

Adult Learning



There are many learning theories when it comes to adult learners, and each one has unique applications and techniques associated with it. This course will visit a few different theories and propose the application of each to varying scenarios while addressing the basics of Design and Training Delivery.

INTRODUCTION

- ≡ **Introduction**
- ≡ **Popular Adult Learning Theories**
- ≡ **Practical Use of the Adult Theories**
- ≡ **The Basics of Design and Training Delivery**
- ≡ **Practical Use of Design and Training Delivery**
- ≡ **Resources**

Introduction



Training Objectives help the learner understand what the facilitator expects of them at the end of the training.

By the end of this training learners will be able to:

- Explain the principles of adult learning.
- Use adult learning principles to achieve the key learning objectives of a training module.

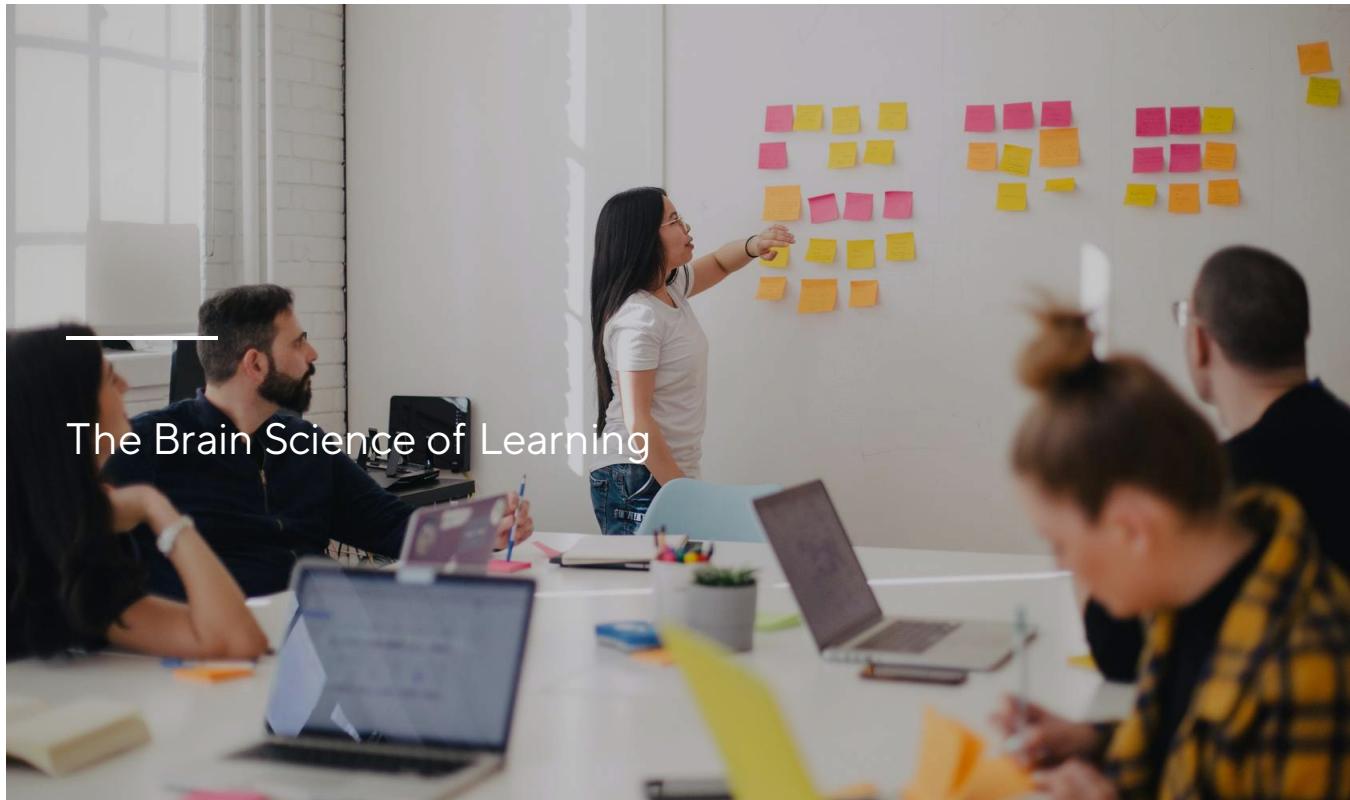
- Deliver training that is appealing to participants by applying adult learning theory.

Share Your Learning Experience

Think of one memorable training experience (positive or negative) to you as a learner. Take a moment to write a short paragraph about it on a single sheet of paper.

What were you learning?

What made it memorable?



The Learning Process

Each neuronal network represents a physical change in the brain. Each time we learn something new – when learning takes place through a synaptic connection—a new tiny “branch” forms in our brain. By connecting new stimuli (information) to an existing neuron—the physical process of learning makes it clear the importance of connecting to prior experience for our learners. We can then say that learning is the physical act of growing our existing neuronal networks.



Storage Cubbies

Tiny Storage Cubbies

Imagine the brain as if it was comprised of millions of tiny little storage cubbies. Each time we attend to a new stimulus, our brain processes the signal coming from that stimulus by comparing it

immediately to the contents of those millions of cubbies to ask—as Taylor and Marienau put it: “How is this experience like what I already know?” (2016, p. 55).

- To understand how the brain learns is to comprehend that trainers and facilitators simply must find some way to connect new information to something the learner already knows. Without that connection, learning is not taking place.
- The brain's plasticity critical role is in allowing the brain to adapt and change over time based on learning that comes from new experiences.
- The physical transformation of the brain can only take place by connecting new stimuli (information) to an existing neuron—hence the importance of connecting to prior experience in our learners. The process of learning is literally the physical act of growing our existing neuronal networks.



The brain needs enriched environments to learn because it processes things in a multi-modal fashion.

(Image <https://infogram.com/learning-enriched-vs-impoverished-environments-1gxop478kjl5pwy>)

Using Multi Stimuli From Different Avenues

Using quotes, images, charts, data, sounds, stories, and colors are all examples of multi-modal stimuli that help create enriched learning environments. By providing a variety of stimuli, we can increase the likelihood of connecting with our learners' prior experiences.

For example, when sharing a previous patient story, we can enrich it by showing images, sharing data, and allowing your patient to ask questions and add comments.

The Adult Learning Journey

The Fresenius Medical Care team is excited to share some of what we have learned and practiced on Adult Learning Theories with you in this course. We began with the biology of learning in the hope of sparking your curiosity. I am counting on your views, ideas, and experience to add to the new content you will find here.

CONTINUE

Popular Adult Learning Theories

We will present only a few of the many Learning Theories in this activity; some may be familiar to you. It is still essential to review each and compare it with the training experience you have.

Let's begin with Andragogy.



Andragogy

What is Andragogy?

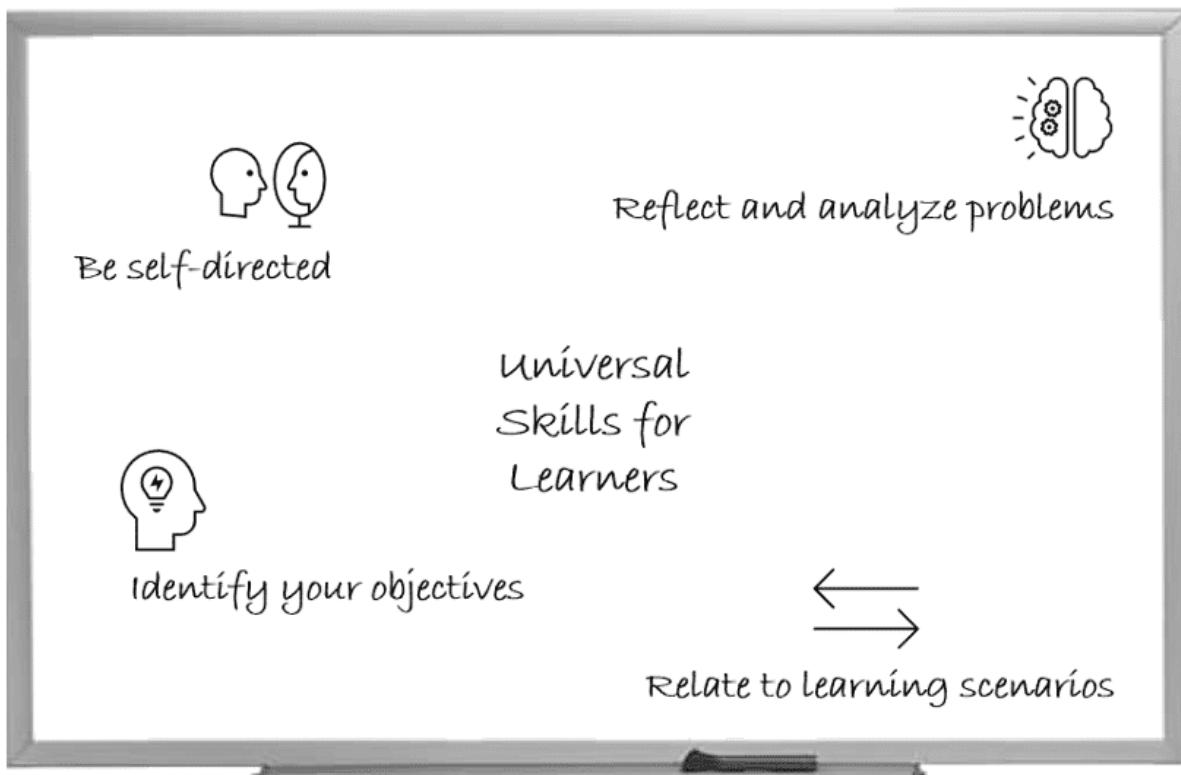
Andragogy is the technique used to help adults acquire knowledge and skills in contrast with pedagogy, which helps children. Malcolm Knowles popularized the concept of andragogy in 1980. He

compared Andragogy to Pedagogy to highlight adult learning needs.

