

Lesson Plan Revamp - Signature Assignment

Sarah Gullion

Northeastern University

EDU 6323: Technology as a Medium for Learning

Dr. W. Britt Watwood

Introduction to the Learner Group

“Train the Trainer” is a full-day annual training and competency assessment seminar for healthcare workers (HCW) employed at facilities that utilize reusable instrumentation and equipment. Reusable (or reposable) equipment requires reprocessing between patients to ensure the safety of each device before reuse. These instruments are used during invasive procedures and require staff members to have a strong understanding of why reprocessing must be performed correctly and completely every time. Regulatory requirements recommend frequent refresher training and return demonstration when assessing HCW competency, as well as strict documentation of competency at each responsibility level. The Train the Trainer seminar is designed to educate staff leaders responsible for training and documenting processes. The seminar assesses the competency of the trainers and supplies them with the materials and knowledge to train others.

Previously, this seminar was held entirely in-person at a city hospital using PowerPoint, group discussion, and physical products to demonstrate and practice the parts of each process. This assignment will modify the original lesson plan (as presented to an ophthalmology profession staff group) to include technologies discussed in the course *Technology as a Medium for Learning*, Northeastern University, Winter 2021, with Dr. W. Britt Watwood.

Lesson Plan

Learners & Setting: Adult healthcare workers who currently perform terminal sterilization and high-level disinfection at an ophthalmology ambulatory surgery center (ASC).

Topic Area: Reusable Instrument Reprocessing

Area of Focus: Terminal sterilization and high-level disinfection of reusable ophthalmology instruments.

Learning Objectives:

- Perform pre-treatment and transport of soiled instruments
- Perform decontamination of soiled instruments
- Inspect, test, and package instruments for sterilization
- Assemble, process, and document sterilization loads
- Identify and document quality monitoring processes
- Properly store sterile instruments
- Complete required documentation

Materials Needed:

- Broken and unbroken instrument examples
- Transport containers, PPE, and pretreatment product(s)
- Peel packs, sterilization tape, and indicators
- Sterilizer peel pack rack
- Copies of equipment IFUs
- Copies of chemistry IFUs
- Copies of hospital policies
- Copies of competency checklists
- Copies of quiz for staff to take and master quiz with answer key

<i>Time & Topic</i>	<i>Objectives</i>	<i>Activities & Materials</i>
<p><u>8:00AM-8:30AM</u> <i>Core Changes/ Updated Materials List</i></p>	<p>Check-In and Seating</p>	<p>Hand out packets</p>
	<ul style="list-style-type: none"> -Presentation and packet modified for electronic delivery: With COVID-19 and web technologies, the seminar can be delivered digitally in real time using web conferencing software such as Zoom and the original PowerPoint with minor modifications. -Handout packet files collected into Dropbox for direct download by attendees. -Further resources and links collected in Pinterest for staff to access when they need to locate industry standards or documents not included in the course packets. -A Train the Trainer Linktree page collects all site links in one place. Past attendees can access the content boards at any time when performing training at their individual facilities. -Presentation optimized for viewing over cellphones and tablets as well as computers, with a PDF file available for slow internet connections. -Use Articulate 360 for more versatility and create interactive knowledge checks with instant feedback for each section in the seminar. -Instructor needs 1-2 facilitators to assist with the digital competency assessments in the afternoon. -Have attendees collect all reprocessing materials used in their department before the training begins to use during practice sessions. 	
<p><u>8:30AM-9:00AM</u> <i>Section 1: Pretreatment & Transport</i></p>	<ol style="list-style-type: none"> 1. Learn how to properly pretreat instruments after use 2. Learn how to properly transport soiled instruments 	<ul style="list-style-type: none"> ▪ Pass around sample products ▪ Demonstrate with red bins ▪ Review pretreatment product Instructions for use (IFU)
<p><i>Changes to Section 1</i></p>	<ul style="list-style-type: none"> -Pinterest board listing various pretreatment products available. -Attendees download files from Dropbox when shown on the Instructor’s screen. -Introduce standards websites for the major standards organizations using screencasting and collect into a Pinterest for later reference. 	
<p><u>9:00AM-9:30AM</u> <i>Section 2: Decontamination</i></p>	<ol style="list-style-type: none"> 1. Learn how to properly decontaminate soiled instruments 	<ul style="list-style-type: none"> ▪ Show examples of cleaning brushes ▪ Review Dakin’s IFU & bleach concentration chart ▪ Review automated washers
<p><i>Changes to Section 2</i></p>	<ul style="list-style-type: none"> -View a science video on ultrasonic cavitation. -Demonstrate how to request a manufacturer IFU using their website using a pre-recorded screencast. -Discuss web authorship and why IFUs should only be downloaded from a trusted source to ensure the most recent version is used. 	

