

ACTIVE LEARNING TYPES, STRATEGIES & TIPS

ACTIVE LEARNING

The responsibility of the presenters is to ensure that they understand what active learning is, and have incorporated active learning strategies into their session. Active learning strategies engage the audience in the activity and should be appropriate for your session type as outlined below.

NOTE: ALL CE PROGRAMS MUST INCLUDE AN ACTIVE LEARNING STRATEGY AND LEARNING ASSESSMENT FOR EACH LEARNING OBJECTIVE IN COMPLIANCE WITH THE ACPE STANDARDS.

ACTIVITY TYPES

CE activities at ASHP meetings are knowledge-based or application-based. **Knowledge-based** sessions are designed primarily for acquiring factual knowledge; **application-based** sessions primarily apply the information learned in the time allotted.

ACTIVE LEARNING STRATEGIES

Below are ideas on how to incorporate active learning into your session. This list should serve as a guide and is not meant to be comprehensive.

Active Learning Strategy	Knowledge-Based Activity	Application-Based Activity
Polling questions	✓	✓
Games and quizzes to practice recall	✓	✓
Demonstration		✓
Example with practice		✓
Interactive case study		✓
Interactive scenario		✓
Role play		✓
Simulation		✓
Think-pair-share	✓	✓
Think-write-share	✓	✓
Application exercises		✓
Practice exercises		✓

Below are some strategies that you may choose to incorporate into your session. Note that this list is not exhaustive.

SELF-ASSESSMENT QUESTIONS

Present questions for attendees to reflect on what has been taught, to self-assess their learning. Develop one question and answer for each learning objective.

Consider:

- Questions must be multiple-choice or true/false format.
- Questions must be simple, clearly stated, and relate only to the educational objective for which they were designed.
- Pose the question in the affirmative; avoid the use of negative statements such as "not" and "except" because they often confuse the learner.
- Answer choices should be specific and distinct, and not overlap with the other answers.

Avoid using the same or similar words in both the question and the correct answer as this may clue the learner to the correct answers.

POLLING QUESTIONS

Have attendees vote anonymously on what they perceive as the best explanation or answer to a question, followed by opportunities to discuss their ideas with peers, and then to vote again leads to greater learning of the material. It is important to have attendees discuss why they think their explanation is the most accurate and also why the other explanations proposed are not accurate. It is also important that the presenter looks at the polling results and listens to the reasoning of the attendees in order to determine what further explanations and summary might need to be made in the presentation. There are various tools that can be used for polling, including ARS, hand-raising, or color cards.

DEMONSTRATION

Interactive demonstrations can be used to demonstrate the application of a concept. Attendees should be involved in the demonstration, and be required to reflect and analyze the process. For example, you can have attendees predict the outcome of the demonstrations individually, and then have them discuss it in groups, or with the whole room. Demonstrations are valuable because they increase attendee understanding of concepts, while also increasing attendee enjoyment of the session.

INTERACTIVE SCENARIOS AND CASE STUDIES

Provide attendees with an example of a concept/theory/issue/topic being covered in the session. They discuss and analyze the scenario/case, applying the information covered in a presentation to some situation they may encounter in practice. Attendees can briefly present their findings to other small groups or to the whole group or simply record ideas on a flipchart so that presenter can draw questions and synthesis from the material.

ROLE-PLAY

Attendees are given a situation and a role to play of a character in the situation. Without practice, they act out the events in the situation. Role-play may be used for the purpose of situation analysis or to provide feedback to the attendees about their own behavior. Some examples of role-play include counseling patients, conducting medication history interviews, and patients care skills.

SIMULATION

In this strategy, attendees assume the role of a person whose job they are learning about. Attendees are given realistic on-the-job assignments with little prior instruction and learn by doing.

GAMES

Games and simulations are closely related, and there are mixed varieties: simulation games, non-simulation games, and non-game simulations. Games are activities in which there are winners and losers, definite sets of rules for “moves,” and frequent use of props or other paraphernalia. Some examples include Jeopardy, Clue, crossword puzzles, or bingo.

QUIZZES

Quizzes are short self-tests given to attendees. Answers are provided to the attendees after completing the quiz.

