Lesson Title: Marlinespike Seamanship

Grade Level: Adult Learning

Subject: Able Seaman Course

Time frame: 4 hour lesson (of 40 hour course)

Learning Goals

Learning Goals	Goal 1	How will they be met
Content Specific Goals	• U.S. Coast Guard NVIC 14-14 Task 4.9.A • United States Code of Federal Regulations: 46 CFR 11.910 Table 2 #4: Understand subjects for deck officer endorsement: Marlinespike Seamanship • Deck and Engineering Guide for the Administration of Merchant Marine Examinations (MCP-MA-NMC2-08(01)) Exam Code AB02 Marlinespike Seamanship Demonstration	• Students will find and review relevant NVICs and CFRs and save as bookmarks for quick reference. • Students will search for photo and video references of knots. • Students will save for future reference. • Students will record videos of tying knots.
Technology-based Goals (NETS-S) • **Empowered Learner**	**Empowered Learner:** Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. **Knowledge Constructor:** Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make	**Empowered Learner:** Students will use internet to find current regulation references, helpful photos and videos of knot tying. **Knowledge Constructor:** Students will use internet to bookmark references and pages. Students will save photos and

• **Knowledge** **Constructor**	meaningful learning experiences for themselves and others.	videos to shared drive. Students will share work with others students. Students will record videos on how to tie knots.

Materials Needed for Lesson (tech and non-tech)	• Instructor computer • Projector • Students computers or tablets • Google (web browser, Gmail, Drive) • CFRs and NVICs – print copies and electronic links • Qty 2 - 3' pieces of line per student

Lesson Overview

Lesson Overview: Share how the activities in the lesson will help to meet the learning goals. How will technology play a role in meeting the learning goals?
Keeping the lecture component to a minimum and having students go through all the motions themselves might help keep their interest. Having students using the computers themselves during the lesson will help them gain hands on experience of completing certain job requirements. Using the search engine to find the regulations and different images and videos to learn how to tie knots and splice line will teach them to be resourceful, help them learn out to find specific information. Compiling all of the information in a cloud based folder will help them access their work as reference materials in the future and on the job. In many cases, this credential level will require them to manage a crew of deckhands. Recording their own knot tying actions demonstrates their ability to explain how they do important work tasks, which can prove to be beneficial in the future on the job if they have employees reporting to them. All of these activities will help students become more resourceful, empowered that they can find information themselves, and able to complete the job requirements with ease when they go back to work.

Triple E Framework Considerations

Share which technology tools you plan to integrate into the lesson. Describe how each tool will help to meet your learning goals. In addition, share the instructional practices that you plan to develop in conjunction with the tool to optimize the learning.

Name of Tool	Tool #1 Google Web Browser	Tool #2 YouTube	Tool #3 **Google Suite**
Learning goal(s) met by using the Tool	Find relevant CFR and NVICs. Discover images and videos for how to knot tying. Students will use search engine to research federal laws related to marlinespike seamanship. They will utilize different methods: Google search by CFR section, image search, video search. Students will also bookmark resources for future use.	Find videos for knot tying. Save video of assessment completion for instructor review. Students may complete assessment via video, uploaded to YouTube or cloud, for instructor review.	Save knot tying and splicing references for future use. Save video of assessment completion for instructor review. Students will save photo and video knot tying and splicing resources for future references. Students may complete assessment via video, uploaded to YouTube or cloud, for instructor review.

How is the Tool Being Integrated Team, individual, pairs, or other?	Individual	Individual	Individual Pairs
What features of the technology tool have elements of engagement? Answer the Triple E Engagement questions concerning how technology can bring about co-use, time-on-task learning and focus on the learning goals. Anywhere there is a lower score (less than 4), consider adding in instructional moves in the notes to help push the score up! Some instructional moves are listed in the rows below.	Can the technology allow students to focus on the assignment/learning with less distraction (Time on Task)? No=0, Somewhat=1, <mark>Yes=2</mark> Can the technology motivate students to begin the learning process? No=0, Somewhat=1, <mark>Yes=2</mark> Can the technology cause a shift in behavior, from more passive to active social learners (co-use)? No=0, Somewhat=1, <mark>Yes=2</mark> Score= 6/6 **NOTES:** Most people will know how to use search engines. Instructor support can be personalized to help with keyword tips, finding and vetting credible sites. May need to help distracted students from just playing around on Google rather than searching for CFRs.	Can the technology allow students to focus on the assignment/learning with less distraction (Time on Task)? No=0, <mark>Somewhat=1</mark>, Yes=2 Can the technology motivate students to begin the learning process? No=0, Somewhat=1, <mark>Yes=2</mark> Can the technology cause a shift in behavior, from more passive to active social learners (co-use)? No=0, Somewhat=1, <mark>Yes=2</mark> Score= 5/6 **NOTES:** May need to help distracted students from just playing around on Google rather than searching for CFRs.	Can the technology allow students to focus on the assignment/learning with less distraction (Time on Task)? No=0, <mark>Somewhat=1</mark>, Yes=2 Can the technology motivate students to begin the learning process? No=0, <mark>Somewhat=1</mark>, Yes=2 Can the technology cause a shift in behavior, from more passive to active social learners (co-use)? No=0, Somewhat=1, <mark>Yes=2</mark> Score= 4/6 **NOTES:** Most should be familiar with Google Suite. Maybe need to support use of Drive and collaboration with others via document sharing.

