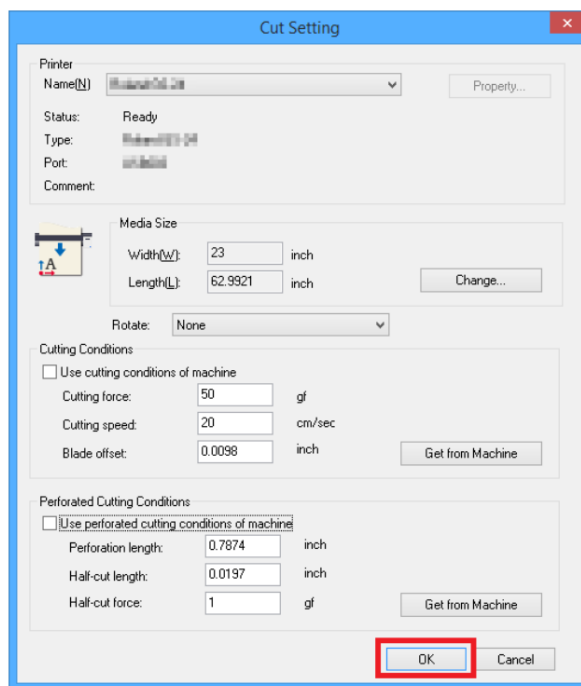
The origin point (cut starting position) set up by STEP6 is located in the screen lower left in the CutStudio window.	The cutting area is now set. You will see it displayed in the primary window. The white area is the cutting area. Any part of your design that is outside the white area will NOT be cut.
The origin point (cut starting position) set up by STEP6 is located in the screen lower left in the CutStudio window. **End of directions drawn from "Simple Cutting Step 7-2: Create Cutting Data"**	Note that the origin point (where the vinyl cutter will start cutting) is located in the lower left corner of the CutStudio display.
Start of directions drawn from "Simple Cutting Step 7-3: Enter Characters and Shapes" (with attempted modifications to accommodate plan to import chosen design)	You'll see outlines appear around your design. (Is that what is meant by "▇ and ▼ appear around the characters.
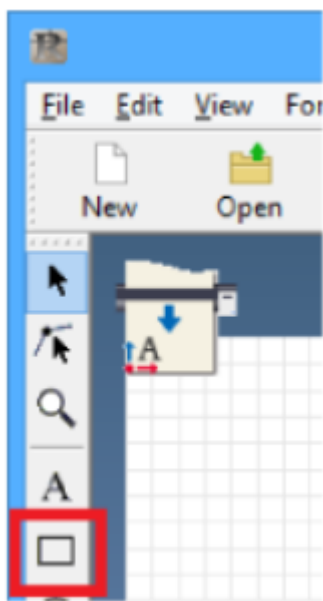
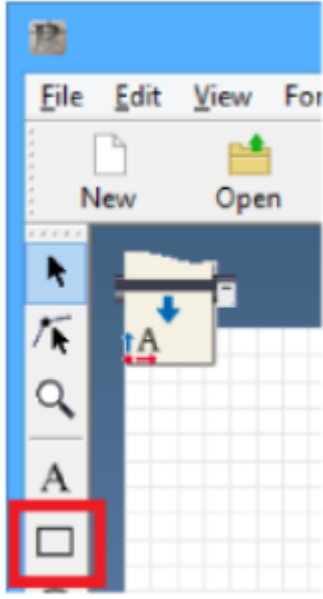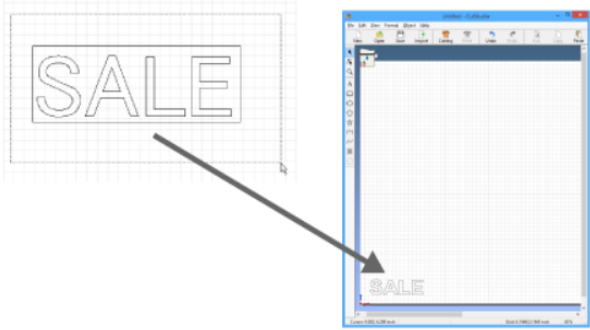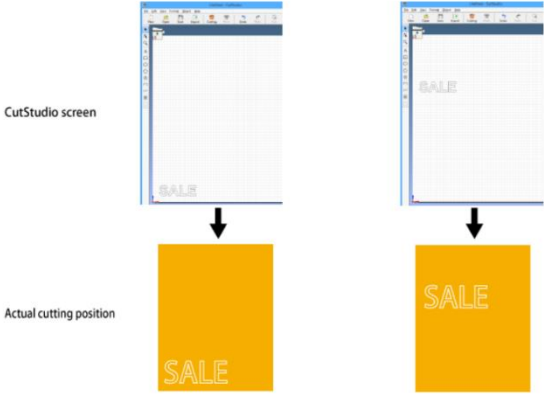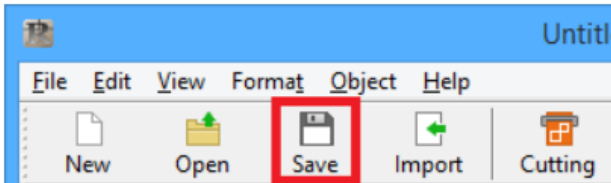|	