How is adult learning needs (Andragogy) different from the children's (Pedagogy)?

According to Malcolm Kowles to successfully acquire knowledge and skills adults need:

- To know why they should learn something.
- Be ready to Learn: Internal motivation. To know how learning will help the learner specifically.
- To apply their Adult Learner Experience: To bring prior knowledge and experience that form a foundation for their learning.
- To have Self-Concept: The freedom to be self-directed and take charge of their learning journey.
- Orientation to Learning: The learner is able to find the most relevance from task-oriented learning that can be immediately applied to their reality.



The four principles applied to adult learning, according to Knowles (1984):

1. Involve your adult learners in the planning and evaluation of their education.
2. Experience (including mistakes) as the basis for adult learning activities.
3. Learning subjects must have immediate relevance and impact on daily activities.
4. Learning must be problem-centered rather than content-oriented. (Kearsley, 2010)

Check What You Learned

Your 65-year old patient is learning to set up the Liberty® Select cycler. During his second session, you ask him how he feels about the tasks he has learned so far. He mentions that he is having a hard time remembering the sequence of how and when to push the blue button on the patient connector.

The cards below contain a list of ideas that pertain to either the Andragogy Learning Theory or Pedagogy Learning Theory. Sort the cards by dragging and dropping each card in its appropriate theory.

Pedagogy

You must learn how to use
the stay•safe® PIN
technology.

Let me show you again.

Show me where you are
running into problems.

Andragogy

Using the stay•safe PIN
technology help reduce

Would you like to practice, or

potential touch contamination.

read the quick guide about the patient connector?

Let's start with what you remember.

You want to know more?

Click on the bottom left of the card below:

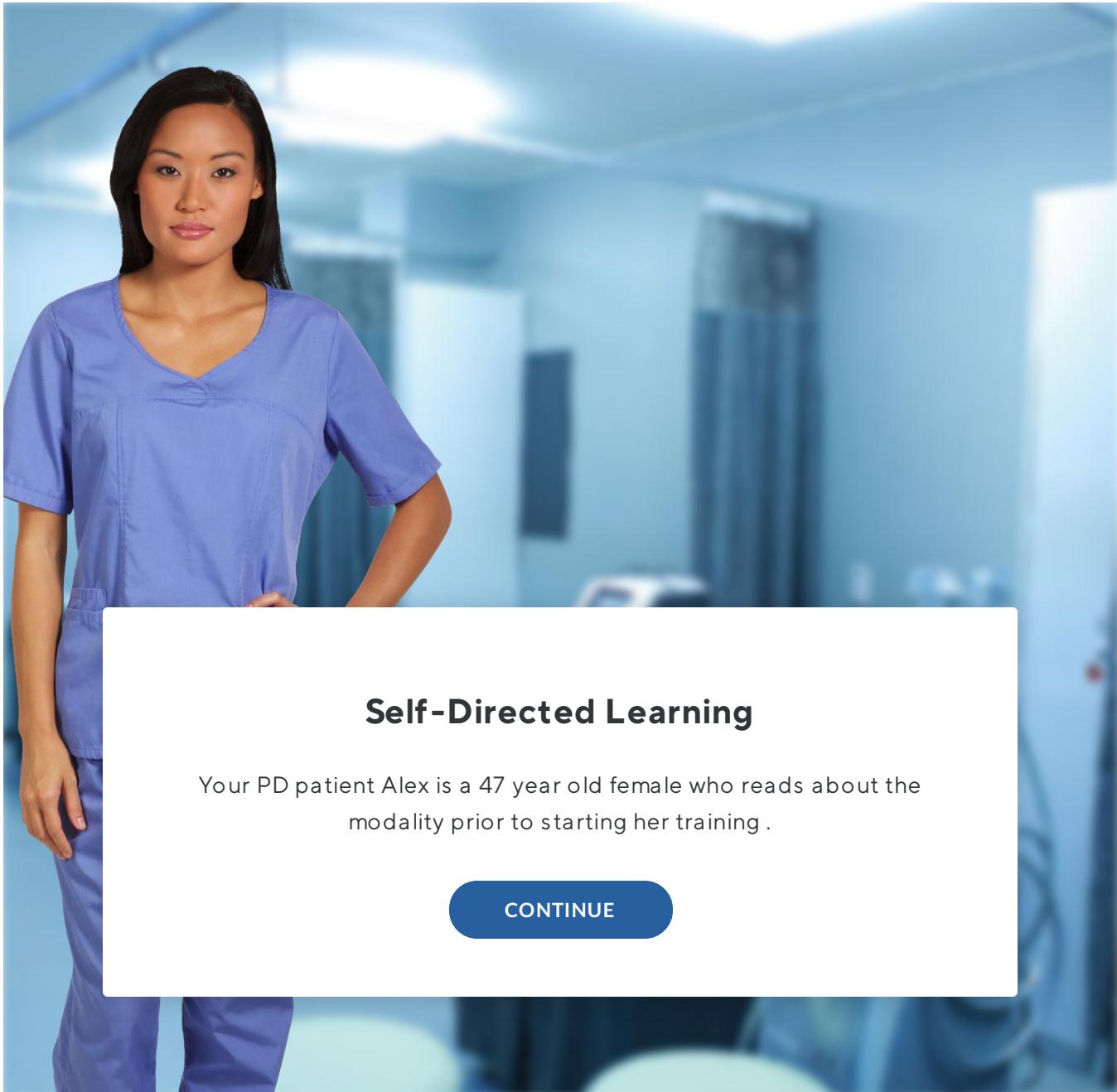


By giving choices of how the patient wants to go over the task, starting from what he or she remembers and explaining why it is essential to learn, you are demonstrating the Andragogy Learning

Self-Directed Learning -



Self-directed Learning describes a process in which individuals take the initiative, with or without the help of others, in determining their learning needs and learning goals, identifying resources for learning, choosing and implementing appropriate learning strategies, and finally evaluating learning outcomes. (Knowles, 1975, p. 18) .



Self-Directed Learning

Your PD patient Alex is a 47 year old female who reads about the modality prior to starting her training .

CONTINUE

Scene 1 Slide 1

Continue → Next Slide



On the first day of training Alex, asked relevant questions and wanted to get additional resources.

1

Alex must be a self-directed learner.

Scene 1 Slide 2

0 → End of Scenario



Scene 1 Slide 3

0 → Next Slide

1 → Scene 1 Slide 1



Scenario End

Add text here to let learners know your scenario is over. View [this tutorial](#) to learn how to create branching scenarios.

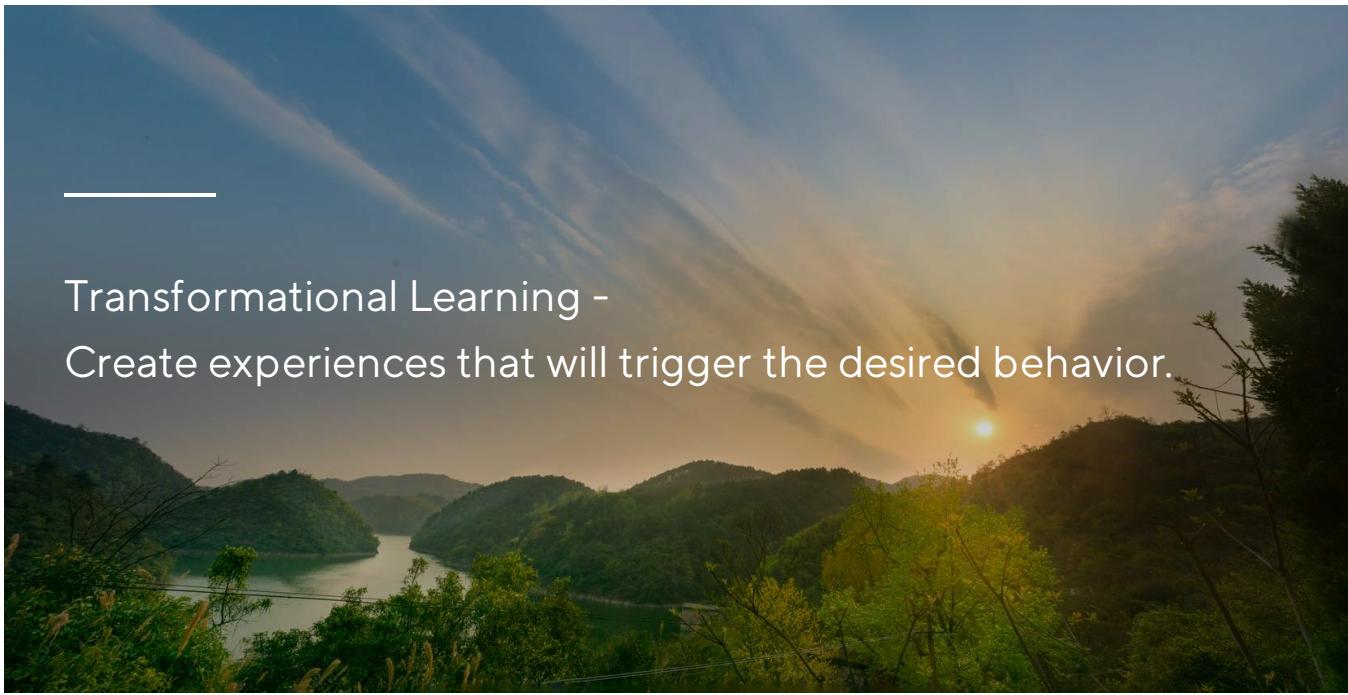
START OVER



Scene 1 Slide 4

Continue → End of Scenario

Transformational Learning - Create experiences that will trigger the desired behavior.



