

Design Document Final

Project Overview

Working in the recreation industry is rewarding because you encourage and teach working-age people, helping them learn a skill that advances them toward their dreams. At Island Sailing in Portland, OR, learners can start chasing their dreams in a four-day hands-on course certified by the American Sailing Association. This class is extensive, but students often lack some essential knowledge for conscious seamanship when using the fleet of club boats. Before leaving the docks for the first time without an instructor—or after a long break—novice sailors must recognize and identify the "no-go" zones on the river, as determined by Island Sailing, and know the safe procedures for avoiding river barges.

This learning module is part of a team-member-led workshop on boater safety for new members. It includes tips on docking and maneuvering, safe trip planning, and weather observation strategies. This course falls under Gagne's domain of an intellectual goal because learners have to form concepts and apply rules to be successful as skippers on a 22-foot boat in the Columbia River. After successfully completing the module, club members should be able to identify "no-go" areas on the chart and demonstrate this with a series of interactive map exercises, simulations, and assessments. The workshop assumes entry skills—for example, basic knowledge of sailing terms, familiarity with operating a small vessel in calm conditions, and the ability to read charts. The more people invest in the pursuit of sailing, the more opportunities we have to train a new generation to fulfill their dreams of sailing and connecting with nature.

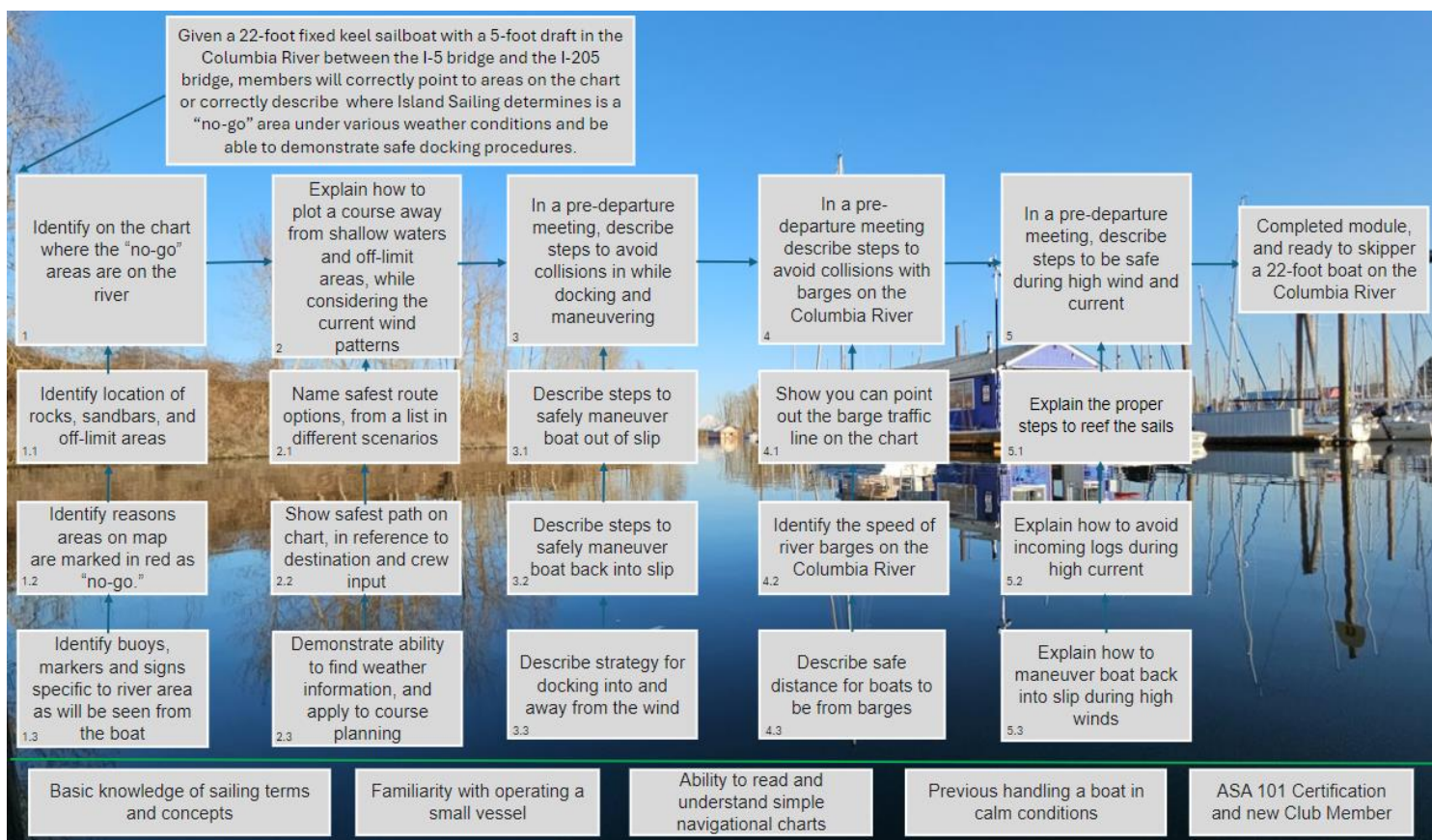
This class is an ancillary unit specific to the sailing club, adding value to the membership and setting club members up for success. Very often, we find that club members need help understanding "the rules of the road" before their first sail on club boats and need a short workshop to inform them about situations on the water. As we implement the workshop, we reinforce learners and set them up for success as club members.

Instructional Goal

Upon completion of the training module, Sailing School graduates will successfully describe where to maneuver a 22-foot sailboat to avoid the "no-go" areas of the Columbia River when a river barge is approaching, demonstrating proficient navigation and safety skills.

Diagram

The course aims to help participants demonstrate proficient navigation and safety skills on a 22-foot sailboat to avoid river hazards. Sailing school graduates and club members will learn to identify hazards, plot courses, avoid danger and river traffic, and execute safe decision-making during high winds and currents. By applying these skills, they will demonstrate their knowledge using intellectual abilities. The workshop assumes that members have basic skills, but by the end of the course, they will have delved deeper and built upon the original knowledge learned in the sailing class.