Images and directions from "7-3: Enter Characters and Shapes" ■ and ▼ appear around the characters. Drag the ■ and ▼ around the text box to change the size of the characters.	Drag the ■ and ▼ around the text box to change the size of the characters"? Step 3 of Step 7-3) Drag the outlines around your character to change the size. To ensure that the dimensions of your design do not distort, be sure to hold down "Shift" on your keyboard while adjusting.
	Click the "square icon." Then draw a rectangle around your design.
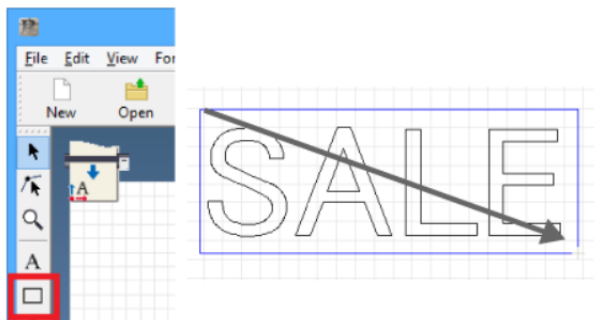
 (Image on screen will highlight the arrow icon)	Select the "arrow icon" in the left side menu bar. This will allow you to select and move your design.
	Click and drag your design to the bottom of the screen close to the origin. Memo Note in Instructions: "Select the object that you want to move to the origin, and then click [Fit] in the menu bar to move it to the origin"
End of directions drawn from "7-3: Enter Characters and Shapes" 	When positioning your design in CutStudio, it is best to place it in the bottom of the screen. This helps to prevent using more material than is needed. "The leading edge of the loaded material is the bottom edge of the cutting area in the CutStudio screen. Therefore, positioning characters at the bottom of the CutStudio screen means the characters will be cut close to the leading edge of the material."