	Teaching Moves Included (From list below):	Teaching Moves Included (From list below):	Teaching Moves Included (From list below):
Which teaching moves could be integrated to aid technology in helping students engage in the learning goals? In other words, what is lacking in the technology tool (from the score above) that could be improved by good instructional strategies. Which strategies listed might be helpful. Note: This is just a suggested list.	• Teacher monitoring • Student self-reflective monitoring • Gradual release of learning	• Software tour • I do, we do, you do • Teacher monitoring	• Teacher monitoring • Co-use or co-engagement • Share-aloud
What features of the technology tool include elements to enhance student learning? Answer the Triple E Enhancement questions concerning how technology can bring about learning supports/scaffolds, higher-order thinking, and value-added over traditional tools. Anywhere there is a lower	Can the technology allow students to develop or demonstrate a more sophisticated understanding of the learning goals (possibly use higher-order thinking skills)? No=0, Somewhat=1, ==Yes=2== Can the technology create or provide supports (scaffolds) to make it easier to understand concepts or	Can the technology allow students to develop or demonstrate a more sophisticated understanding of the learning goals (possibly use higher-order thinking skills)? No=0, ==Somewhat=1==, Yes=2 Can the technology create or provide supports (scaffolds) to make it easier to understand concepts or	Can the technology allow students to develop or demonstrate a more sophisticated understanding of the learning goals (possibly use higher-order thinking skills)? No=0, ==Somewhat=1==, Yes=2 Can the technology create or provide supports (scaffolds) to make it easier to understand concepts or

score (less than 4), consider adding in instructional moves in the notes to help push the score up! Some instructional moves are listed in the rows below.	ideas (possibly differentiate or personalize)? No=0, Somewhat=1, <mark>Yes=2</mark> Can the technology create paths for students to demonstrate their understanding of the learning goals in ways they could not do with traditional tools? No=0, Somewhat=1, <mark>Yes=2</mark> Score= 6/6 **NOTES:** **Teaching Moves Included (From list below):**	ideas (possibly differentiate or personalize)? No=0, <mark>Somewhat=1</mark>, Yes=2 Can the technology create paths for students to demonstrate their understanding of the learning goals in ways they could not do with traditional tools? No=0, Somewhat=1, <mark>Yes=2</mark> Score= 4/6 **NOTES:** **Teaching Moves Included (From list below):**	ideas (possibly differentiate or personalize)? No=0, <mark>Somewhat=1</mark>, Yes=2 Can the technology create paths for students to demonstrate their understanding of the learning goals in ways they could not do with traditional tools? No=0, <mark>Somewhat=1</mark>, Yes=2 Score= 3/6 **NOTES:** **Teaching Moves Included (From list below):**
Which teaching moves could be integrated to aid technology in enhancing the learning goals? In other words, what is lacking in the technology tool (from the score above) that could be improved by good instructional strategies. Which strategies listed might be helpful. Note: This is just a suggested list.	• Graphic organizers • Visual representations of learning • Questioning practices	• Anticipation guides • Predicting	• Anticipation guides • Questioning practices • Personalization

How does the technology extend the learning goals? Answer the Triple E Extend questions concerning how technology can bring about learning that connects to everyday life, allows learners to continue to learn 24/7 and helps them develop soft skills. Anywhere there is a lower score (less than 4), consider adding in instructional moves in the notes to help push the score up! Some instructional moves are listed in the rows below.	Can the technology create opportunities for the students to learn outside the typical school day? No=0, Somewhat=1, ==Yes=2== Can the technology create a bridge between school learning and everyday life (authentic experiences)? No=0, Somewhat=1, ==Yes=2== Can the technology allow students to build authentic life skills, which they can use in their everyday life (soft skills)? No=0, Somewhat=1, ==Yes=2== Score= 6/6 **NOTES:** **Teaching Moves Included (From list below):**	Can the technology create opportunities for the students to learn outside the typical school day? No=0, ==Somewhat=1==, Yes=2 Can the technology create a bridge between school learning and everyday life (authentic experiences)? No=0, Somewhat=1, ==Yes=2== Can the technology allow students to build authentic life skills, which they can use in their everyday life (soft skills)? No=0, Somewhat=1, ==Yes=2== Score= 5/6 **NOTES:** **Teaching Moves Included (From list below):**	Can the technology create opportunities for the students to learn outside the typical school day? No=0, ==Somewhat=1==, Yes=2 Can the technology create a bridge between school learning and everyday life (authentic experiences)? No=0, Somewhat=1, ==Yes=2== Can the technology allow students to build authentic life skills, which they can use in their everyday life (soft skills)? No=0, Somewhat=1, ==Yes=2== Score= 5/6 **NOTES:** **Teaching Moves Included (From list below):**
Which teaching moves could be integrated to aid technology in extending the learning goals? In other words, what is lacking in the technology tool (from the score above) that could be improved by good	• Connect with authentic experts • Engage students in authentic discourse with others	• Connect with authentic experts • Engage students in authentic discourse with others	• Connect with authentic experts • Role Playing

instructional strategies. Which strategies listed might be helpful. Note: This is just a suggested list.			
Lesson set up. **How will I prepare for this piece of technology in this lesson?** **What do I need to do to get the technology ready?** ✓ **Selecting the just right tool or part of the resource** ✓ **Setting up Accounts** ✓ **Differentiating** ✓ **Personalizing** ✓ **Creating models or mentor**	Ensure all students have Google accounts with logins. Have computers set up and powered on. Have students login with Google accounts. Open Google Chrome.		Ensure all students have Google accounts with logins. Have computers set up and powered on. Have students login with Google accounts. Open Google Chrome.
Assessment **How will you assess the activities happening through the tool?** ✓ **Monitoring/observations**	Monitor / Observation throughout lesson. Check saved bookmarks at end of lesson.	Monitor / Observation throughout lesson. Check saved spreadsheet or Google Drive at end of lesson.	Monitor / Observation throughout lesson. Review video or in person presentation for formal assessment completion.

✓ **Formative assessment** ✓ **Informal assessments** ✓ **Summative assessment**			