IDER Reflection

At the beginning of this project, I wanted to combine my passion for sailing with education to provide more value for our members and ownership. Initially, I planned to create a sales strategy module for the member services staff. However, I realized that developing an interactive training module to help new members become safer on the water would be more useful than an elementary sales module. The owner expressed a need for a module focusing on docking boats and river safety beyond the current curriculum. I feel connected to students reaching for their dreams on the water, and this project has allowed me to dive deep into the Dick and Carey systematic design model to help expand the educational program at the sailing club.

The initial feedback from my peers helped me set clear intentions for my module. Although my follow-up feedback was limited due to time constraints before I had to leave the country, I knew I needed to

limit the scope. I learned what my desired outcome needed to be for a successful learning module and adjusted accordingly to improve the flow of my diagram. By re-reading the text and receiving feedback, I decided that my goal was an intellectual one. By demonstrating that they can successfully accomplish the psychomotor skills, the learners prove they are able to "choose to maximize safety while on club boats."

I look forward to diving deeper into analyzing the learners and the learning contexts in the following chapters to identify characteristics of the target population and the environment where the training will occur.

Learner Analysis

The Island Sailing Club is a small, family-owned club that shares characteristics with other local Portland facilities like Freedom Boat Club and Sailtime Portland, where students can get on the water without owning their own boats. However, Island Sailing Club is unique because it operates as an academy model rather than a boat leasing or sales model. Its mission is to empower the community by creating easy and affordable access to the world of sailing.

The target population for this sailing workshop consists of small groups of recent graduates from a beginner sailing class. These individuals are between the ages of 18 and 65 and are physically fit to handle a 22-foot sailboat on the Columbia River.

The target learners have passed a four-day, in-house American Sailing Association (ASA) 101 sailing class but have limited boating experience and are still in the novice stage. Data sources include interviews with the club owner and lead instructor, and further insights will be gained through observations during the workshop. Through additional interview questions with the students, I hope to gain more insight into their skill and experience levels, attitudes toward sailing and the sailing school, and their motivation for attending the workshop.

Throughout the class, I will make observations about the learners to further discover their motivations. From personal experience, I understand the challenges of being unfamiliar with the river and the nuances of docking, and I recognize the additional focus on skills needed to set them up for success when sailing. Below are further details explaining the characteristics of the learners in a club sailing program.

Information Categories	Data Sources	Learner Characteristics
Entry Skills	Interviews with the club owner and lead instructor	The learners are familiar with sailing as they took a class with 4 other people and their instructor signed off on their skills. They are unfamiliar with how to confidently operate the boat as a skipper on their own due to insufficient "sea time".

Prior Knowledge of Topic Area	Interviews with the club owner and lead instructor	Target students have knowledge of the gear and functionality surrounding the boat and basic knowledge of charts. They are not familiar with navigating the Columbia River. Novice sailors are not confident to take out the 22-foot Capri boats alone.
Attitudes Toward Content	Interviews with the club owner and lead instructor	Learners have pre-registered for the class and are new members of a sailing club, indicating an interest in specific knowledge about the river and boats. Learners will be surveyed to understand their attitudes and reduce redundancies in training.
Attitudes Toward Potential Delivery System	Interviews with the club owner and lead instructor	Learners have taken a certified sailing course before and like hands-on instruction. Additional materials would be well received to ensure they get the most value out of their membership.
Motivation for Instruction	Interviews with the club owner and lead instructor	Learners are motivated to grow their skillset with knowledge specific to the sailing area and boat use. They aim to learn specific tactics to avoid dangerous situations and follow up on previous learning.
Educational and Ability Levels	Records of previous ASA tests	Each student is certified through the American Sailing Association. The school has the missed test questions on file for the instructor to review and consider.
General Learning Preferences	Not applicable	This is not applicable as the workshop is pre-designed as a presentation and demonstration and cannot be on the water to test physical skills. Ideally, connecting with learners about their learning preferences would be preferred but the flow cannot be changed.
Attitudes Toward Training Organization	Interviews	Learners will be club members planning to become more involved and learn as much as they can about sailing. Many have dreams of sailing worldwide or owning a boat. They use Island Sailing to grow their sailing resume and become comfortable sailing with others.
General Group Characteristics	Observations	Observations have been made as learners informed the school of past sailing or boating experience. The class should have no more than 10 individuals who have pre-registered. Participants will have little to no experience sailing on their own without an instructor or fellow students.

Learning Context

The workshop will take place at the sailing school, which includes a well-equipped classroom and an adjacent sailing area on the Columbia River. The classroom is decorated with nautical charts, sailing memorabilia, and pictures of sailboats, fostering a sense of maritime adventure. The room has plenty of chairs and tables to place their sailing gear. It is equipped with a projector screen, projector, and a computer to show the presentation. The workshop will conclude with a demonstration on the boats docked on their slips.

Information Categories	Data Sources	Learning Site Characteristics
Number/Nature of Sites	Interview with Club Owner, site visit	The workshop will be held in the classroom and the adjacent sailing area. The room is well equipped with the necessary technology and gear for the workshop. There will need to be a projector screen. The sailing area includes docks and a practice area on the Columbia River.
Site Compatibility with Instructional Needs	Interview with Club Owner, site visit	The workshop site is compatible with the instructional needs as it will be in a classroom equipped with the necessary technology for presentation and demonstration. The sailing area provides direct access to the water for practical exercises.
Site Compatibility with Learner Needs	Interview with Club Owner, site visit	The workshop site is compatible with learner needs as it is directly on the docks in a boathouse at the end of the pier. The classroom provides plenty of space for learners to spread out their sailing gear and participate. There are different boats available for demonstrations.
Feasibility for Simulating Workplace	Observation	Simulating workplace application is difficult as learners will have to apply the knowledge on the river without instructor testing on the river. Testing will occur in the classroom and on boats without leaving the dock area completely.

Performance Context

Before the workshop began, I observed other sailing workshops held at Island Sailing. I understand the physical limitations and resources available at the location. Along with this observation, I met with the managerial team to discuss resources and tools provided. I have a good understanding of what the performance context is like for both the instructor and the learner.