Transformational learning aims to provide learning experiences that cause a shift in an individual's perspective.

Instrumental learning - An example of Instrumental Learning would be to begin asking the patient to perform a task and ask questions during the task that will clarify and point out the importance of steps and or features of the Liberty Select cyclers.

Communicative learning - An example of Communicative Learning would be to begin a topic by asking the patient what he or she thinks or feels about his experience with a task, product or a product feature and expand his or her knowledge about it.

A-HA!

The Transformational Theory uses the A-Ha moments to shine the light into dilemmas, crises, conflicts. It believes that learning takes place when the new meaning is given to an earlier experience (Mezirow, 1990), or an old meaning is seen in a new light. Encourage critical thinking and critical reflection.

Click Start to look at two steps that will help you creating A-HA moments.

Step 1

Suggest an Emotional Scenario



Identify the scenario that lays out the dilemma or crisis. The flow alarm may interrupt a patient's sleep for example. What should the patient do? You may ask the patient how he or she can resolve the Flow Alert alarm.

Step 2

Describe How It Relates to the Learner



Establish personal relevance. What is in it for me? Provide the value of the results of learning. The patient has a personal need to know how to resolve the Flow Alert alarm because it will continue to sound until it is resolved.

Summary

Setting the scene with a crisis or dilemma - providing opportunity for evaluating and critical thinking which will lead to the Aha moment as learners re examine beliefs and attitudes creates Transformational Learning Opportunities.

Look at the Pros and Cons of Transformational learning by clicking on the plus sign to expand the cards below:



The A-HA Moment

[CONTINUE](#)

Scene 1 Slide 1

Continue → Next Slide



Larry, a 65-year-old male patient, has been having recurrent early-stage peritoneal infections. You have demonstrated the steps to prepare the area and wash hands with him several times.

1

Today you show him the consequences of acute peritoneal infection and how it would impact his life if he has to go back to in-center hemodialysis

Scene 1 Slide 2

0 → End of Scenario



Add another question to your scenario here.
There are many ways to branch learners
based on their responses.

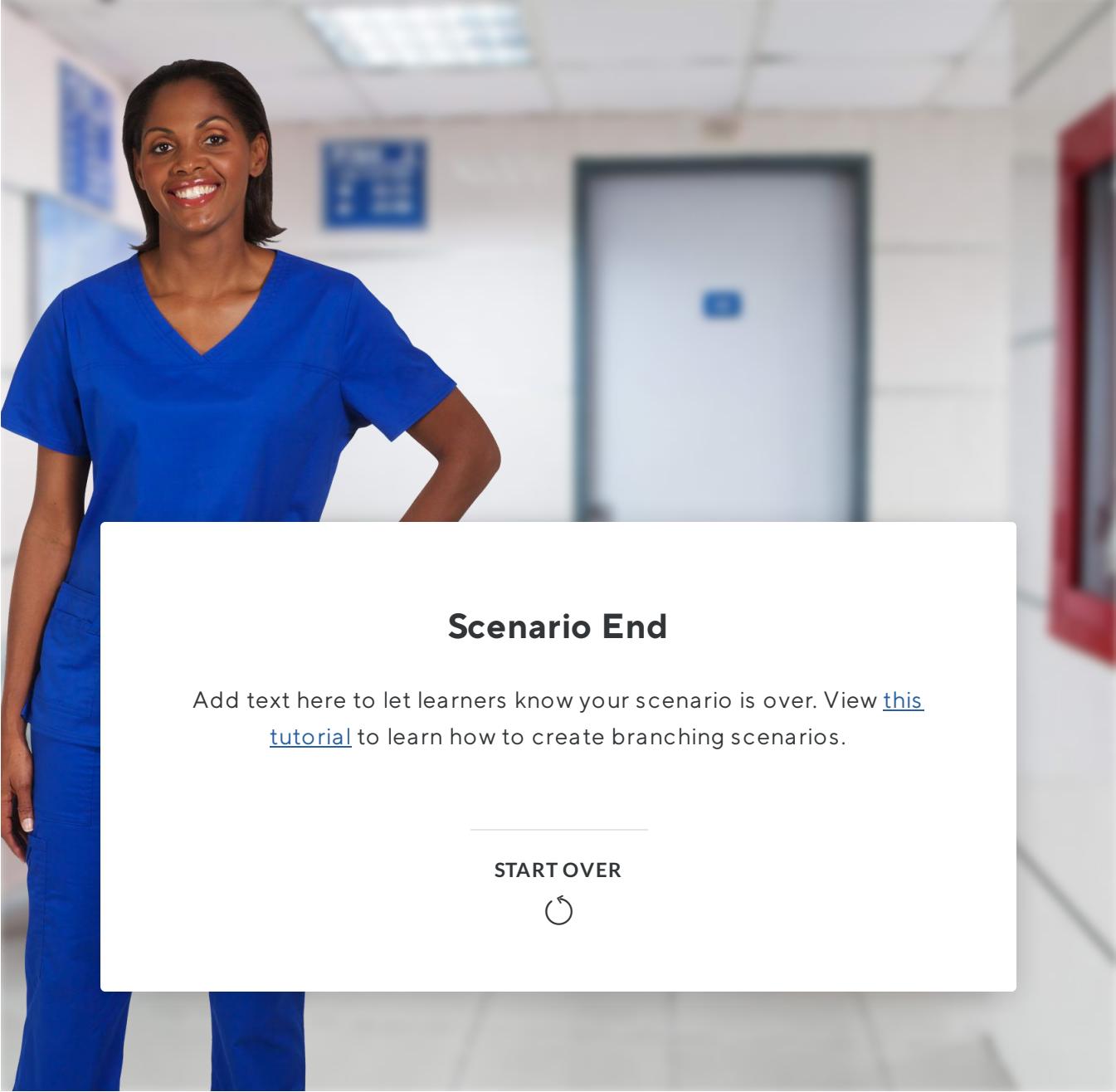
1 End this scenario.

2 I want to do the scenario again.

Scene 1 Slide 3

0 → Next Slide

1 → Scene 1 Slide 1



Scenario End

Add text here to let learners know your scenario is over. View [this tutorial](#) to learn how to create branching scenarios.

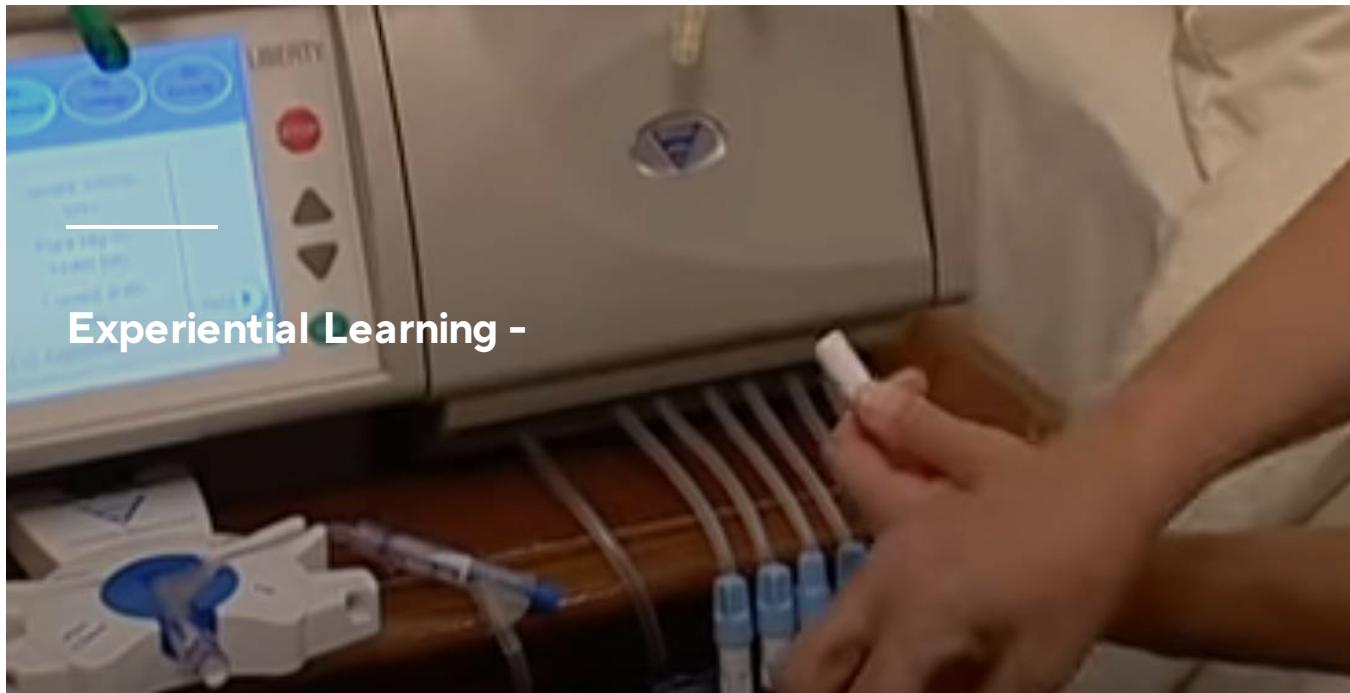
START OVER



Scene 1 Slide 4

Continue → End of Scenario





This theory supports the idea that experiences shape us into adults. Cognition, environmental factors, and emotions, influence the learning process.