Save Your Cutting Data (On-Screen Title) **Start of directions drawn from "Simple Cutting Step 7-4: Save Cutting Data"**	Now that your design is located and sized appropriately, let's save your design!
	From the top menu bar, select "Save"
Important: The cutting area is not saved. **End of directions drawn from "Simple Cutting Step 7-4: Save Cutting Data"**	It is important to note that the cutting area you set up is NOT saved for future projects. The next time data is loaded, the cutting area must be set again from the "Cut Setting" menu

Modules 9 and 10 Storyboard Notes ("Design Transfer" and "Resize a Design")

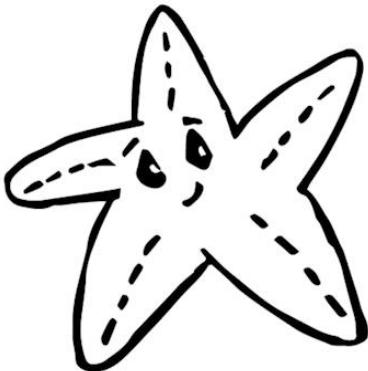The design and layout of modules 9 and 10 will mimic that of existing modules:

- Introductory slide with voiceover audio

- Video

- Review slides

- Interactive questions with integrated feedback

- "Main Points" slide

- "Congratulations for completion" slide

- "References" slide with linked resources

The primary videos will drive module content. Finalization of content/wording/questions pending approval of above storyboard for videos by SMEs.
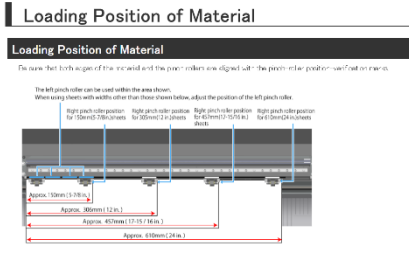
Module 11 Video Storyboard (**"Perform Basic Vinyl Cutting"**)

Basic Vinyl Cutting Steps:

1. Load the Material
2. Turn on the Machine
    2.1. Fixing Loose Material Position
3. Set the Origin
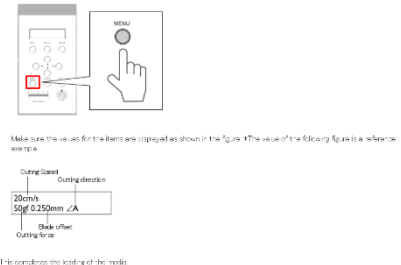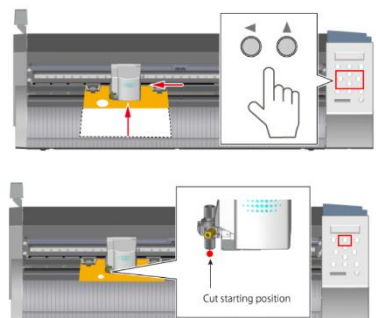4. Perform Cutting
    4.1. Canceling cutting
5. Remove the Material

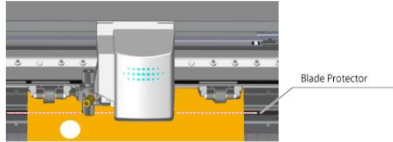| Visuals	Script
Narrator standing beside vinyl cutter Shows design planning to cut (edit in picture of sea star above hands) 	Now that you have design data ready to provide to the vinyl cutter, we're ready to cut that design!
Narrator standing beside vinyl cutter and remnants box	Start by finding your material. In my case, I want a piece of glossy, waterproof (651) vinyl.
Narrator opens remnants box and pulls out piece of 651 vinyl, showing both front and backing	To avoid missing the opportunity to use ready-to-use material, I'll start by checking the remnants box. Maybe there's a piece of material the size and color I'm looking for. Perfect! This blue piece of 651 waterproof vinyl is just what I'm looking for. Whenever possible, it helps to save resources if you can find remnants materials that might work for your project