Information Categories	Data Sources	Performance Site Characteristics
Managerial/Supervisory Support	Observations, Interviews	Island Sailing is managed by the owner, who has designed a curriculum following ASA guidelines but leaves

		it to the instructors to follow that rubric. The owner provides technology, reading materials, and sailing boats and gear. The course can be taught 1-on-1 if needed.
Physical Aspects of Site	Observations	The workshop will be held at the sailing school, which includes classroom instruction and on-water practice. The classroom has equipment such as a projector screen, chairs, tables, and a demonstration sail with practice ropes.
Social Aspects of Site	Observations	Club members are inclined to be social and form friendships. Learners will work both independently and collaboratively. On-water practice involves teamwork and individual tasks. There will be no supervision from the owner or an additional instructor during the workshop.
Relevance of Skills to Workplace	Observations	The instruction serves as a refresher course, making club members more confident. Completing the course builds confidence and value, reducing the need for additional coaching sessions. The course complements the ASA class and Oregon Boater's Permit.

By understanding these aspects of the performance context, I can ensure that the workshop is well-prepared and that both the learners and instructors have the necessary support and resources to succeed.

Assessment Plan for Sailing Workshop

The learners will be assessed at the beginning of the course to see how familiar they are with the chart of the Columbia River, and if they know about the shipping lanes and best practices for docking the boats. Intellectual skills involved will be tested and then be proven using psychomotor skills which require repetition. Upon class's conclusion, the learners will dock in front of myself or the instructor as a final assessment to reinforce the additional information they have received. The assessment types will work in congruence with the performance objectives and in line with the instructional strategy.

Entry Skills Test

The entry test is not particularly needed for this module because we can assume basic sailing knowledge based on the recent graduation of the American Sailing Association 101 class taken in house. If someone does not have these skills, they will still need to be signed off by an instructor to sail the club boats.

Pretest

After a brief introduction about how the entry skills will be incorporated within the workshop, I will have the learners look at the chart of the Columbia River between the bridges and tell me what they

are familiar with to assess their current knowledge. We will have a discussion to determine if my module will build on what they already know or if they are in a completely unfamiliar territory. I will gather a sense of what elements need to be covered in the workshop based on their responses.

Practice Test

The course will have practice tests after each performance objective to help clarify and reinforce the knowledge learned in a workbook style, where the learners can fill out a sheet to take home with them after the class. The practice test for each objective will build from each other and will mostly be fill-in-the-blank or multiple choice.

- **Objective:** Reinforce learning and provide practice in identifying and responding to no-go areas and other navigation challenges.
- **Format:** Scenario-based questions, practical chart exercises, and multiple-choice questions.
- **Example Questions:**
 - Given a scenario, identify the safest course of action to avoid a no-go area.
 - Plot a course on the chart of the Columbia River avoiding all no-go areas under different weather conditions.

Post Test

For the final assessment, learners will complete a short exam on the final page of their workbook which will be graded and handed back to them after completion. They will be handed a chart and show/point to me what areas on the map are “no-go” and describe why they are off limits. The learners will then describe the details of docking and maneuvering and will be tested using multiple-choice questions to scenarios.

- **Objective:** Evaluate students' proficiency in identifying no-go areas, plotting courses, and performing necessary maneuvers.
- **Format:** Comprehensive test including multiple-choice, short answer, and practical navigation exercises.
- **Example Questions:**
 - Identify and explain the significance of no-go areas.
 - Demonstrate on a chart the best course to avoid no-go areas under varying conditions.
 - Describe maneuvers to avoid obstacles in the marina.

A good final activity will be at the end of class to get in the boats and practice the learned skills docking in front of me for coaching after reciting the “no-go” areas by memory beforehand.

Follow Through Activities

For the follow through activities, I will include a job aid to reduce the reliance of memory on where not to go on the river. We know through Dick and Carey that learning is most often situation-specific, and to enable a more effective transfer of learning designers need to use any means in their repertoire to counter this tendency. Ideally, I will have created a short educational online learning module they can turn to at any time through an app or LMS if time allows.

Performance Objectives

<p>Main Instructional Goal</p>	<p>Terminal Objective</p>
<p>Before leaving the docks for the first time without an instructor, or the first time for the season after a long break, novice sailors must recognize and identify “no-go” zones as determined by Island Sailing on the river and safe procedures for avoiding river barges.</p>	<p>Upon completion of the training module, Sailing School graduates will successfully describe where to maneuver a 22-foot sailboat to avoid the “no-go” areas of the Columbia River when a river barge is approaching, demonstrating proficient navigation and safety skills.</p>
<p>Main Step in Instructional Goal</p>	<p>Objective</p>
<p>Identify on the chart where the “no-go” areas are on the river (1)</p>	<p>When given a nautical chart of the Columbia River (CN), participants will identify the no-go areas (B) and explain their significance without error (CR).</p>
<p>Explain how to plot a course away from shallow waters and off-limit areas (2)</p>	<p>In a visual test using the chart and knowledge of wind patterns (CN), explain how to plot a course away from areas of the map that are “no-go” areas (B), as detailed on the Island Sailing “no-go” chart. (CR)</p>
<p>In pre-departure meeting describe steps to avoid collisions while docking and maneuvering (3)</p>	<p>In preparation for leaving the docks (CN) describe in detail the maneuvers to avoid hitting other boats or the dock in the marina (B) and be as specific as possible. (CR)</p>
<p>In pre-departure meeting describe steps to avoid collisions with barges on the Columbia River (4)</p>	<p>In a pre-departure safety briefing (CN) describe steps to avoid collisions with barges (B) as detailed in the American Sailing Association guidelines (CR)</p>
<p>In a pre-departure meeting describe steps to be safe during high wind and current (5)</p>	<p>In a pre-departure safety meeting (CN) describe steps to take during high wind and high current (B) as detailed in the American Sailing Association handbook. (CR)</p>
<p>Subordinate Skills</p>	<p>Objective</p>
<p>Identify location of rocks, sandbars, and off-limit areas (1.1)</p>	<p>1.1.1 When shown a section of the Columbia River on the nautical chart (CN), participants will identify the marked no-go areas (B) without error. (CR)</p>