Watch a quick YouTube video on [Experiential Learning](#) made by Experience Based Learning Systems (EBLS).

Take the test at [Personalitymax](#) to look at your learning styles.

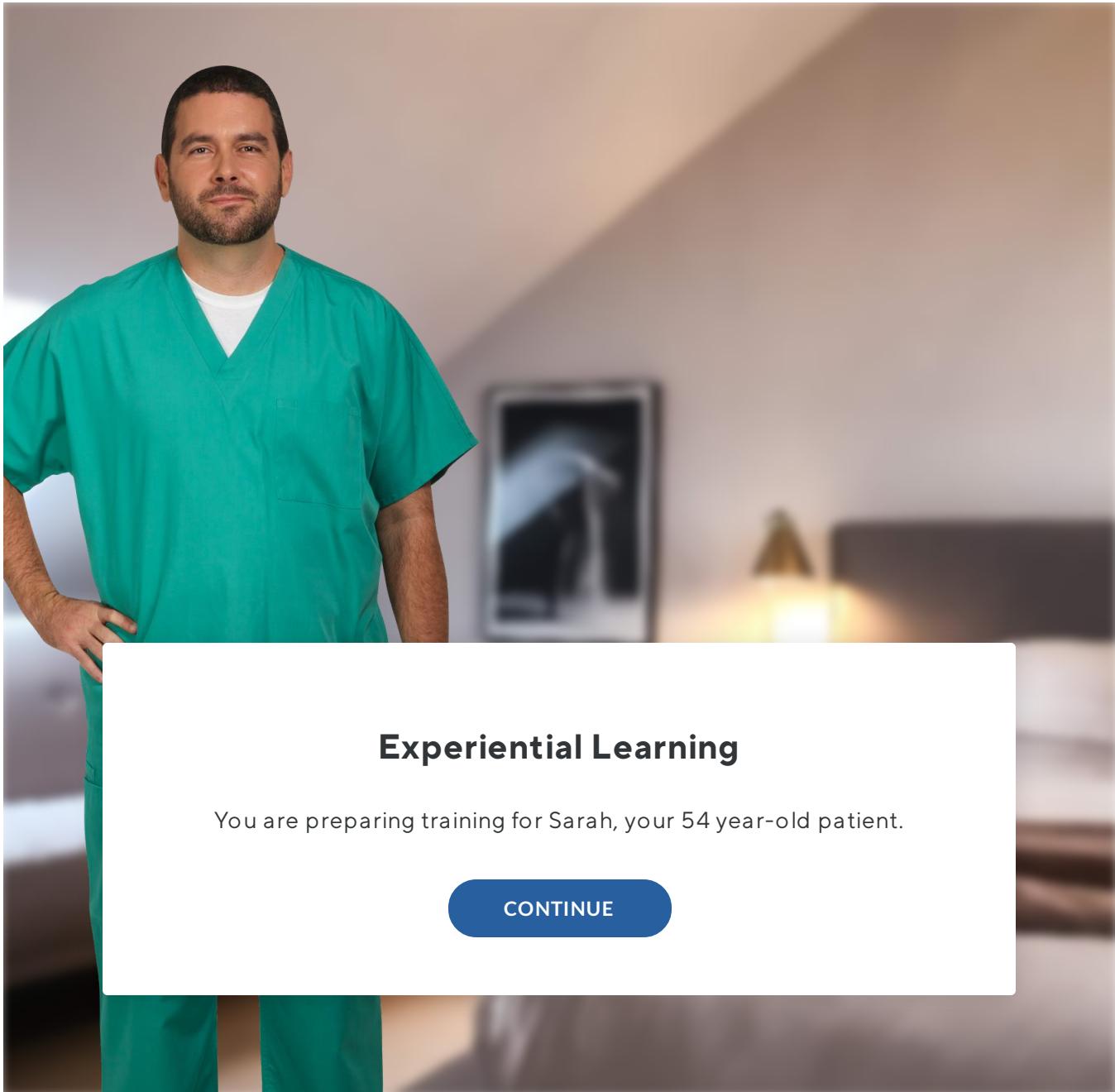
Summarizing Experiential learning:



We all use each of the learning styles in different degrees and circumstances. Some people have one more robust learning style, while others have even strength in all styles.

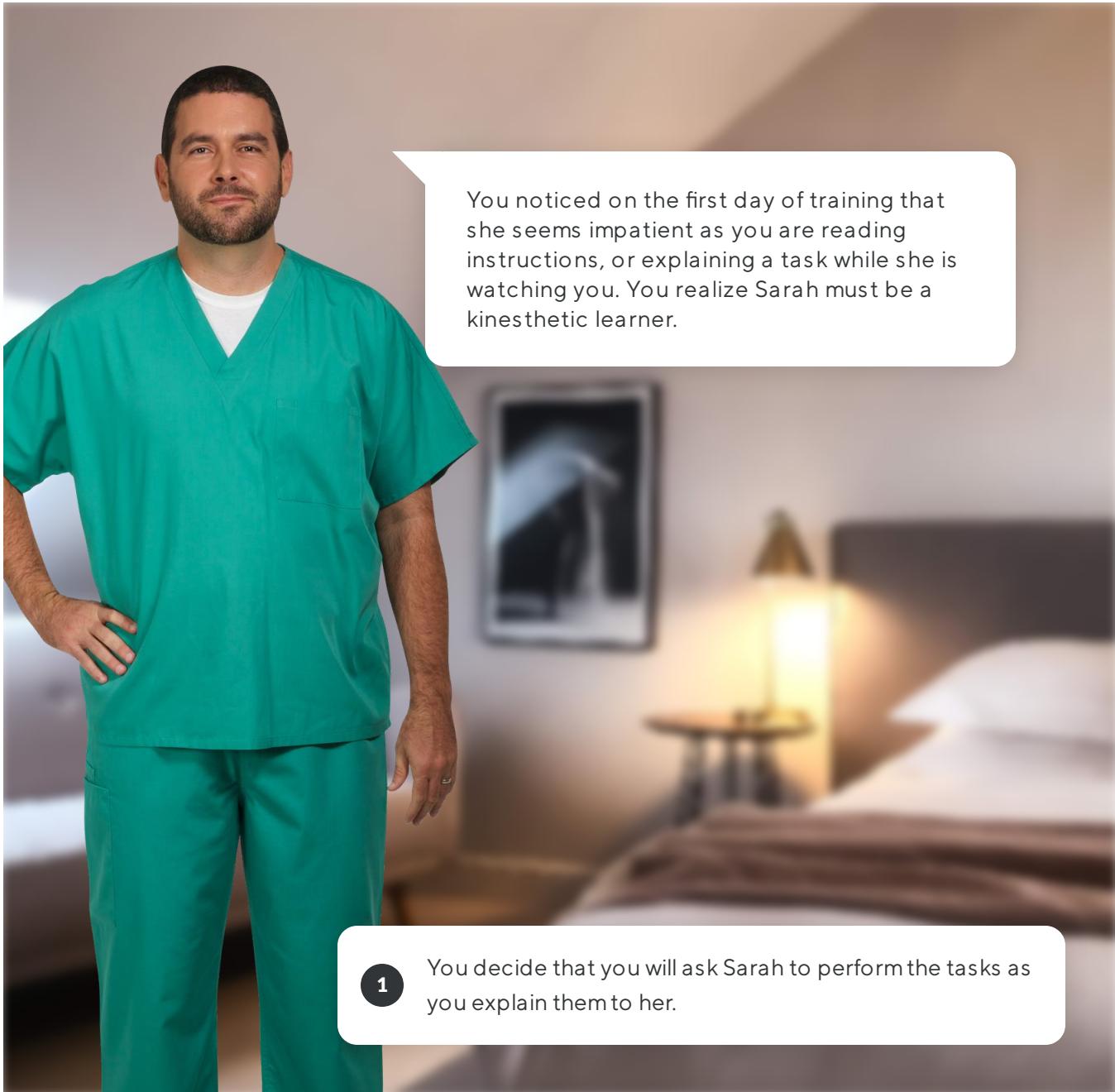
As a facilitator being able to identify learning styles, their strength, and how they relate to each other maximizes your patient's learning potential.