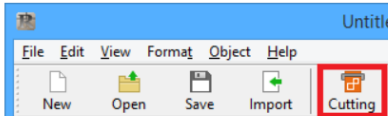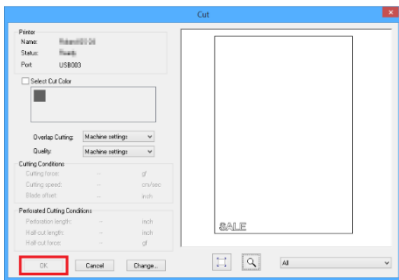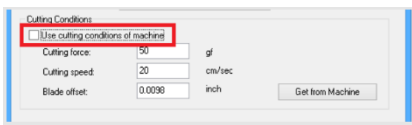|	
Narrator demonstrates flattening material	If your material is curled, bent, or creased, be sure to stretch or flatten it before putting it into the vinyl cutter
Narrator opens cupboard and points to rolls of vinyl	When we use a roll of vinyl to cut a design, we load it through the back of the machine. If you need to load a roll of vinyl, ask for support from an Innovation Lab staff member. When loading relatively small pieces of material - like this one - we put them in through the front of the vinyl cutter
Narrator holds up remnants piece	When loading relatively small pieces of material - like this one - we put them in through the front of the vinyl cutter.
Load the Material (On-screen title break)	
(Narrator demonstrates steps of loading material throughout) Narrator lifts loading lever and points to pinch rollers that lifted	Start by carefully lowering the loading lever. This will unclamp the pinch rollers, allowing you to slip the vinyl into the front of the machine.
Narrator demonstrates Narrator demonstrates hot dog vs. hamburger hold	Load the short edge of your material through the front of the vinyl cutter (holding the vinyl like a hot dog, not a hamburger)
Zoom in on guide lines	Line up the left edge of your material so that it approximately lines up with the guide lines
Narrator demonstrates location of grit rollers, white stickers, and moving the pinch rollers to locations that align with white stickers/grit rollers	Now it's time to set up the pinch rollers so that they can grab and move your material when the blade is cutting your material. You must always line up the pinch rollers with a grit roller location.

	As you can see, the grit roller locations are indicated by these white stickers
Narrator demonstrates good and bad pinch roller placement	These pinch rollers are placed correctly, aligned with the grit rollers. This position would NOT work. The pinch roller needs to aligned with the grit roller.
Narrator points to left-pinch roller locations	You can move the left pinch roller to any of these grit roller positions
Narrator points to right-pinch roller locations	You can move the right pinch roller to any of these grit roller positions
Edit this image into video (hold for a few seconds to allow review) Loading Position of Material	The position of the pinch rollers will depend upon the size of your material. You can find this diagram in the Innovation Lab or in the User's Manual (which you can find linked in this course).
Narrator loads and material	In my case, I'll place the material here, my left pinch roller here, and my right pinch roller here.
Narrator raises the loading lever	Now that the material and pinch rollers are in position, you're ready to secure the material in place. Carefully raise the loading lever to clamp your material in place.
Turn on the Machine (On-screen title break)	
Narrator moves to stand beside the operation panel	Next, let's turn on the vinyl cutter. (Safety)*Note that whenever the vinyl cutter is on, be very careful of the cutting

	area where the cutting carriage with a sharp blade is held.*
Points to power cord and connections	Make sure that the power cord is plugged into the wall
Narrator presses power button	Press the power button. When the button lights up blue you know that the machine is on.
Narrator demonstrates	Press the "Down" cursor key until you see the word "PIECE" appears on the Display. Press the "Enter" key to select.
Video shows vinyl cutter doing this	When you press "Enter," the cutting carriage will move to where you placed the left pinch roller and the vinyl cutter will move your material forward and backward.
Video shows display	You'll notice that the cuttable width and length then appear in the display
Narrator checking and okaying the position of the material	Wait until the vinyl cutter has stopped moving the cutting carriage and your material. Now, check that the material has not come loose. This material looks good!
Fixing Loose Material (On-screen subtitle break)	
Narrator noting material NOT okay, has come loose	If the material comes loose, no worries! We just need to fix it.
Narrator demonstrates turning off the machine	First, turn off the machine. To turn off the machine, hold the power button for one second or longer. The blue color will fade away, indicating that the vinyl cutter is now off.