Identify reasons areas on map are marked in red as “no-go” (1.2)	1.2.1 When asked (CN), participants will identify the reasons why certain areas are designated as no-go (B) based on the keel depth of the boat and river currents. (CR)
Identify buoys, markers, and signs specific to river area as will be seen from the boat (1.3)	1.3.1 Given a list of markers found in the Columbia River (CN) identify the locations of these markers on the Columbia River (B), in relation to how they will be seen from the boat. (CR)
Name safest route options from a list in different scenarios (2.1)	2.1.1 In a scenario describing the boat headed towards a “no-go” area (CN), name the safest decision-making option to avoid danger (B). The participants should name the best course of action in three scenarios. (CR)
Show safest path on chart in reference to destination and crew input (2.2)	2.2.1 In a scenario describing a situation where a crew member wants to go through a “no-go” area (CN), the participants will show on the chart a path to avoid shallow waters (B), as detailed in the Island Sailing guidelines. (CR)
Demonstrates ability to find weather information and apply to course planning (2.3)	2.3.1 In a scenario where the weather forecast calls for high winds (CN), the participants will demonstrate ability to name three sources of weather models (B) as found on the Island Sailing Website. (CR)
Describe steps to safely maneuver boat out of slip (3.1)	3.1.1 Before casting off and leaving the docks (CN), describe the maneuver to establish steerageway on the 22-foot sailboat (B), to avoid hitting other boats or the dock. (CR)
Describe steps to safely maneuver boat back into slip (3.2)	3.2.1 Before docking with a new boat in the fleet (CN), describe steps for docking (B), to avoid hitting other boats or the dock. (CR)
Describe strategy for docking into and away from the wind (3.3)	3.3.1 Describe the strategy for docking (B), when landing on the windward or the leeward side of the dock (CN) to avoid damaging the boat.
Show you can point out the barge traffic line on the chart (4.1)	4.1.1 Using the chart (CN) show you can place your finger along the line of barge traffic (B) as detailed in the Island Sailing guidelines. (CR).
Identify the speed of river barges on the Columbia River (4.2)	4.2.1 In a multiple-choice question format (CN) identify the correct average speed of barges going upriver and downriver (B) as detailed in the COLREG Guidelines. (CR)
Describe safe distance for boats to be from barges (4.3)	4.3.1 In a multiple-choice question format (CN) describe the correct distance for boats to be away from oncoming barges (B) as detailed in the Island Sailing Guidelines. (CR)
Show you can reef the sails (5.1)	5.1.1 In a pre-departure meeting on the boat (CN) show proper preparation for reefing the sails (B) as detailed in the Island Sailing Guidelines. (CR)
Explain how best to avoid incoming logs during high current (5.2)	5.2.1 In a pre-departure safety meeting (CN) explain the proper answer for avoiding incoming logs (B) as detailed in the Island Sailing guidelines. (CR)

Explain how to maneuver boat back into slip during high winds (5.3)	5.3.1 In a pre-departure safety meeting (CN) explain the correct maneuver in maneuvering the boat back into the slip during high winds (B) as described in the Island Sailing Guidelines. (CR)
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IDer Reflection

At the start of designing the learning module, I felt overwhelmed and unsure how it would all come together. I knew I wanted to enhance the current curriculum at the sailing school to better connect the club's education to practical use on the water. Learning is continuous, and through interviews with the owner, I discovered that he designed the entire curriculum himself, drawing on decades of experience. He is passionate about teaching because of the joy it brings and because most sailing schools do not have a standardized curriculum design.

My process has evolved through each interview with the Subject Matter Expert (SME) and each feedback session with my group. I have continued to edit DD1 to reflect my updated terminal and subordinate objectives derived from these sessions. I updated the goals in my diagram to change from testing an attitudinal goal to an intellectual goal and to specify my subordinate objectives. I enjoyed how this process has allowed me to become more articulate in formulating my objectives and to understand exactly what I am testing for. I still question whether I have taken on too many testable skills in one module.

In designing the assessment strategy, I wanted to use multiple-choice questions to help learners intellectually understand the chart and no-go areas, ensuring these concepts are retained in memory. If time allows, I plan to test the psychomotor docking skills at the end, since motor skills need repetition. The design process feels like I am engineering a solution rather than haphazardly throwing a course together. I am pleased to see my growth as an instructional designer in this process, as I have become more meticulous and avoid rushing into strategy before laying the blueprint. I appreciate the feedback I received because it allows me to see my project from an outsider's perspective, often from someone with years more experience than myself.

I expect that I will further revise my current DD2 draft in the process of creating DD3 because each time I dive deeper into the material or listen to feedback from others in my cohort, something clicks, and my understanding of instructional design becomes deeper.

Design Evaluation Chart

Goal / Step / Subordinate Skill	Performance Objectives	Parallel Test Items
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<p>Goal: Upon completion of the training module, Sailing School graduates will successfully describe where to maneuver a 22-foot sailboat to avoid the “no-go” areas of the Columbia River when a river barge is approaching, demonstrating proficient navigation and safety skills.</p>		<p>Test Type: Scenario-Based Practical final Assessment</p> <p>Scenario Example: You are sailing the Capri 22 sailboat on the Columbia River. You notice a river barge approaching from the east going at a speed of 10 kts. Using the provided nautical chart, identify the no-go areas, and describe your navigation plan to safely maneuver the sailboat away from the barge and avoid the no-go areas.</p> <p>Instructions:</p> <ol style="list-style-type: none"> 1. Review the provided nautical chart. 2. Identify and mark the no-go areas. 3. Recognize the direction and speed of the approaching barge. 4. Describe your navigation or “float” plan, including specific maneuvers and directions to ensure safety.
<p>Step 1: Identify on the chart where the “no-go” areas are on the river.</p>	<p>Given a nautical chart of the Columbia River (CN), participants will identify the no-go areas (B) and explain their significance (CR) without error.</p>	<p>Scenario Example: You are the captain of a Capri-22 sailboat preparing for a day trip on the Columbia River. Your route will take you through the busiest section of the river where several no-go areas are marked on the nautical chart due to shallow waters, rocks, and strong currents. As you review the chart, your task is to identify these no-go areas and explain their significance to your crew to ensure a safe passage.</p> <p>Task: Given a detailed section of the Columbia River chart, identify all marked no-go areas. For each identified no-go area, explain the reason it is marked as such, considering factors like shallow waters, rocks, and strong currents. Discuss the potential hazards these areas pose to your sailboat and crew.</p>
<p>1.1 Subordinate Skill: Identify location of rocks, sandbars, and off-limit areas.</p>	<p>When shown a section of the Columbia River on the nautical chart (CN), participants will identify the marked no-go areas (B)</p>	<p>Instructions: Using the provided section of the Columbia River nautical chart, identify and label the following items indicating visual cues for no-go areas:</p> <p>Buoy A (Red) Buoy B (Green) Wing Dam 1 Secondary Channel 1 Dolphin 1 Off-Limit Bridge and Barge Traffic Area 1</p>