Look at the Experiential Learning Example Below



Scene 1 Slide 1

Continue → Next Slide



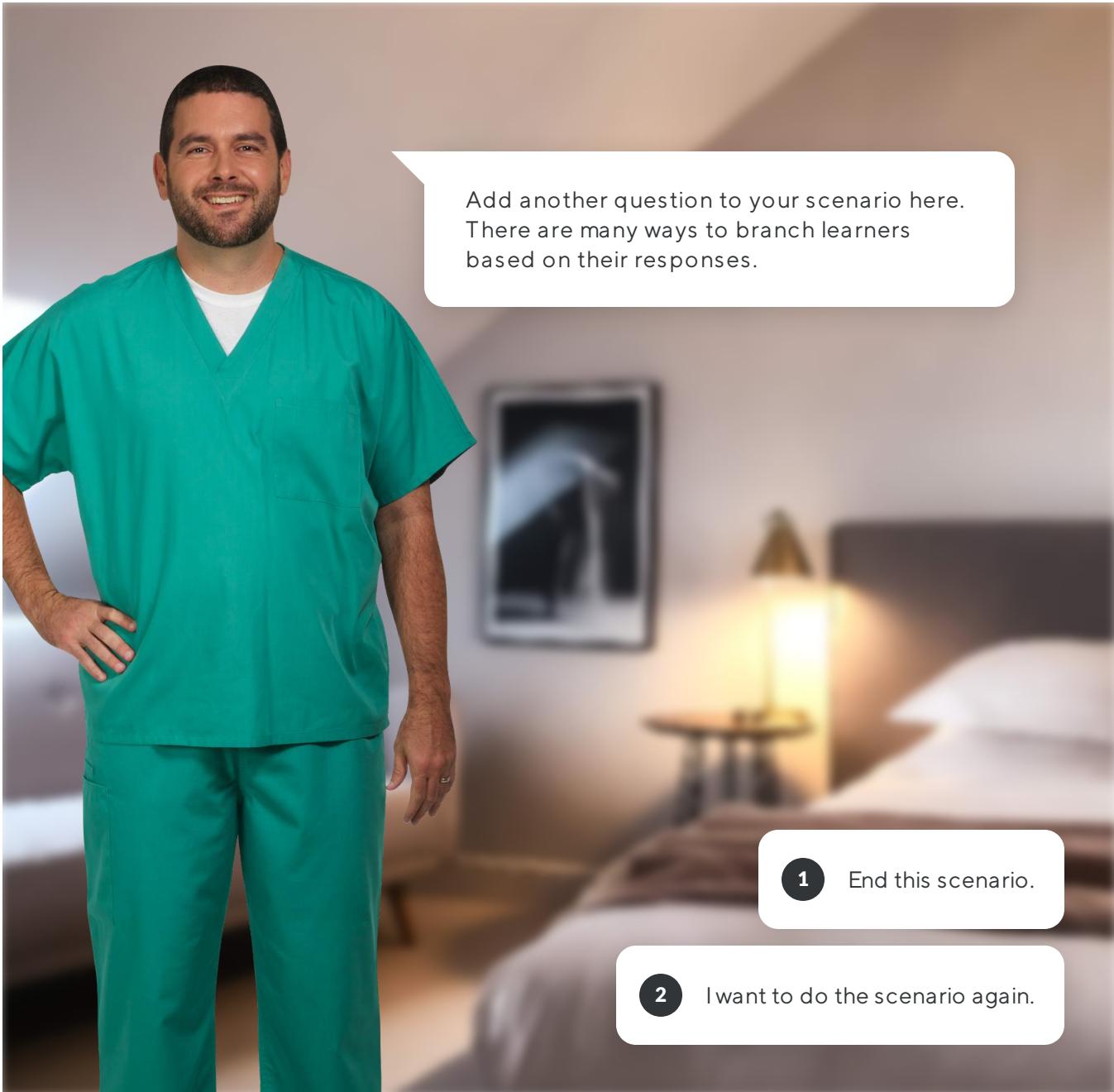
You noticed on the first day of training that she seems impatient as you are reading instructions, or explaining a task while she is watching you. You realize Sarah must be a kinesthetic learner.

1

You decide that you will ask Sarah to perform the tasks as you explain them to her.

Scene 1 Slide 2

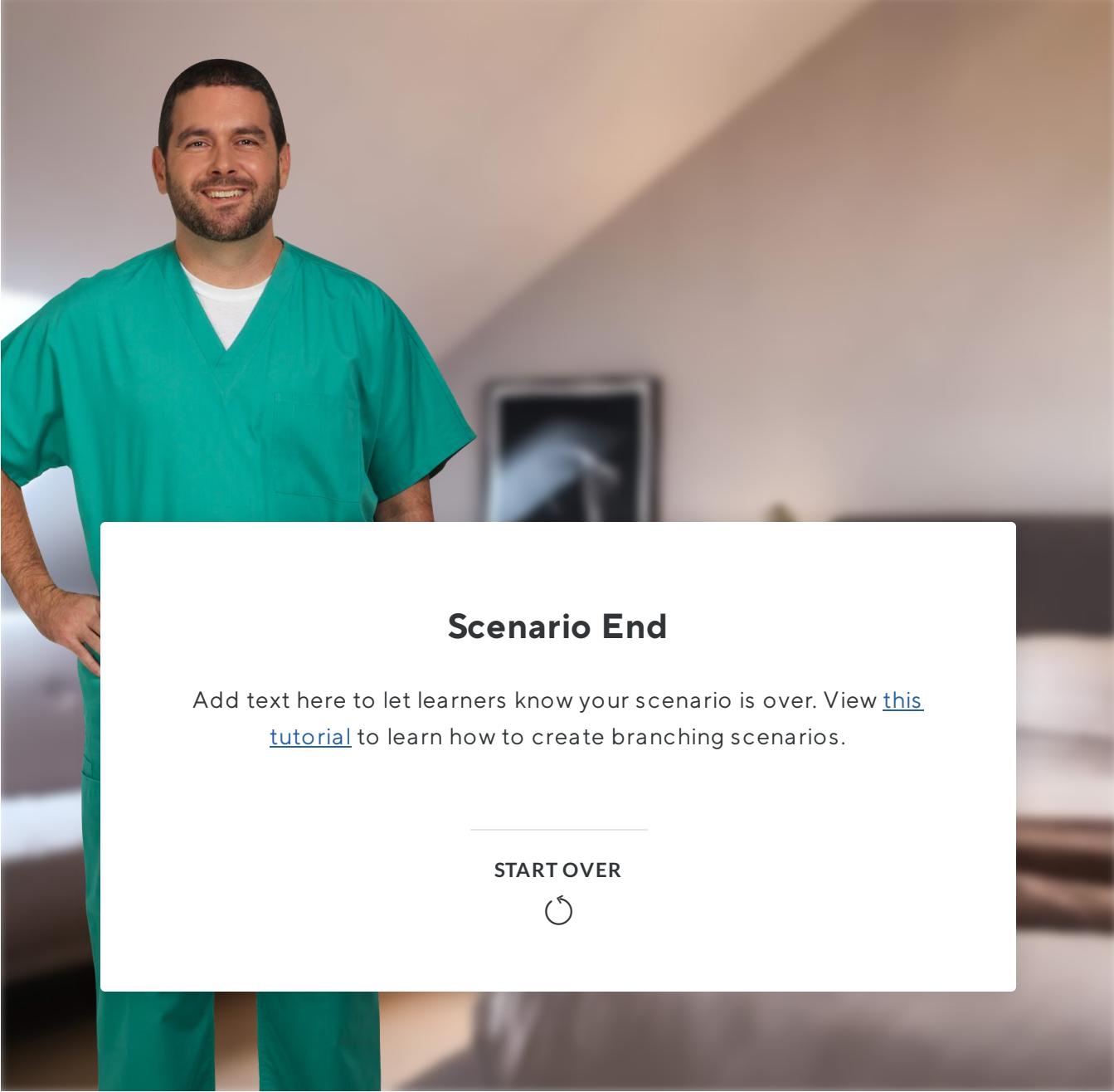
0 → End of Scenario



Scene 1 Slide 3

0 → Next Slide

1 → Scene 1 Slide 1



Scenario End

Add text here to let learners know your scenario is over. View [this tutorial](#) to learn how to create branching scenarios.

START OVER

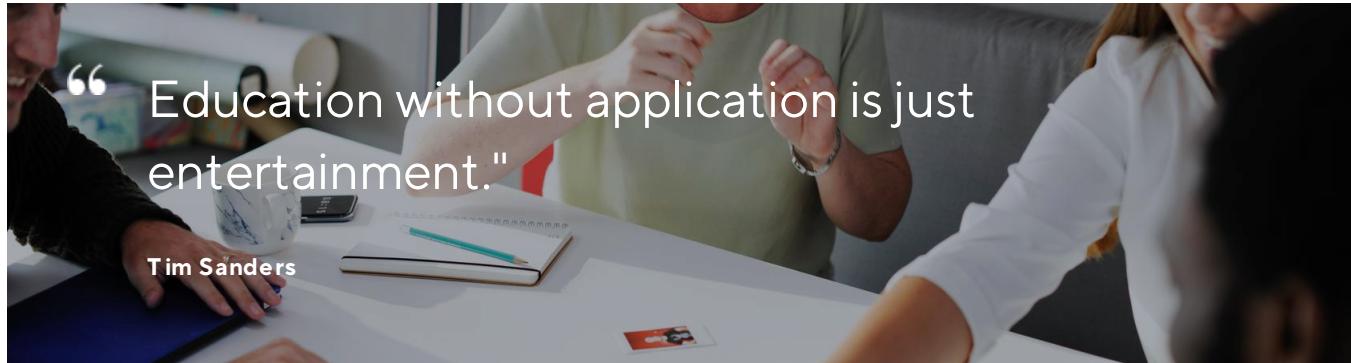


Scene 1 Slide 4

Continue → End of Scenario

CONTINUE

Practical Use of the Adult Theories



Practice This ...

Scenario:

You have provided your patient with the - (Ex: Liberty Select cycler and the stay.safe organizer)

You are teaching your patient to attach the organizer to the machine

Explain to the patient the two main objectives of the learning experience. (Ex: Identify the stay.safe organizer and the post below the screen, accurately attach the organizer to the machine.)

How can you put him/her in charge of their education?

How can you make the value of the content evident?

How can you make this moment memorable and meaningful?

At the end of the patient's experience, revisit the goals.

