LEARNING STRATEGIES

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LEARNING STRATEGIES I: WHAT ARE LEARNING STRATEGIES?

DEFINITION: Learning strategies are actions, activities, or events used by a trainer to facilitate learning.

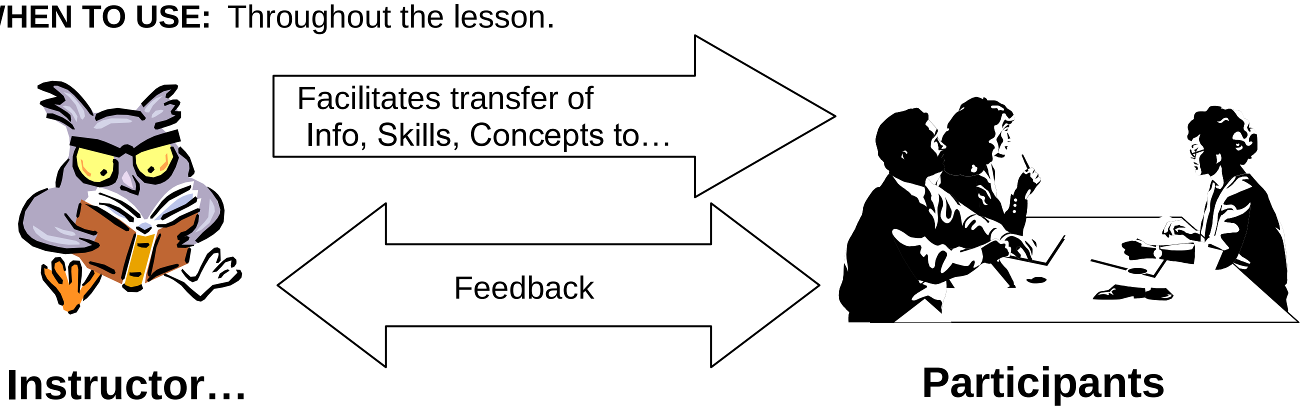
Each lesson should use multiple learning strategies. You may use a dozen or more learning strategies to facilitate the learning process before, during, and after the delivery of the content on one lesson.

Learning requires a two-way process that assures that not only is the content "sent" but also that it is "received." Learning Strategies are those devices used to assure that a message is received at or near the time it is sent. They serve the purpose of a feedback mechanism.

FUNCTION: Learning Strategies are used to motivate, clarify, focus, get feedback, and reinforce key points.

- Motivate: Adults are generally motivated if they can see a need and use to transfer the lesson to their job. It is important to use strategies that relate the knowledge/skill to the participants' jobs. Use strategies that let participants share experiences that relate their job to the lesson.
- Clarify: – When the participants are talking about and/or doing the skill, the participant will be able to clarify for themselves how they can apply the lesson. Additionally, the instructor has an opportunity to see where clarification is needed.
- Keep on focus: - To have participants focus on the lesson, it is critical to use learning strategies that keep them physically, mentally, and emotionally involved.
- Get feedback: - For content to be understood, it must be received and applied. To insure that this happens, the instructor gets feedback from the participants on what they heard or saw, and the participants get feedback from the instructor on their application of the content.
- Reinforce key points: - Every lesson has a few key points that are the keys to achieving the objective(s). Using a variety of learning strategies to highlight these key points will increase the potential for learning and retention.

WHEN TO USE: Throughout the lesson.



GUIDELINES TO ALL STRATEGIES:

- Chunk information - Arrange the content into "chunks" of information to help people learn and remember data, processes, and cognitive material. Remember, the less experienced (relative to the topic) the participant, the smaller the chunk should be.

- Ask questions - To check for understanding of the information delivered, ask specific content questions. Include these questions and possible answers in your lesson plan. The following are a few tips on asking questions.
  - Ask the question and then allow time (at least 10 seconds for a response. If you still do not receive an answer, try asking the question in a different way or in a series of questions leading up to the answer.
  - If a partial response is given, ask a follow-up question which asks for more information.
  - Spread the questions around. Not calling only on the "dependables" keeps everyone alert.
  - Be careful about embarrassing those who seldom volunteer responses. Allow discussion with one or two other people before asking for an answer.
  - Avoid:
    - Asking "Is that clear?"
    - Using questions that can be answered with "Yes or No." It doesn't really test learning unless tagged with "Why?", "Why not?", or "How?".
    - Leading questions, which indicate how you want it to be answered. This discourages independent thought.
    - Long questions or asking two questions at one time. They are hard to follow.