	without error. (CR)	
<p>1.2 Subordinate Skill: Identify reasons areas on map are marked in red as “no-go.”</p>	<p>When asked (CN), participants will identify the reasons why certain areas are designated as no-go (B) based on the keel depth of the boat and river currents. (CR)</p>	<p>Instructions: Using the provided section of the Columbia River nautical chart, identify all marked no-go areas. For each identified no-go area, explain <i>why</i> it is designated as such, considering the keel depth of your sailboat and the river currents which help determine water depth.</p> <p>Identify the potential hazards these areas present and what actions should be taken to ensure safe navigation.</p>
<p>1.3 Subordinate Skill: Identify buoys, markers, and signs specific to river area as will be seen from the boat.</p>	<p>Given a list of markers found in the Columbia River (CN) identify the locations of these markers on the Columbia River (B), in relation to how they will be seen from the boat. (CR)</p>	<p>There will not be a test item for this skill as this item can be grouped together with the test question used for Subordinate Skill 1.1</p>
<p>Step 2: Explain how to plot a course away from shallow waters and off-limit areas.</p>	<p>In a visual test using the chart and knowledge of wind patterns (CN), explain how to plot a course away from areas of the map that are “no-go” areas (B), as detailed on the Island</p>	<p>Instructions: Review the provided section of the Columbia River nautical chart and the wind pattern information gathered from a reliable source. Plot a safe course on the chart, avoiding all shallow waters and off-limit areas.</p> <p>Give a detailed explanation of your chosen course and how you decided to navigate towards your destination, including how the wind patterns influenced your decisions.</p>

	Sailing chart. (CR)	
<p>2.1 Subordinate Skill: Name safest route options from a list in different scenarios.</p>	<p>In a scenario describing the boat headed towards a “no-go” area (CN), name the safest decision-making option to avoid danger (B). The learner should name the best course of action in three scenarios. (CR)</p>	<p>Scenario Example: You are sailing near a section of the river known for its shallow waters. The chart indicates several no-go areas due to shallow depths. The wind is coming from the northwest at 10 knots.</p> <p>Route Options:</p> <ul style="list-style-type: none"> a) Sail directly through the shallow area to save time. b) Navigate to the east, following the deeper channel. c) Turn to the west and sail close to the shore to avoid the shallow area. <p>Scenario Example 2: You are approaching a bend in the river beyond the limits of the prescribed sailing area east of the I-205 Bridge, how will you determine no-go areas?</p> <p>Route Options:</p> <ul style="list-style-type: none"> a) Sail through the area with wing dams protecting an island from erosion knowing there are no sandbars there. b) Stay as close to the center channel as possible, avoiding rocks and sticking to your float plan. c) Turn around as soon as possible.
<p>2.2 Subordinate Skill: Show safest path on chart in reference to destination and crew input.</p>	<p>In a scenario describing a situation where a crew member wants to go through a “no-go” area (CN), the participant will show on the chart a path to avoid shallow waters (B), as detailed in the Island Sailing guidelines. (CR)</p>	<p>Scenario Example:</p> <p>Review the provided section of the Columbia River nautical chart and consider the crew's input recommending an unsafe path. Plot the safest path to the destination, ensuring avoidance of shallow waters and hazards.</p> <p>Show on the chart your chosen path, including how you addressed crew input and ensured safety.</p>

<p>2.3 Subordinate Skill: Demonstrate ability to find weather information and apply to course planning.</p>	<p>In a scenario where the weather forecast calls for high winds (CN), the learner will demonstrate the ability to name three sources of weather models that are accurate (B) as found on the Island Sailing Website. (CR)</p>	<p>Scenario Example: You are planning a day trip on the Columbia River and need to adjust your course based on current weather conditions. Use the following weather sources to gather necessary information and plan your route:</p> <p>Windy App Data from the PDX weather station triangulated with data from the Pearson Airfield in Vancouver, WA Tropical Tidbits</p> <p>Demonstrate the ability to identify these weather sources and explain how you use the information from each to adjust your course planning.</p>
<p>Step 3: In pre-departure meeting, describe steps to avoid collisions while docking and maneuvering.</p>	<p>In preparation for leaving the docks (CN), describe in detail the maneuvers to avoid hitting other boats or the dock in the marina (B) and be as specific as possible. (CR)</p>	<p>Participants will be asked question about specifics of the contents of a pre-departure meeting before leaving the dock:</p> <p>Participant Sample Answer- “Good morning, everyone. Before we set off, let’s go through our pre-departure checklist. Make sure your life jackets are on and that we have all safety equipment in place. [Point to equipment locations]</p> <p>Next, let’s inspect the boat. Jane, please check the engine and make sure it’s running smoothly. Mark, inspect the lines and fenders. I’ll go over our charts and documents.</p> <p>Now, let’s gather for a briefing. Our departure plan involves moving eastward to clear the dock and then turning north to head into the main channel. Jane, you’ll be on the bow line, Mark on the stern line. Remember our communication signals letting the skipper know the bow is clear.</p> <p>The wind is coming from the west, so we’ll need to counter that as we move away from the dock.</p> <p>Once I give the signal, Jane, release the bow line first, then Mark, release the stern line. We’ll steer gently to starboard to avoid the boat docked next to us.</p> <p>Everyone ready? Let’s execute our plan carefully and smoothly.</p>