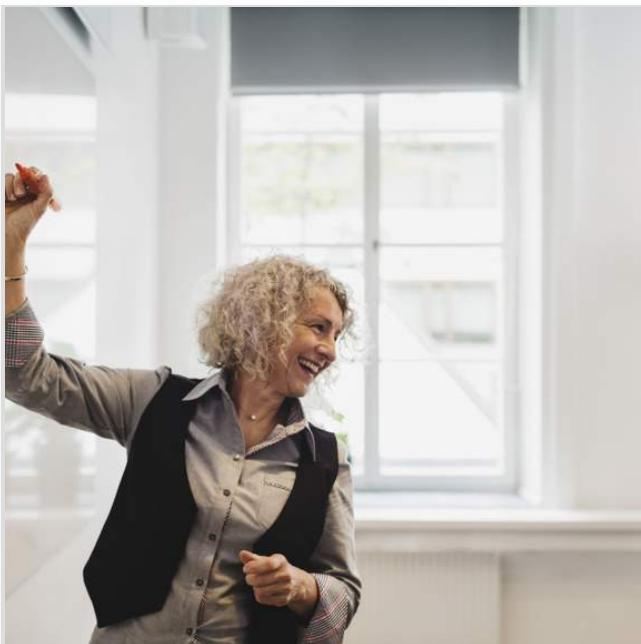
How would you apply adult learning theory to facilitate your patient learning experience with the CCPD Liberty Select cycler set up?



- Facilitators and learners should trade ideas. Learners are expected to learn through participating and exchanging ideas. Reflecting, challenging, and finding solutions to scenarios proposed.
- The content of delivery addresses the needs of the trainees (cut the fluff).
- Sessions planning accounts for the time for the informal exchange of ideas.

- Content can be applied to learners on the job tasks and are accompanied by practical (hands-on) exercises.
- The environment is conducive to learning where the facilitator assists learners in the application of topics learned.

How Can You Facilitate Content?



The DIRECTIVE style involves lecturing or presenting the content to the participants, it may include question/answer periods monitored by facilitator. The facilitator is the expert.



The FACILITATIVE style involves debates and discussions. Feedback and flexibility of time takes in consideration unpredictable comments/reactions of individuals.

Click on the tabs below to see the value of the six most popular delivery modalities -

LEARNING MANAGEMENT SYSTEM (LMS)	BRAINSTORMING	ROLE-PLAY OR ROLE REVERSAL	CASE STUDY	PRE
----------------------------------	---------------	----------------------------	------------	-----

Learners can be assigned tasks in the LMS pre or post-training. Some examples are:

eLearning

Job aids

Video Version of job aids

Video tutorials

Pre and post evaluations

"Brown-bag" lunch or discussions sessions



LEARNING
MANAGEMENT
SYSTEM (L...

BRAINSTORMING

ROLE-PLAY OR
ROLE REVERSAL

CASE STUDY

PRE

Brainstorming involves flushing out ideas by examining every possible alternative. It can be done in a group or individually, but ultimately the ideas should be shared.



LEARNING
MANAGEMENT
SYSTEM (L...

BRAINSTORMING

ROLE-PLAY OR
ROLE REVERSAL

CASE STUDY

PRE

Participants gain experience by assuming the role of others. As much as possible, role-plays should simulate a real situation. Generally, role plays have a high impact on the learner.



LEARNING MANAGEMENT SYSTEM (L...	BRAINSTORMING	ROLE-PLAY OR ROLE REVERSAL	CASE STUDY	PRE
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A situation that identifies problem areas is presented to the learners. It is usually written down, so the details are at hand. Solutions to the problems can be discussed.



LEARNING MANAGEMENT SYSTEM (LMS)	BRAINSTORMING	ROLE-PLAY OR ROLE REVERSAL	CASE STUDY	PRE
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A group of experts is brought in to discuss problems in front of the participants. For example, if you are having trouble convincing women of the necessity for bank accounts, you could have several village women with accounts come and speak on the subject.

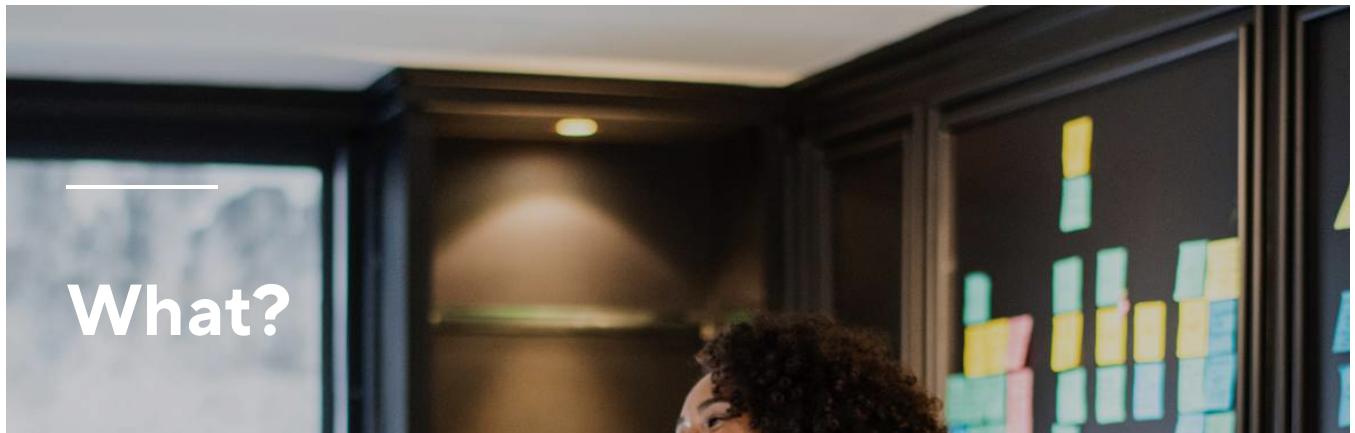


LEARNING MANAGEMENT SYSTEM (LMS)	BRAINSTORMING	ROLE-PLAY OR ROLE REVERSAL	CASE STUDY	PRE

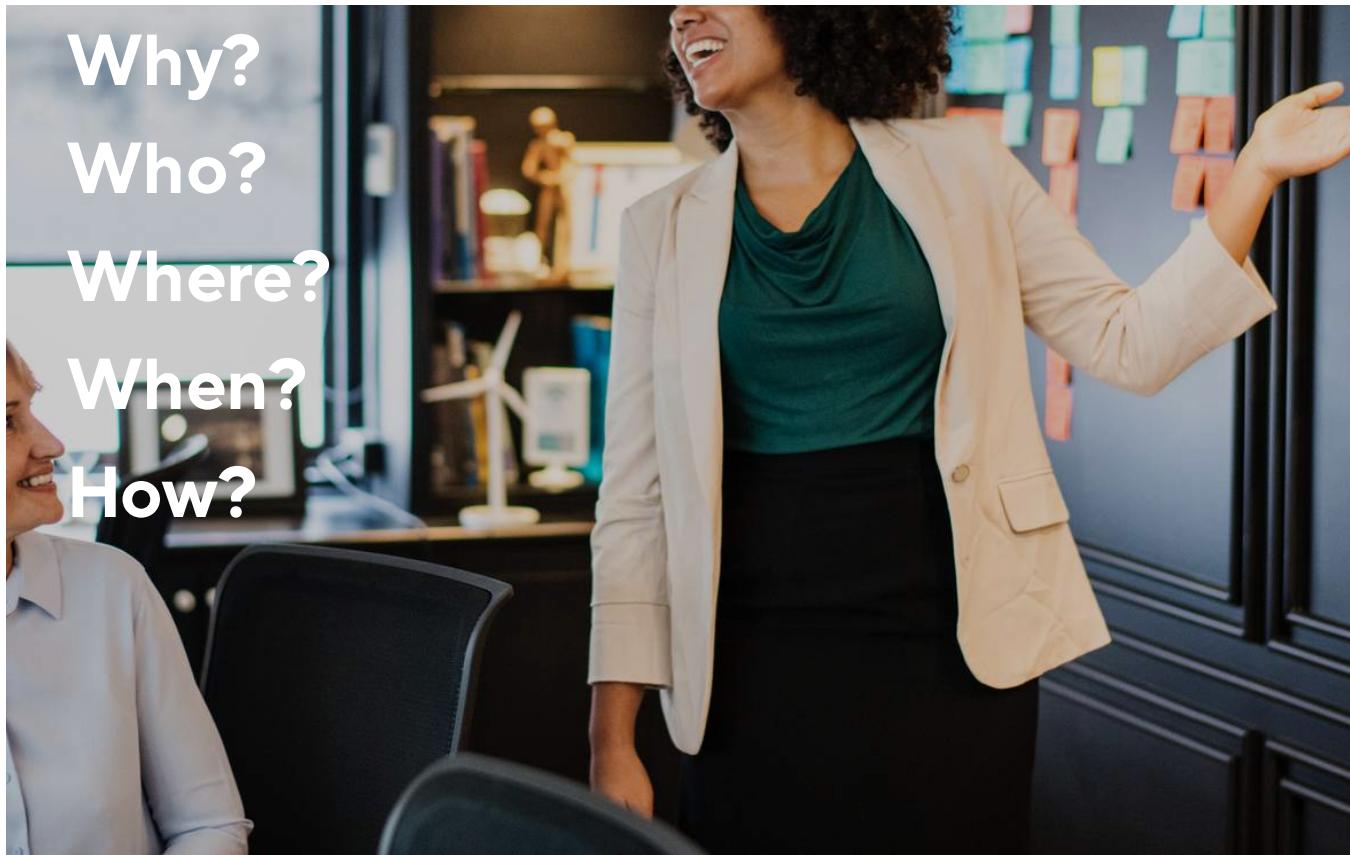
- **Increased Convenience. Time and location.**
- **Short, interactive modules that can be repeated if needed. Micro-Learning. On-demand short increments of training which create a more manageable and memorable experience.**
- **Increased Participation & Engagement. Chat and rating feature, interactive comment and share features, questions, polls, and break out rooms.**



Summarizing preparing and delivering content for adults requires that you facilitate learning, use content delivery methods that engage the different learning styles, and ask the right questions.