THINK-PAIR-SHARE

Have attendees turn to someone near them to summarize what they're learning, to answer a question posed during the presentation, or to consider how and why and when they might apply a concept. This works well with pre-planned questions and with ideas that emerge during a larger group discussion. The objectives are to engage attendees with the material on an individual level, in pairs, and finally as a large group. The activity can help to organize prior knowledge; brainstorm questions; or summarize, apply, or integrate new information.

The procedure is as follows:

- 1) Attendees reflect on (and perhaps jot notes) for one minute in response to a question.
- 2) They pair up with someone sitting near them and share responses/thoughts verbally for two minutes, or they may choose to work together to create a synthesis of ideas or come to a consensus.
- 3) The presenter asks for volunteers to give thirty-second summaries of ideas.

THINK-WRITE-SHARE

The format for this strategy is identical to the think-pair-share, except that attendees process the question asked of them by writing about it rather than reflecting. After a brief time to note their thoughts, each attendee turns to a partner to discuss. The activity closes with the presenter asking for volunteers to summarize their responses. As with the think-pair-share, the presenter may choose to skip the summary portion of the exercise depending on circumstances.

APPLICATION EXERCISE

These provide an opportunity for the attendees to practice skills. This could include labeling, rank ordering, multiple choice, problem-solving or true/false and completion. Exercises must be completed in a set time period and the presenter provides and discusses the correct answers.

PRACTICE EXERCISE

Attendees are given a problem or situation to solve in a 5 to 10-minute period of time. All directions and rules are printed in a visual and explained by the presenter.

ASSESSMENT OF LEARNING AND FEEDBACK

Learning assessment involves feedback to learners on how well they have answered questions or completed a learning exercise, such as a case study.

	Knowledge-based Activity	Application-based Activity
Assessment of Learning	Must include assessment questions structured to determine the recall of facts based on the learning objectives. Techniques can be informal such as audience response systems, color cards, or hand raising.	Must include case studies or practiced skills structured to address application of the principles learned based on the learning objectives.
Assessment of Feedback	Feedback may include the correct response to questions. For incorrect responses, communicate that a question was answered incorrectly and provide rationale for the correct response.	Feedback may include the correct evaluation of case studies. When responses are incorrect, explain the rationale for the correct response.

TIPS FOR ACTIVE LEARNING

- Don't try to do too much. Active learning takes time.
- Choose activities that will help the attendees learn the material and/or master important skills. Don't choose activities just for the sake of doing something active.
- When attendees are working in small groups, walk around, listen to the attendees, ask questions, and guide them in the right direction.
 - If you notice that attendees are struggling with a particular issue, gather everyone's attention to add a clarifying comment or work through an example problem. You don't want a lot of attendees to struggle for too much time, as this becomes discouraging.
- Make sure to give all of the necessary instructions before distributing materials and telling attendees to break into groups or find a partner. Otherwise, the attendees start talking to find a partner, or start looking at the materials, and it is hard to regain their attention to give the directions.
- Write down the instructions for any activity – on a slide or in a handout. In case someone wasn't paying attention briefly, or in case there are multiple steps to the instructions, it is much easier if the attendees have written instructions to refer to.
- It can be nice to randomize attendees so that they work with a variety of people and you mix up attendees from different backgrounds. You can do this in a variety of ways – birthdays, random numbers, etc.
- You may wish to assign reporters for group work.
- Include time to debrief the activity. A variety of approaches can be successful, and may vary depending on the subject matter.
 - The instructor might ask attendees to share answers. For quantitative work, attendees might write on flipcharts.
 - The presenter might present a PowerPoint™ slide that explains possible answers.
- How do you ensure that all attendees in a group know what is going on? Below are a few suggestions:
 - Let the attendees know in advance that each member of the group may be responsible for sharing their answers or thought process with the room. You could designate who this person will be (e.g., the person whose last name is first in the alphabet, or who has the next birthday).
 - You could rearrange the attendees and have attendees teach each other about what they just discussed, so each attendees needs to be responsible for understanding the material.
 - Ask a follow-up question that each attendee responds to individually. This could be a self-assessment question or poll.

ACTIVE LEARNING

Attendees remember...

10% of what they **hear**,
25% of what they **see**, and
90% of what they **hear and do**!