		<p>After we have cleared the dock, we will head into open water and maintain a steady course. Keep a lookout for other vessels and obstacles and report any sightings immediately.”</p> <p>*A grading rubric will be provided for all questions involving a description</p>
<p>3.1 Subordinate Skill: Describe steps to safely maneuver boat out of slip.</p>	<p>Before casting off and leaving the docks (CN), describe the maneuver to establish steerageway on the 22-foot sailboat (B), to avoid hitting other boats or the dock. (CR)</p>	<p>Scenario Example: You are the captain of a Capri 22 sailboat preparing to leave the dock. To ensure a safe departure, you need to establish a steerageway and exit the slip without incident.</p> <p>Describe the steps you will take. Include the roles of your crew, the specific actions you will take to establish steerageway, and how you will navigate out of the slip while avoiding collisions.</p>
<p>3.2 Subordinate Skill: Describe steps to safely maneuver boat back into slip.</p>	<p>Before docking with a new boat in the fleet (CN), describe the steps for the best strategy for docking (B), to avoid hitting other boats or the dock. (CR)</p>	<p>Scenario Example: You are the captain of a Capri 22 sailboat returning to dock.</p> <p>Describe the steps required to safely dock the boat back into the slip. Include the roles of your crew, the specific maneuvers you will use to counteract wind and current, and how you will communicate and coordinate with your crew to achieve a smooth and safe docking.</p>
<p>3.3 Subordinate Skill: Describe strategy for docking into and away from the wind.</p>	<p>Describe the strategy for docking (B), when landing on the windward or the leeward side of the dock (CN) to avoid damaging the boat. (CR)</p>	<p>Scenario Example: You are the captain of a Capri 22 sailboat returning to dock. To ensure safe docking, you need to consider the current wind and current conditions and if you are docking on the windward or leeward side of the boat.</p> <p>Describe the steps required to safely dock the boat back into the slip. Include the roles of your crew, the specific maneuvers you will use to counteract wind and current, and how you will communicate and coordinate with your crew to achieve a smooth and safe docking.</p>

<p>Step 4: In pre-departure meeting, describe steps to avoid collisions with barges on the Columbia River.</p>	<p>In a pre-departure safety briefing (CN) describe maneuver to avoid barge when you see it (B) as detailed in the American Sailing Association guidelines (CR)</p>	<p>Scenario Example: During a pre-departure safety briefing, you are responsible for ensuring the crew understands the steps to avoid collisions with barges on the Columbia River.</p> <p>Using the American Sailing Association guidelines, describe the specific maneuvers and precautions that should be taken when a barge is spotted. Include the roles of the crew and how communication should be managed.</p>
<p>4.1 Subordinate Skill: Show you can point out the barge traffic line on the chart.</p>	<p>Using the chart (CN) show you can place your finger along the line of barge traffic (B) as detailed in the Island Sailing guidelines (CR).</p>	<p>Question: Using the provided nautical chart of the Columbia River, demonstrate your ability to identify and trace the barge traffic lines. Place your finger along the line of barge traffic as detailed in the Island Sailing guidelines and explain the significance of these lines for safe navigation.</p>
<p>4.2 Subordinate Skill: Identify the speed of river barges on the Columbia River.</p>	<p>In a multiple-choice question format (CN) identify the correct average speed of barges going upriver and downriver (B) as detailed in the COLREG Guidelines. (CR)</p>	<p>Instructions: Select the correct average speeds of upriver and downriver barges on the Columbia River from the multiple-choice options provided.</p> <p>What is the average speed of river barges traveling upriver on the Columbia River?</p> <p>a) 3 knots b) 5 knots c) 7 knots d) 9 knots</p> <p>Answer: b) 5 knots</p> <p>What is the average speed of river barges traveling downriver on the Columbia River?</p> <p>a) 6 knots b) 8 knots c) 10 knots d) 12 knots</p> <p>Answer: c) 10 knots</p>

<p>4.3 Subordinate Skill: Describe safe distance for boats to be from barges.</p>	<p>In a multiple-choice question format (CN) describe the correct distance for boats to be away from oncoming barges (B) as detailed in the Island Sailing Guidelines (CR)</p>	<p>Multiple-Choice Question:</p> <p>What is the safe distance for boats to maintain from oncoming barges on the Columbia River?</p> <p>a) 50 feet b) 100 feet c) 200 feet d) 500 feet</p> <p>Answer: d) 500 feet</p>
<p>Step 5: In a pre-departure meeting, describe steps to be safe during high wind and current.</p>	<p>In a pre-departure safety meeting (CN) describe safety protocols during high wind and high current (B) as detailed in the American Sailing Association handbook. (CR)</p>	<p>Instructions: During a pre-departure safety meeting, describe the safety protocols for dealing with high wind and high current conditions. Use the American Sailing Association handbook as a reference.</p>
<p>5.1 Subordinate Skill: Show you can reef the sails.</p>	<p>In a pre-departure meeting on the boat (CN) show you can demonstrate proper preparation for reefing the sails (B) as detailed in the Island Sailing Guidelines. (CR)</p>	<p>Question: During a pre-departure meeting on the boat, demonstrate and show the process of reefing the sails as detailed in the Island Sailing Guidelines.</p> <p>Explain each step clearly and ensure that all preparations for reefing the sails are properly executed.</p>
<p>5.2 Subordinate Skill: Explain how best to avoid</p>	<p>In a pre-departure safety meeting (CN)</p>	<p>Instructions: During a pre-departure safety meeting, explain the process for avoiding incoming logs during high current conditions.</p>

incoming logs during high currents.	explain the process for avoiding incoming logs (B) as detailed in the Island Sailing guidelines. (CR)	Use the Island Sailing guidelines to detail the steps and safety measures that should be taken.
5.3 Subordinate Skill: Explain how to maneuver boat back into slip during high winds.	In a pre-departure safety meeting (CN) explain the correct maneuver in maneuvering the boat back into the slip during high winds (B) as described in the Island Sailing Guidelines. (CR)	Instructions: During a pre-departure safety meeting, explain the maneuvers for safely docking the boat back into the slip during high wind conditions as described in the Island Sailing Guidelines. Describe each step clearly.

Instructional Strategy Alignment

Learning Component	Instructional Strategy Plan
Cluster 1: Identifying No-Go Areas on the Chart	<p>Objectives: (1, 1.1, 1.2, 1.3) When given a nautical chart of the Columbia River, graduates will identify the no-go areas and explain their significance without error.</p> <p>Content Presentation:</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> ○ The instructor will capture interest using engaging visuals from DALL-E and real-life examples of sailing accidents caused by misidentifying no-go areas. ○ The participants will learn the basics of “how to not hit stuff” and understand the reasons behind the decisions to deem the areas “no-go.” ○ The instructor will lead an introductory discussion about the importance of identifying no-go areas and discuss with participants how being aware will help with the main goal of “staying on the boat.” ○ Content will include providing clear, step-by-step instructions and guided practice sessions to build learners' confidence in identifying no-go areas.