Narrator demonstrates lowering the loading lever	Carefully lower the loading lever and remove your material. You'll now be able to re-load the material following the same instructions provided at the beginning of this video.
Narrator presses "Menu" button	Once the material is loaded and secured appropriately in place, press the "Menu" button.
	(Per manual): You'll now be able to see the cutting speed, cutting force, blade offset, and cutting direction on the "Display" screen. If you have questions about these, ask a staff member in the Innovation Lab.
Prepare the Blade	**Exclude from Level 1 Badge?**
Install the Blade Holder	**Exclude from Level 1 Badge?**
Perform a Cutting Test	**Include or exclude from Level 1 Badge?**
	(See comment for plan if excluding) If including will script based on these instructions
Set the Origin (On-screen title break)	Now it's time to set the origin!
Narrator demonstrates. 	Now - using the "left" and "up" cursor keys, move the position of the cutting carriage to where you would like to set the origin. The "origin" is the place where the vinyl cutter will start cutting your material
Narrator points to appropriate location	Press the "up" cursor key to move your material backward into the machine,

	ensuring that the cutting test traces are in front of the blade protector.
The narrator points out the blade protector and to the vinyl behind the blade protector that will be cut.	Note that the blade moves over the "blade protector" - this strip of material that runs across the length of the cutting area. Once the origin is set, the area of the material behind the "blade protector" is what will be cut
Narrator points to area of material that will NOT be cut	Any material in front of the "blade protector" will not be cut by the vinyl cutter
Narrator demonstrates. *On-screen text:* Origin = The place where cutting will start	Once you are happy with the location of your material and that of the cutting carriage, hold down the "Origin" button for one second or longer to set the origin.
ORIGIN SET	The display will flash and read "Origin set"
	As noted earlier in this course, setting the origin at the **bottom left corner** of your material helps to minimize waste. The unused material you saved can later be placed in the remnants box for other Innovation Lab participants to use.
Perform Cutting (On-screen title break)	Now you're ready to provide your design data you prepared earlier to the vinyl cutter!
Narrator demonstrates connecting computer and vinyl cutter with USB cord	CutStudio software on the computer holds the information you want to provide to the vinyl cutter.

	To allow CutStudio and the vinyl cutter to communicate, connect the USB cord to both the vinyl cutter and your computer.
Screen record and/or this image with narrator talking. Click [Cutting icon] . [CutStudio toolbar image: Untitle, File Edit View Format Object Help, New Open Save Import Cutting]	Open CutStudio and select "Cutting" from the menu bar that runs along the top of the screen
Screen record and/or this image with narrator talking [Cut dialog box image with Printer Name, Status, Port USB003, Select Cut Color, Overlap Cutting, Quality, Cutting Conditions, Perforated Cutting Conditions, OK Cancel Change buttons, SALE]	Select "OK" in the bottom left of the screen. This will send design data from CutStudio to the vinyl cutter and cutting will start!
Narrator demonstrating area to keep hands out of	(Safety) Whenever the vinyl cutter is on, always be careful of this whole area. Be especially careful to keep your hands away from this area after you've selected "OK" - the sharp blade will be in motion.
[Cutting Conditions image: Use cutting conditions of machine checkbox, Cutting force: 50 gf, Cutting speed: 20 cm/sec, Blade offset: 0.0098 inch, Get from Machine button]	**Exclude changing cutting conditions instructions?** (To change the cutting conditions, click "Change," clear the "Use cutting conditions of machine" check box, and enter values.
Canceling Cutting (on-screen subtitle break)	
Narrator demonstrates pressing pause to cancel cutting	If for any reason you need to cancel cutting, always press the "Pause" button