**Why?
Who?
Where?
When?
How?**



Your Turn

Visit the paragraph you created where you described your memorable learning experience. If you were preparing to deliver the same topic what questions would you believe important to ask before determining how you would deliver the same content?



What _____?



Why _____?



Who _____?



Where _____?



When _____?



How _____?

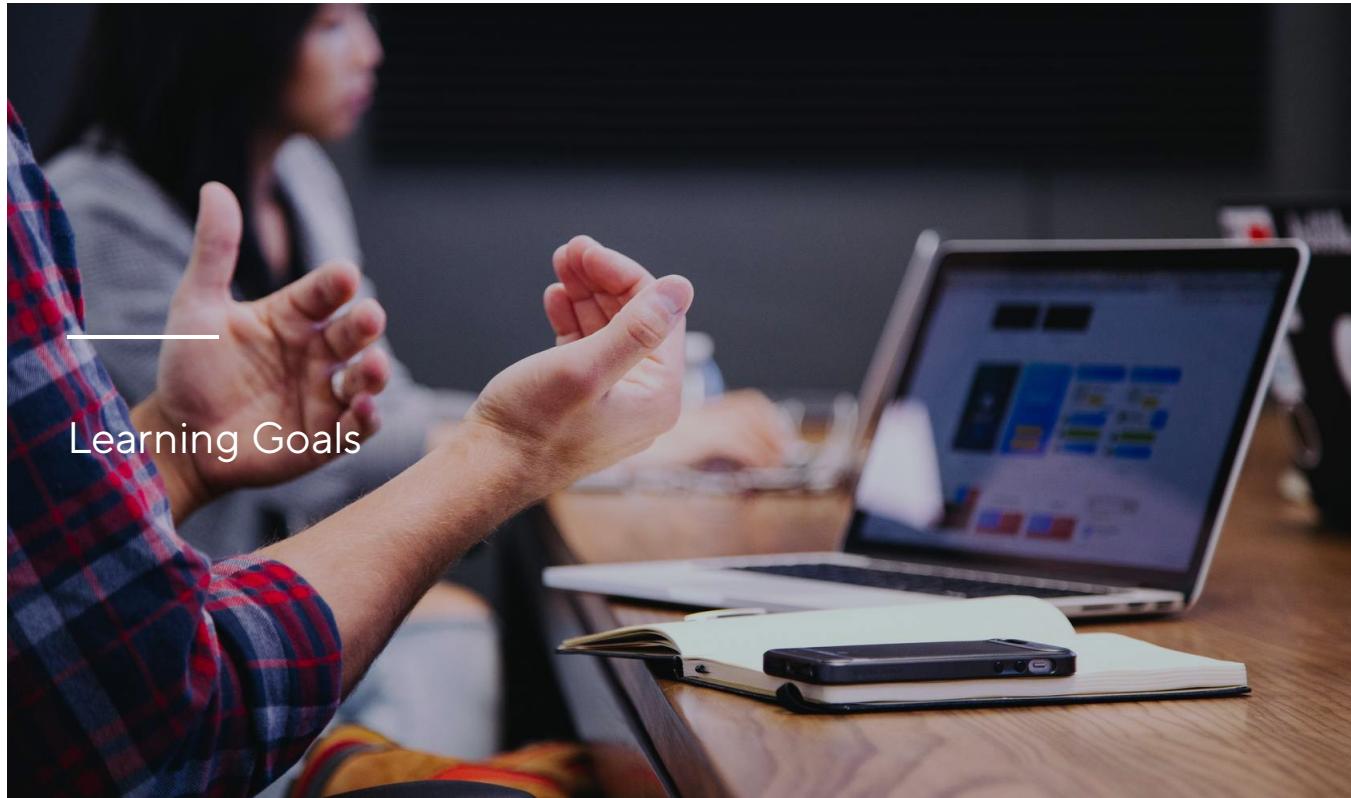
Next Steps



Create a training plan outline. Imagine you have an audience of 10 learners who have a similar learning style as you do. Explain the topic, list the activities, and order you would deliver the content.

CONTINUE

The Basics of Design and Training Delivery



Identify Your Lesson Objectives

We can say that being able to use the Liberty Select cycler accurately is your final objective, but for your learner to be successful, he or she needs to be able to perform several tasks. When you clarify to the learner what the specific tasks are, he or she will be ready to celebrate the small victories of learning each task. Looking at the different domains of objectives, you can identify if your learning goal for a patient involves Intellectual, Physical or Emotional skills. Understanding what your patient will need to learn will help you determine if the objectives were achieved.

“Show me and I forget. Teach me and I remember.
Involve me and I learn.”

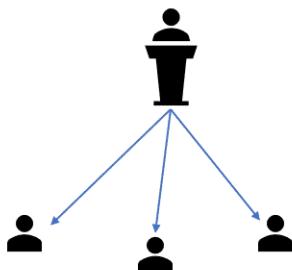
Benjamin Franklin

Should We Teach or Facilitate?

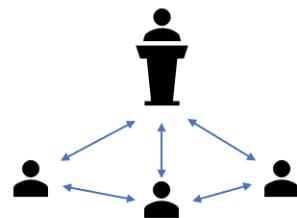
Traditionally we tend to use learning sessions or lectures to teach when this happens. The teacher is the teller.

Facilitating involves learners who participate and take responsibility for learning.

Teaching vs. Facilitating



One directional dissemination of knowledge



Providing support and opportunity for group learning.

How much is too much?

You are facilitating, your learner is *adding Heparin to a bag of PD solution* and needs to be able to draw up and inject it to the bag. How would you engage your learner to accurately be able to perform the task at the end of the training?

Click the box next to each true sentence as you read the statements below:



Bring written directions on how to perform the task and have the patient read them to you.



Provide different resources and support the learner as he/she uses the resources given.



Show the learner how to perform the task.



Explain, show and have the learner demonstrate.

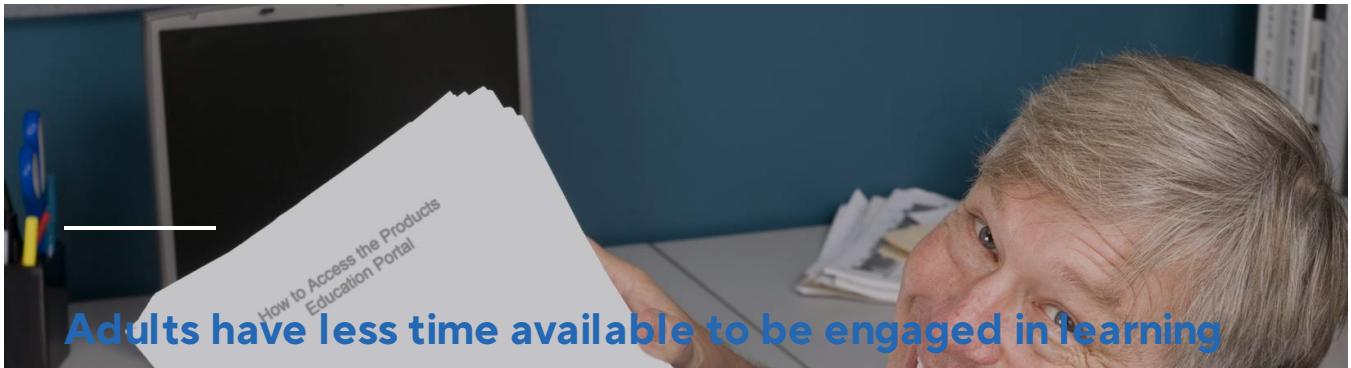
SUBMIT



Although you may want your learners to be proficient in a sequence of tasks that pertain to an activity you must not overwhelm them.

Timing

You noticed that in the video, the University of Nottingham determined the length of training for specific types of training for their audience. Take a moment to think about what works for you.



Adults have less time available to be engaged in learning



① If your learner has positive past learning experiences he will show up to the training excited and motivated!

How can you help your learners feel the training is time well invested?

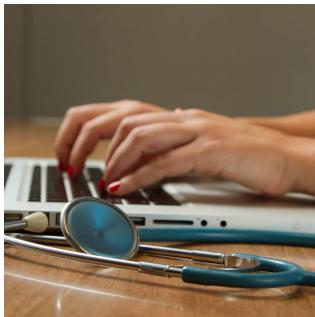
- Provide clear and actionable objectives - Adults need to know what actionable items they will get from the training.
- Provide practice and repetition - Memory is increased by actions.
- Map out the course for the learner and repeat it with each new module - Create a sense of accomplishment in smaller increments.
- Use a "hook" to refocus the audience on the topic or message every five to ten minutes - The adult brain will disengage after ten minutes.
- Deliver learning topics in 15 to 20 minutes increments - Shorter and concise topics allow your learner to accomplish an objective at a time and celebrate the learning.
- Provide breaks of a minimum of 15 minutes every two hours maximum - Learners need to rest their brain and reset it, they also need time to replenish their bodies and quickly

check in with others as needed.

- Be flexible and add activities and breaks as needed - Depending on other factors like place, time of the day, age, and condition of your learner, you will need to be flexible with breaks and length of training.
- Listen to your learner's needs and watch body language when possible.