	<ul style="list-style-type: none"> • Examples: <ul style="list-style-type: none"> ○ The nautical chart provided will serve as an example of the type of chart they will use during the workshop. There will be scenarios discussed that are familiar to the participant based on previous American Sailing Association (ASA) certification. ○ The instructor will use Canva slides with embedded video and animations to highlight numerous examples and nonexamples of no-go areas on the chart and explain their significance. • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Short videos and animations will be used to elaborate on points. ○ Small groups will be formed to facilitate collaborative learning and discussion. ○ The instructor will play a video clip demonstrating the consequences of not recognizing no-go areas to motivate learners. <p>Student Participation:</p> <ul style="list-style-type: none"> • Practice Items/Participation: <ul style="list-style-type: none"> ○ A YouTube video clip or animation in a Canva presentation will serve as a hook to the main objective of the course. ○ Practice questions will gradually become more difficult to prepare for final assessment. ○ Participants will have a copy of the nautical chart and will work on marking no-go areas on their own or in a group if available. • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Students will first discuss in pairs why they chose to sign up for the class and what they are hoping to learn from the workshop. ○ Students will be able to stand up and explain <i>why</i> to avoid the no-go areas, not simply where they are.
<p>Cluster 2:</p> <p>Plotting a Safe Course</p>	<p>Objectives: (2, 2.1, 2.2, 2.3) In a visual test using the chart and knowledge of wind patterns, plot a course away from areas of the map that are “no-go” areas.</p> <p>Content Presentation:</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> ○ At the start of the module, after the funny introduction to keep the energy, the instructor will ensure each learner understands how to use digital tools like the Navionics marine app or DeepZoom.com. ○ The instructor will lead a discussion on the techniques for plotting a safe course, considering wind patterns and no-go areas. ○ The instructor will connect learned skills to real-world sailing situations where accurate navigation is essential. • Examples: <ul style="list-style-type: none"> ○ The digital tools will be used to demonstrate plotting a course. The instructor and participants will collectively plan a route going up the Columbia River and discuss different scenarios to help prepare for the assessment. ○ The instructor will demonstrate a proper pre-departure meeting, specifically related to course plotting. • Student Grouping/Media Usage:

	<ul style="list-style-type: none"> ○ The participants will open new apps on their phone (Navionics), or a new web page (DeepZoom.com) ○ The instructor will utilize interactive modules in Canva for real-time plotting exercises. <p>Student Participation:</p> <ul style="list-style-type: none"> ● Practice Items/Participation: <ul style="list-style-type: none"> ○ Interactive exercises will allow students to plot courses on the charts provided. They need to focus on how to communicate the route plans to their crew in the pre-departure meetings. ○ The instructor will critique the participants plotted courses after they practice inputting the route. ○ The instructor will facilitate discussions on the challenges faced during plotting and how to overcome them. ● Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Solo practice with digital and printed charts will be conducted. ○ Paired discussions using Canva presentations will be used to review and improve plotted courses. ○ Provide examples and practice scenarios with increasing complexity to build confidence.
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<p>Cluster 3:</p> <p>Docking and Maneuvering</p>	<p>Objectives: (3, 3.1, 3.2, 3.3) Describe in detail the maneuvers to avoid hitting other boats or the dock in the marina.</p> <p>Content Presentation:</p> <ul style="list-style-type: none"> ● Content: <ul style="list-style-type: none"> ○ Students will be briefed on docking techniques and strategies upon starting the module. ○ The instructor will ensure each learner understands the importance of proper docking and maneuvering. ○ The instructor will lead a discussion on common docking pitfalls and how to avoid them. ● Examples: <ul style="list-style-type: none"> ○ A video demonstration of the club owner explaining the process will be used to show effective docking techniques. ○ The instructor will teach the docking process in a way that helps participants become better communicators of the plan, and how to describe what they need to do in specific scenarios. ○ Information on how tides and wind affect docking situations will be explained in detail. ● Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ There will be a YouTube video and groupwork to discuss their own personal difficulties with docking and create a shared experience. ○ The visual presentation of docking will ensure the participants can relate the content to their existing knowledge to use on the boats. <p>Student Participation:</p>
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	<ul style="list-style-type: none"> • Practice Items/Participation: <ul style="list-style-type: none"> ○ Discussing docking scenarios with added wind and current and from different sides of the dock is essential to this workshop. Students will need to practice describing the proper docking techniques in different conditions to help grow the knowledge they already have. ○ The instructor will provide feedback on simulated docking maneuvers making sure feedback is balanced with positive and negative. ○ The instructor will provide manageable steps and clear instructions to build confidence in being a “boater” not just a “sailor.” • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Docking will have to be explained on the whiteboard with interactive discussion on the best movements for the tiller and engine in different wind/current scenarios. ○ Instructional videos and interactive Canva presentations will support learning these skills.
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<p>Cluster 4:</p> <p>Avoiding Collisions with Barges</p>	<p>Objectives: (4, 4.1, 4.2, 4.3) Describe maneuvers to avoid barges as detailed in the American Sailing Association (ASA) guidelines.</p> <p>Content Presentation:</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> ○ Students will receive guidelines and techniques for avoiding barge collisions upon starting the module. ○ The instructor will lead a discussion on recognizing barge traffic lines and predicting barge movements, organizing new into existing skills. ○ Point out common errors in deciphering barge speed both upriver and downriver. • Examples: <ul style="list-style-type: none"> ○ Case studies and video analyses will be used to illustrate barge collision avoidance techniques. ○ The instructor will use Canva slides to detail specific maneuvers and scenarios. ○ In scenarios, highlight good decisions and bad decisions when barge traffic is approaching. ○ After establishing knowledge in a hierarchical sequence, discuss visual cues in determining barge speed and teach how to describe and act on a bailout plan to avoid the no-go areas during oncoming barge traffic. • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Individual review and group discussions will be conducted. ○ Visual charts will be used to help understand the shipping channels and how they relate to current in the river. <p>Student Participation:</p> <ul style="list-style-type: none"> • Practice Items/Participation: <ul style="list-style-type: none"> ○ Case study analysis and role-playing scenarios will be conducted in pairs. ○ Provide visual aid (job aid) for participants to take with them relating to the “rules of the road” found in the ASA handbook. ○ Students will simulate avoidance maneuvers and receive feedback from peers. ○ The instructor will facilitate group discussions on effective strategies for avoiding barge collisions.
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	<ul style="list-style-type: none"> • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Group discussions and individual simulations will be used. ○ Canva presentations will support the analysis and discussion of case studies.
<p>Cluster 5:</p> <p>Safety During High Wind and Current</p>	<p>Objectives: Identify safety protocols during high wind and high current as detailed in the American Sailing Association (ASA) handbook.</p> <p>Content Presentation:</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> ○ Students will be introduced to common sailor sayings and the basics of visually identifying if high winds may be approaching. Phrases include the common, “Red sky at night, sailor’s delight. Red sky at dawn, sailor’s take warn.” And “Mare’s tails make tall ships carry short sails.” This states that in noticing cirrostratus cloud cover the observer can see the effect of wind pulling at the edges of these upper-level clouds and create optics that look like mare’s tails. ○ Students will be provided with safety protocols and emergency procedures for high wind and current conditions upon starting the module. This will include reefing the sails, heaving-to, and anchoring. ○ The instructor will lead a discussion on real-life examples and how to use the information on apps like Windy and Sail flow to help understand the safest measures for navigating in higher wind speeds and faster current. ○ The instructor will teach how to triangulate weather info from the NOAA weather stations at PDX and Pearson Airfield in Vancouver, WA. ○ The importance of these discussions of these protocols in pre-departure safety meetings will be highlighted. • Examples: <ul style="list-style-type: none"> ○ Common weather data websites will be introduced (NOAA), and then gradually move to a more high-level way to gather weather forecast data (TropicalTidbits.com). ○ The participants will review the relevant information in the ASA handbook and incorporate knowledge from courses later in the curriculum they have not taken yet. • Student Grouping/Media Usage: <ul style="list-style-type: none"> ○ Groupings will be the same as previous modules. ○ Interactive Canva presentations will be used to help participants know how to explain the processes of avoiding weather related obstacles like logs and other debris <p>Student Participation:</p> <ul style="list-style-type: none"> • Practice Items/Participation: <ul style="list-style-type: none"> ○ Students will practice discussing emergency maneuvers in pairs to reinforce learning. ○ The instructor will incorporate group discussions on safety strategies during high wind and current using real-life scenario analysis. ○ The instructor will have the participants triangulate information from three weather stations in the PDX metro area to determine wind speed in the sailing area. • Student Grouping/Media Usage:

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| | <ul style="list-style-type: none">○ Group role-play on different scenarios and individual practice with guidelines will be conducted.○ Interactive Canva presentations will support the role-playing exercises and discussions. |
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Implementation Plan

The pilot test for the sailing safety workshop modules will involve the club owner and lead instructor, a current instructor, and one or two recently joined club members. This test aims to determine the instruction's effectiveness. These individuals will go through a module to identify what works and what doesn't. If time permits, additional modules will be presented to the pilot test subjects for further analysis. The goal is to gather feedback from current practitioners to understand whether the material presented is helpful or redundant. While sailing instruction is typically a hands-on experience, the goal is to integrate technology to accommodate new types of learners who are becoming involved.

The instructors and owners have been teaching sailing for over two decades but typically do not use computer-aided visuals in their presentations. Any advice or feedback on incorporating more media into the instruction would be appreciated. A follow-up session may be scheduled to address any gaps or questions raised by the pilot testers. The final version of the workshop will incorporate the feedback received, ensuring that the modules are both effective and engaging for the club members.

Evaluation Plan

During the pilot test, I will collect formative evaluation data by conducting the entire workshop with my selected group. Before the workshop begins, the participants and the instructor will be provided with the performance objectives, facilitator guide, assessments, a job aid, and the Canva slides.

While the instructor conducts the workshop, each participant will focus on specific aspects of the course to provide comprehensive feedback. Ideally, one participant will concentrate on the physical and technological aspects; another will focus on the overall flow and identify any instructional gaps; and a third participant, acting as a subject matter expert, will evaluate the terminology used in the presentation. The goal of this run-through is to improve the workshop before it is offered to the sailing group as an additional educational resource.

Each participant will take notes throughout the workshop and will present this information to me individually afterward, along with a completed survey. This feedback will be crucial in refining the content and delivery of the workshop.

Below are questions that will be asked on the survey:

- Is the material relevant to the club members' goals?

- Do the materials presented cover the skills in a manner readily understood, and are the materials clustered in a logical way?
- Was the content presented well during the workshop, and are the participants satisfied with what they have learned?
- Will the materials be able to be managed efficiently by the instructors using the equipment on hand?
- Were the assessment activities timed appropriately throughout the workshop?

After the data is collected from the evaluators, I will finalize the workshop to create an even more effective set of modules for learning how to sail away from the no-go areas on the Columbia River in a 22-foot Sailboat.

IDer Reflection

My understanding of the instructional design process has grown dramatically while formulating this workshop based on the Dick and Carey systematic model. Assigning assessments to each objective and developing learning clusters kept me focused on achieving clear results with every activity and visual aid I created. I have learned that developing a clear path for learners to master each objective is essential for designing impactful curricula. The old saying, "Start with the end in mind," rings true in instructional design work.

At one point, I had a significant learning moment during the creation of my first Canva presentation module. I was satisfied with a solid first draft of my slides, but before moving on, I performed one last review, comparing my subordinate objectives to how they aligned with the learning content. I realized I was missing a key element! I revised the draft by inserting another slide that covered the objective, which would have gone unnoticed without this blueprint for design. Reviewing the subordinate skills while creating the module and developing the assessment strategy beforehand was helpful in determining the actual content presentation. The creation is a continuous work in progress, and I am grateful for the feedback from my peers.

Now I have greater skill in creating these blueprints for instructional design. I am happy to help workshop attendees grow their skills and apply them to the real world, where their lives may become more enriched. One of the best outcomes of this work is that I learned an immense amount about the subject matter and how to be a better instructor from some of the most passionate people in the sport. I am excited to see how the rest of the project unfolds and what else I can learn in the process.