Instructional Techniques
Procedures

Procedures are step-by-step sequences of actions or operations used to accomplish a task or achieve a specific outcome. They involve practical skills and typically follow a predetermined order.

Key Considerations

- Procedures are unique in that they are to be completed step-by-step, in sequence – unless decision gates or branching are used – <u>exactly</u> the same way each time.
- Practice and repetition are essential to building speed and accuracy. Offer multiple practice opportunities to build confidence and proficiency.
- Configure assets for structured learning experiences or use for just-in-time support.
- Minimize extraneous cognitive load by presenting the details in a clear, organized, and coherent manner.
- Individuals may progress through procedural learning at different rates and may require varying levels of support. Consider incorporating adaptive learning techniques that allow learners to progress at their own pace and receive personalized support and feedback based on their performance.
  - This may involve breaking down the procedural steps into smaller, more manageable chunks, providing scaffolding and guidance during instruction, and leveraging multimedia resources to enhance comprehension.

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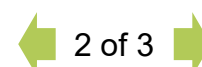|	
Demonstrations	Show Me. Conduct live or recorded demonstrations of the procedure, providing step-by-step instructions while learners observe.
Guided Practice	Let Me Try. Provide learners with structured opportunities to practice the procedure with guidance, offering feedback and coaching as needed.
Simulations	Use simulated environments or virtual reality technology to allow learners to practice the procedure in a safe and controlled setting.
Problem-Based Learning	Present learners with cases or scenarios that require them to apply the procedure in a problem-solving context, promoting critical thinking and decision-making skills.

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Role-Playing	Engage learners in role-playing scenarios where they take on different roles and practice the procedure in simulated real-world situations.
Scenario-Based Learning	Present learners with realistic scenarios or case studies where they must apply procedures to solve problems, make decisions or take action.
Task-Based Learning	Structure learning around authentic tasks or projects that require learners to apply procedures in real-world contexts, fostering meaningful learning and skill transfer.
Guided Discovery Learning	Guide learners through a series of structured activities or inquiries that lead them to discover and internalize the steps of a procedure on their own.
Mentoring & Peer Teaching	Pair learners with experienced practitioners who serve as mentors, providing hands-on instruction and guidance as learners observe and participate in the procedure.
Interactive Workshops	Conduct interactive workshops or hands-on sessions where learners practice procedures in a collaborative setting, receiving feedback and guidance from instructors and peers.
Apprenticeship Model	Pair learners with experienced practitioners who serve as mentors over a period of time, providing hands-on instruction and guidance on the job.
Real-World Application Projects	Assign learners real-world application projects where they must independently apply the procedure to solve authentic problems or address real-world challenges.
Storyboarding	Have learners create storyboards or flowcharts illustrating the steps of a procedure, helping them visualize the process and sequence of actions.

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Memory Palaces	Teach learners mnemonic techniques, such as the method of loci or memory palaces, to help them memorize the steps of a procedure by associating each step with a specific location or visual image.
Gamification	Design gamified experiences where learners progress through levels by successfully completing procedural tasks, earning rewards, and unlocking new challenges.
Reverse Engineering	Reverse engineer a finished product or outcome to understand the steps involved, encouraging learners to deconstruct the procedure and reconstruct it in their own words.
Digital Escape Rooms	Create digital escape room challenges where learners must solve procedural puzzles and complete tasks to progress, promoting engagement and problem-solving skills.
Performance Support	
Flowcharts and Diagrams	Provide learners with flowcharts, diagrams, or visual representations of the procedure's workflow, helping them view the sequence of actions and decision points.
Digital Interactive Manuals	Develop digital interactive manuals or job aids that provide learners with on-demand access to procedural instructions, troubleshooting tips, and visual demonstrations.
Step-by-Step Guides	Provide learners with written or visual step-by-step guides outlining the procedure, allowing them to follow along at their own pace.
Checklists	Provide learners with procedural checklists outlining the steps and key components of the procedure, facilitating systematic execution and error reduction.