- Give feedback
  - Reinforce correct answers.
  - Determine why wrong answers were given and help to correct them. This can be done by repeating or rephrasing the answer to clarify your understanding of it. "I think what you're saying is. . .? Is that accurate?" If the answer is no, ask the person to rephrase their answer. Another response to a confusing or incorrect answer is to ask, "Why do you say that?" This helps the person to better understand their own thinking. It helps them verbalize thoughts and explain the answer more clearly. If the answer is still incorrect, turn the question over to the group: "Mike, you have some good points. What does the rest of the group think?" If Mike finds that the entire group also disagrees with him, he will most likely re-evaluate his answer. These techniques also give you a little more time to formulate a response if the correct answer does not come out in the discussion.

- Provide opportunities for practice with feedback
  - Be sure to include an opportunity for participants to practice remembering and applying the information that has been delivered before the assessment exercise. Again provide feedback to reinforce appropriate answers and clear up misconceptions.

- Set ups assessment with feedback
  - Set up the assessment exercise in a positive manner with clear instructions. Feedback may be given via answer key, evaluation guidelines, or orally. Key it to reference material to help participants go back over weak areas.
  -

"To be ignorant is not such a shame as to be unwilling to learn." G. W. Hoss

"The secret to education is respecting the pupil." Ralph Waldo Emerson

Brainstorming

Description and Purpose:

- Used to bring forth thoughts, associations, and/or ideas.
- Responses are not evaluated until the end. Each response produced does not need to be usable. Instead, initial responses can be viewed as a starting point. Examples of how brainstorming is used includes asking the participants to list:
  - What they know about the lesson or "chunk",
  - Possible solutions to a problem,
  - Possible issues involved,
  - What the participants learned, and
  - More.
- Invites participants to recall existing knowledge in their own minds. It can help orientate the participant to the topic and motivate to fill the gaps in their knowledge.

Process:

1. Determine the learning outcome to be supported or assessed through the activity.
2. Display directions.
3. Have the group(s) brainstorm.
4. Debrief the activity to ensure key points are emphasized.

Setup:

- Group size: Any size. For full participation, use groups of 3 to 8.
- Time required:
  - Dependent on the depth you want to go but at least 5 minutes plus time for discussion
  - Set and display the timeframes (handout, flipchart, overhead, or PowerPoint slide) for brainstorming and report outs.
- To help the brainstorming and later the discussion, each group records their responses on flipchart paper or a white board.
- Call time when the announced time is almost up for the brainstorming.
- Have each group report out on:
  - All their responses, ***or***
  - *Use an alternate structure such as:*
    - Summarizing the key themes
    - Answering a question about the process used, or
    - Explaining how they will use the information.
- Debrief – ensure the key points for the lesson are identified (by instructor or participants).

Variations and Additional Notes:

- Sample questions:
  - What are the factors you consider with setting AML?
  - What are these people doing in this picture/video/role play?
  - List all the items you need for a hazmat inspection.
  - List animals that are on the endangered list.
  - What could you do to get the public to come to a meeting?

"Every job is a self-portrait of the person who did it. Autograph your work with excellence." Unknown

Case Studies

Description and Purpose:

- Excellent way to get the group involved in a meaningful way.
  - Participants relate the lecture to relevant real-life situations (real or simulate real life).
  - Cases encourage interaction between participants and/or to help participants analyze and solve specific problems.

Process:

1. Determine the learning outcome to be supported or assessed through the activity.
2. Provide each participant a description of a case (situation) including question(s) which require application of the skill and knowledge covered in the lesson(s).
3. Have the group(s) work on the case.
4. Groups report results. There could be multiple steps requiring report outs at each step.
5. Debrief the activity to ensure key points are emphasized.

Set Up:

- Group Size: Any size. For full participation, use groups of 3 to 8 participants. It is best to have 2 or more groups. This exposes participants to different approaches to the same problem as each small group processes the case study differently.
- Time Required:
  - Can range from 5 minutes to the entire course depending on the complexity and the sharing process.
  - Set and display the timeframes for each stage of the activity.
- Have the group select a discussion leader and a recorder.
- Attributes of a good case:
  - Appear real – i.e. have the trappings of a current problem (or it could be real).
  - Has general applicability. Generally it should be similar to the real job experience – not that horrific exception!
  - Complex enough to be challenging, but not so complex that objective gets lost or the participants get too frustrated to complete the case.
  - Long enough to introduce the facts of the case but not so long as to bore the reader or to make the analysis tedious.

Variations and Additional Notes:

- Sometimes you may want to cover multiple cases by having a few groups to one case while the other groups do a different case. You could even have each group do a different case. In the final briefing, all the points could be brought out.
- Decide how to set up small groups. Can they work with the people seated close to them, mixed randomly, or will there need to be various levels or types of expertise in each group?