Narrator demonstrates pressing "Enter" button	Next, hold down the "Enter" button for one second or longer. This will cancel the operation and you'll be able to reset as desired.
Remove the Material (On-screen title break)	Once the vinyl cutter stops cutting, you are ready to remove your material!
Narrator demonstrates pressing the menu button until "UNSETUP" displays UNSETUP ◄ ◆ ↵	To remove the material, you'll start by pressing the "Menu" button several times until you see "UNSETUP" in the Display
Narrator demonstrates pressing "Enter." Video demonstrates the subsequent movement of the cutting carriage.	Once you see "UNSETUP," select the "Enter" button. When you select "Enter" the cutting carriage will move back to its "home" position beside the operation panel.
Narrator lowers the loading lever gently	Once the cutting carriage has moved to its home by the operation panel, carefully lower the loading lever to unclamp the pinch rollers
Narrator removes material and holds it up to camera	You can now easily remove your cut material!
Narrator demonstrates holding down the power button to turn off the machine	To protect yourself and others, turn off the vinyl cutter that is no longer in use. Hold down the "power" button for one second or longer until the blue light turns off.
Narrator speaking to camera	Now you know the steps to cut a basic vinyl cutter design! You'll soon have the opportunity to perform these steps in the Innovation Lab with the help of Innovation Lab staff.
References slide	Exit music

Module 11 Storyboard Note ("Perform Basic Vinyl Cutting")

The design and layout of Module 11 will mimic that of existing modules:

- Introductory slide with voiceover audio

- Video

- Review slides

- Interactive questions with integrated feedback

- "Main Points" slide

- "Congratulations for completion" slide

- "References" slide with linked resources

The primary video will drive module content. Finalization of content/wording/questions pending approval of above video storyboard by SMEs.

Module 12 Storyboard Notes ("Sticker Transfer")

The design and layout of Module 12 will mimic that of existing modules:

- Introductory slide with voiceover audio

- Video

- Review slides

- Interactive questions with integrated feedback

- "Main Points" slide

- "Congratulations for completion" slide

- "References" slide with linked resources

A primary video will drive module content. Review slides, interactive questions, and "main points" will be derived from the video once approved by SMEs. It is anticipated that this simple video will address:

- Necessary tools

- "Step-by-step" of how-to use those tools to remove the backing from a sticker cut by the vinyl cutter (provided in context of example)

Module 13 Storyboard Notes ("'Frequently Asked Questions' and Troubleshooting Tips")

The design and layout of Module 12 will mimic that of existing modules:

- Introductory slide with voiceover audio

- Video (possibly, depending upon time constraints)

- Informative slides

- Interactive questions with integrated feedback

- "Main Points" slide

- "Congratulations for completion" slide

- "References" slide with linked resources

Key "Frequently Asked Questions" and troubleshooting tips for the GS-24 vinyl cutter, CutStudio, and Adobe Illustrator are to be identified with the support of SMEs. Given the breadth of planned content, it is likely that this information will be provided in slide format with integrated voiceover audio. If time allows prior to planned course completion date in early- to mid-November, short video demonstrations may be integrated into these modules for optimal clarity.

Possible content includes, "What to do if":

- The Machine Doesn't Run

- The Material Slips Away from the Pinch Rollers While Cutting

- You receive any of the notifications in this: Error Message List

- Sample Data Cannot be Found in CutStudio

- The sensor fails to read crop marks

Module 14 Storyboard Notes ("Final Sign-off in the Innovation Lab"

"Module 14" is a final hands-on vinyl cutter and software (CutStudio, Adobe Illustrator) use sign-off. This process is currently facilitated by certified Innovation Lab staff with the support of existing materials. It is possible that the Lab may desire updates to these sign-off materials to ensure alignment with this "Level 1 Badge" course content upon the course's finalization.

Creation and provision of simple visual laminated job aids to physically keep beside the vinyl cutter may support learners working to obtain "Level 1 Badge" certification. If this is desired, identification of most applicable job aid content will be completed with the support of SMEs.

Module 15 Storyboard Notes ("Resources")

The final module will provide access to a consolidated list of resources including:

- Roland GS-24 Vinyl Cutter User's Manual

- Instructional video links

- "Main Points" of each module

- "Liberatory Design" website link

    o "Liberatory Design" card deck link

- "Liberatory Design" Rise 360 Course

- Vector file designs

- Planned supplementary courses when created ("Level 2 Badge" course, "Adobe

  Illustrator" course, etc.)

    o Courses planned and pending creation by the Innovation Lab team.

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