<i>Time & Topic</i>	<i>Objectives</i>	<i>Activities & Materials</i>
<p><u>9:30AM-10:00AM</u> <u>Section 3: Preparation & Packaging</u></p>	<ol style="list-style-type: none"> Learn how to properly inspect instruments Learn how to properly package instruments for sterilization 	<ul style="list-style-type: none"> Pass around broken instruments; ask staff to identify damages Demonstrate use of peel packs and tip protectors View kit wrapping video Practice sealing peel packs Practice wrapping Review instrument IFUs
<p><i>Changes to Section 3</i></p>	<p>-Display “good instrument” and “broken instrument” photos – attendees vote to identify the damaged instrument in real time using Poll Everywhere.</p> <p>-Instructor demonstrates wrapping on camera.</p> <p>-Instructor demonstrates peel packing on camera.</p> <p>-Attendees open wrapping video on their individual machines to reference/follow during the afternoon hands-on.</p> <p>-Have class complete <i>The Instrument Bodyguard</i> game on www.Crazy4Clean.com and go through the quiz questions live together in video conference.</p>	
<p><u>10:00AM-10:30AM</u></p>	<p>Break</p>	
<p><i>Changes</i></p>	<p>Take attendance via callbacks after the break</p>	
<p><u>10:30AM-11:00AM</u> <u>Section 4: Terminal Sterilization</u></p>	<ol style="list-style-type: none"> Learn how to check sterilizer for functionality Learn how to load and unload instruments from sterilizer Learn how to confirm sterilizer efficacy 	<ul style="list-style-type: none"> Review sterilizer IFUs Review biological IFUs Review recordkeeping templates
<p><i>Changes to Section 4</i></p>	<p>-Attendees download the applicable sterilizer IFUs for their facility from a Dropbox assembled by the instructor.</p> <p>-Show a video demonstrating how to load the sterilizers and perform sterilizer maintenance tasks.</p> <p>-Display scanned sample sterilizer log sheets and have attendees discuss with one another to identify errors. Provide feedback in real time.</p>	
<p><u>11:00AM-11:30AM</u> <u>Section 5: Sterile Instrument Storage</u></p>	<ol style="list-style-type: none"> Learn how to properly transport sterile instruments Learn how to properly store sterile instruments 	<ul style="list-style-type: none"> Demonstrate loading peel packs into a rack Review policies

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<p><i>Changes to Section 5</i></p> <p><u>11:30AM-NOON</u> <u>Section 6:</u> <u>Recordkeeping &</u> <u>Quality Monitoring</u></p>	<p>-Play a humorous video of improper/unsafe instrument transport to bring attention back to the presentation.</p> <p>-Attendees identify which standards organization their facility follows in group discussion.</p>	<p>1. Learn how to perform routine maintenance on equipment</p> <p>2. Learn how to perform quality monitoring activities</p> <p>3. Learn how to record maintenance and quality monitoring activities</p> <ul style="list-style-type: none"> ▪ Review recordkeeping templates ▪ Show examples of quality test products ▪ Review sterilizer IFUs
<p><i>Changes to Section 6</i></p> <p><u>12:00PM-12:30PM</u></p>	<p>-10-minute discussion held in breakout rooms for attendees to interact with one another on camera and discuss how their facilities record regulated documentation.</p> <p>-Attendees choose one person from their breakout group to report back to the Instructor.</p> <p>-Link to a Pinterest of various quality testing products.</p>	<p>Sterilization Quiz & In-Class Review</p>
<p><i>Changes to Quiz</i></p> <p><u>12:30PM-1:00PM</u></p>	<p>-Use SurveyMonkey to administer test questions.</p> <p>-Instructor displays a live count of completed quizzes and wrong answers on their screen.</p> <p>-Group discusses problem questions as identified by the running score tally.</p>	<p>Lunch Break</p>
<p><i>Changes</i></p> <p><u>1:00PM-3:00PM</u> <u>Hands-On</u></p>	<p>Take attendance via callbacks after lunch break.</p>	<p>Competency Assessments</p> <ul style="list-style-type: none"> ▪ Using competency checklists, have staff perform each activity ▪ Reeducate as necessary ▪ Ask staff to state reasoning behind activities & identify IFU requirements

<i>Time & Topic</i>	<i>Objectives</i>	<i>Activities & Materials</i>
<i>Changes to Hands-On</i>	<ul style="list-style-type: none"> -Step-by-step videos of how to peel pack instruments and how to wrap kits hosted on Dropbox so staff can reference and follow along during practice. -Breakout groups used for staff to practice each process, working off the competency checklists and videos, and demonstrated on camera to assist each other. -Instructor and Facilitator(s) spend time in each breakout room to guide attendees and answer questions, as well as observe how each attendee is doing over video for competency. -Attendees encouraged to use a cellphone or tablet camera so they can move it around to show what they are doing. -Include a full room discussion after practicing each skill, then back to breakout rooms with new group members for the next skill practice. -Pose competency questions to the entire group for discussion after breakout rooms end and answer final questions. -Link attendees to a Pinterest with continuing education resources about reprocessing. -Have attendees complete a feedback survey for the seminar on SurveyMonkey. 	

Rationale

Web aggregate sites are a very important part of this lesson revamp because the attendees need to have access to all the relevant files without having the instructor there to pass out a physical handout. This format is also easier to maintain over time as the attendees can access the most recent resources lists using the Linktree and be able to select the specific subcategory they require resources from, without having to dig through one entire aggregate of every resource for every portion of the process.

Articulate 360 should be used for this program to more easily integrate responsive activities, but still allow the instructor to perform the majority of the activities from a single live presenter. Articulate files can also be exported for LMS systems, so if the hospital decides to take Train the Trainer into a digital-only format going forward, attendance and quiz results will be saved within the LMS for record.

Changing between presentations, screencasts, videos, polls, games, interactive discussion, and physical practice is designed to keep the students from losing attention and becoming disengaged from the

learning experience. This also addresses the varied learning needs of a diverse attendee population. It also allows the attendees to develop relationships and rapport with other attendees working in the same capacity, increasing overall comfort and confidence in asking questions and discussing procedures. Application to an attendee's job is essential to retention of this information, so all sections are designed to reference the specific materials and processes used by each facility to build relevant bridges between the taught material and current practice. Using real-world examples of instruments and log sheets encourages attendees to use critical thinking and apply the information learned in each section to identifying and rectifying problems they experience in their day-to-day work.