Your Learner's Challenges

You may be delivering training to nurses or patients. Always consider your learner's challenges when allotting time. Notice below that both nurses and patients share some of the same challenges as well.



Nurse Education

Challenges -

Work Schedule,
Motivation,
Relevance, Need,
Environment,
Attention,
Memory, Previous
Experiences,
Emotions, Training
Time, Training
Length

Patient

Education

Challenges -
Motor Skills,
Language,
Relevance, Need,
Environment,
Attention,
Memory, Previous
Experiences,
Emotions, Training

Time, Training
Length

The Forgetting Curve

Be considerate - Learners cannot go through 40 slides of content or sit through a classroom session for eight long hours with just lunch and breaks. The human brain has limited cognitive power, and overloading information will not foster learning.

According to the Forgetting Curve, a theory by a German psychologist, Hermann Ebbinghaus. There is a period just after learning has taken place when we start to forget what we have learned. We tend to forget almost 50-80 percent of all new information we have learned within a few days after the learning event has occurred. He also found that we tend to recall more and forget less when the learning is spaced across time and repeated during the teaching session. According to these same findings, learning using the spaced repetition method, improves long-term retention by 200 percent.



"Every time I attend your class, I learn something new about the Liberty Select cycler."

- Clinic Nurse

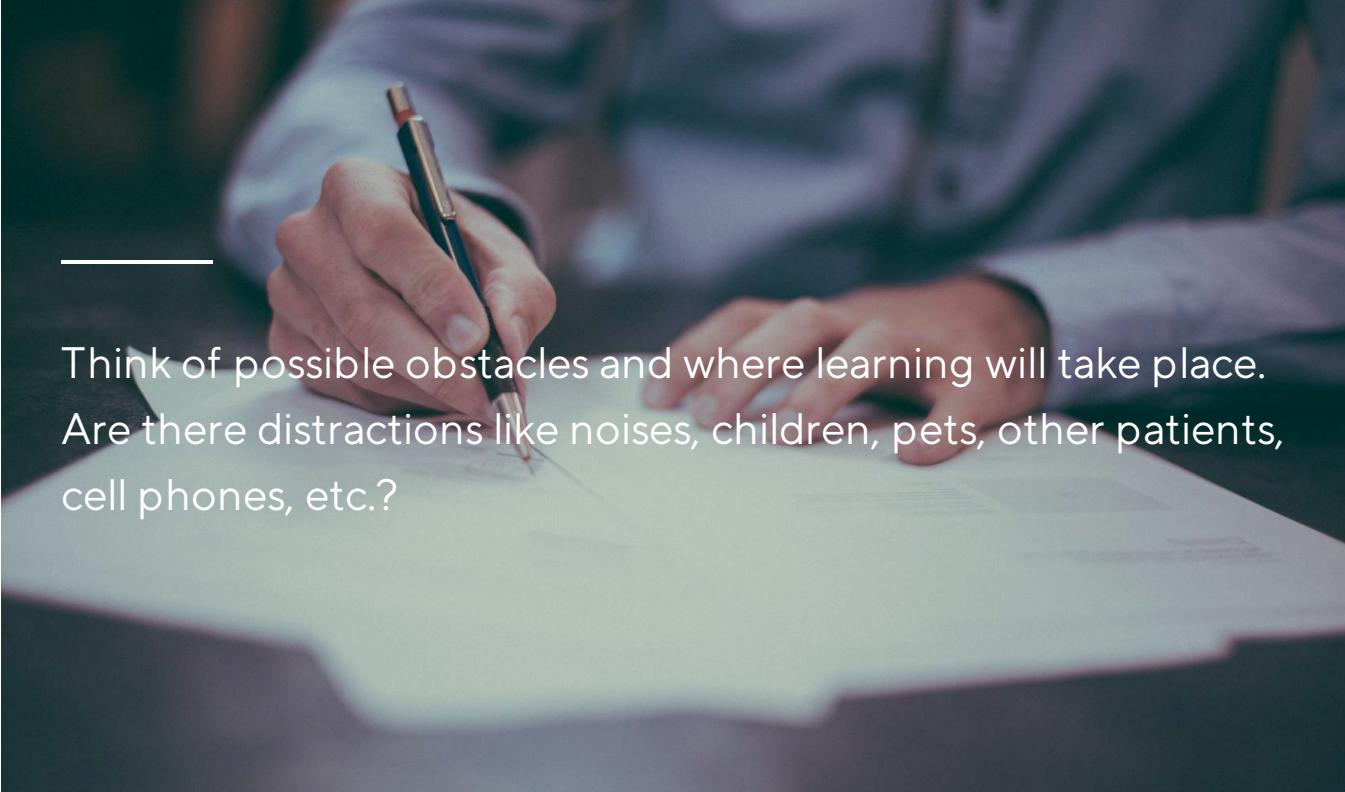
CONTINUE

Practical Use of Design and Training Delivery

In this session, we will apply the principles and theories we have covered in training and create a 15-minute session on hand wash for two patients who will be taught separately. Both patients are male in their 50's, but one has a vision impairment, the other doesn't.

Look at the content review in this module to help you think about this content and develop your outline.

Think of possible obstacles and where learning will take place. Are there distractions like noises, children, pets, other patients, cell phones, etc.?

A close-up photograph of a person's hands writing in a notebook with a pen. The hands are in focus, while the background is blurred, showing a dark, possibly medical or office setting.

Think Ahead

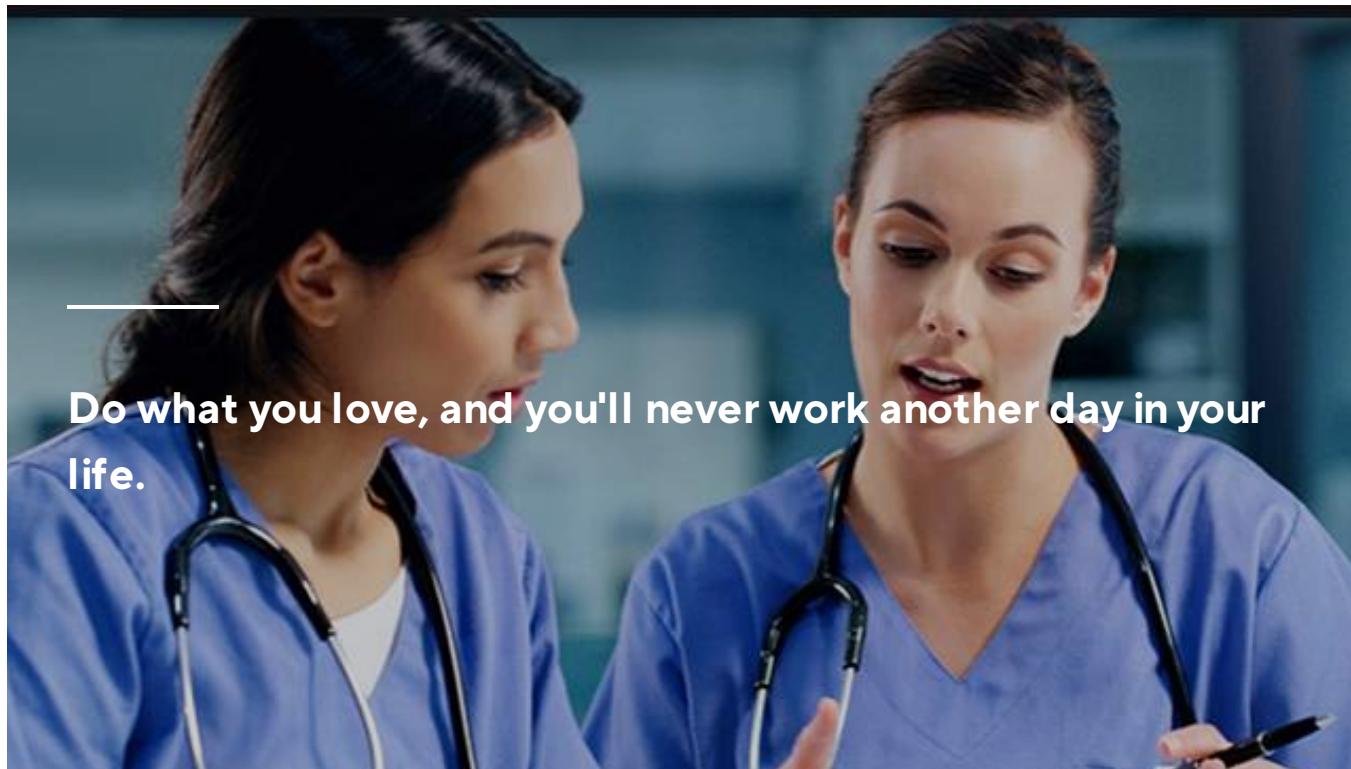
List all resources and prompts you want to provide your patient for learning to take place while addressing his/her learning style. So, if your patient is visual, make sure you have lots of images, videos, and other resources to help.

Create an Agenda

List what you will teach in order if necessary, your patient may need to learn one task before they can move to the next.

Make Notes

Annotate anything you want to point out before and during training. You may also want to make notes of patients learning journeys. Bring your notes to our PD Nurse Education in-person session. You will use them as a reference in the Adult Learning presentation group discussion.





THANK YOU

Resources

Click the the attached document below to download the Bloom's Taxonomy Action Verbs

Source - https://www.apu.edu/live_data/files/333/blooms_taxonomy_action_verbs.pdf



blooms_taxonomy_action_verbs.pdf

47.4 KB



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