Education [training] is not the filling of a pail, but the lighting of a fire. – Heraclitus

Panel

Description and Purpose:

- Present different perspectives or aspects of an issue. This format allows experts to present information or debate. It can illicit better discussion than a one person discussion. Plus, a frequent change of speakers keeps attention from lagging.
- Way of tapping multiple subject matter experts for short discussions on multiple aspects or views of subject.

Process:

1. Determine the learning outcome to be supported or assessed through the activity.
2. Coordinate with panel members to outline time, purpose, and process to interact with participants. Ensure that each panelist understands his/her role and is aware of the names, backgrounds, and roles of other panelists.
3. For the participants, explain the focus of panel and introduce panel members.
4. Panel members answer questions and/or present their sections. To ensure the participants get the most possible out of the experience, include structured interaction between panel members and with the participants.
5. Debrief the activity to ensure key points are emphasized.

Set Up:

- A panel can have as few as two speakers (or two groups) or as many as six. More than six generally becomes unwieldy.
- Time:
  - 15 minutes for an impromptu debate to one hour for prepared and more structured events.
  - Generally, 5 to 10 minutes per panel member is adequate. Generally, each panel member should have equal time.
  - Allow also for time for interactions.
- Panel setting: Panelists should be located at the front of the room. The moderator can sit to the side so they can see both the panelists and the audience.

Variations and Additional Notes:

- Panelist can be members of the cadre, guest speakers, or subject matter experts within the ranks of the participant group... or any combination.
- Panels can be used to present different information or aspects of a subject. For instance when the topic is restoration, one panel member may talk how they dealt with a project with little historical data and another with a lot of data. For the same topic, you could also have a biologist; hydrologist, forester, planner, and botanist talk how their specialty relates.
- Panels can be used as a debate session to discuss opposing or conflicting viewpoints. Their tables can be placed in a "V" shape. Each panelist responds has a specific time to respond to questions (either preformatted or spontaneous from the participants.) This method can create sensitivity, understanding of, and empathy for both sides of an issue.
- Facilitate the discussion to avoid angry of hurtful situations.
- Avoid personalities overshadowing the content.
- Panelists can “role-play” to simulate a debate. Be careful to ensure that no one should end up being associated with an assumed role.

"The only dumb question is the question you don't ask.” Paul MacCready

Demonstration

Description and Purpose:

- Demonstration is a delivery method in which the instructor explains and shows the precise actions necessary to perform skills or processes. Demonstrations generally include time for the participants to practice.
- Demonstrations makes explanations concrete and appeals to several senses.

Process and Set Up:

1. Prepare
    - Yourself (have a plan and practice)
    - Materials (have sufficient samples for learners to practice with)
    - Participants (get their attention)
2. Present
    - Place participants so all can see
    - Point out principles being demonstrated as you go
    - Associate demonstration with everyday things
3. Reinforce
    - Have participants practice the skill or process (on their own or in groups)
    - Be available for questions and check each participant's progress. Assess whether or not they can do it without assistance.
    - Discuss exceptions or questions that arose as they tried in on their own.
4. Debrief with the entire group to share lesson learned and ensure key points are understood.

Variations and Additional Notes:

- Instead of demonstrating the whole process and then having the participants practice, demonstrated and give practice time one step at a time. This works particularly if the process is long and/or complex. If you proceed this way, it may also be beneficial to give them an additional exercise or assessment that has them do the whole process without instructional breaks.
- Practice before presenting.
- Emphasize safety.

"The objective of education is to prepare the young to educate themselves throughout their lives."
Robert Maynard Hutchins

Discussion

Description and Purpose:

- Uses the resources of the participants; pools ideas and experiences from group.
- Provides participants an opportunity to practice critical thinking skills and/or synthesizing several sources of information into a coherent perspective.
- Give participants opportunities to formulate applications of principles. This learning strategy invites participants to develop and express their ideas.

Process:

1. At the outset, clarify the objective of the discussion (what you expect to be the end result), the process you wish the group to adopt (how the discussion ought to proceed, which rules should be followed), and what your role will be.
2. Prepare the questions to be answered.
3. Have the discussion.
4. Ask participants to sum up the outcome of the discussion.

Set Up:

- Group size:
  - Entire class if you wish to guide the process of discussion.
  - Groups of 3 to 8 participants if you wish the participants to guide the discussion.
- Time: Generally 5 to 20 minutes but it depends on the complexity of issue.
- Physical Setting: Participants should be able to see and hear each other easily.

Variations and Additional Notes:

- Decide these questions for yourself in advance of the discussion so that you can be consistent in class.
  - Can you allow the group to digress a bit? Much depends on your time constraints and the degree to which you want participants to really explore their approaches to the topic.
  - When do you cut in and gently bring them back on topic?
  - How much can you allow one or two group members to dominate the discussion? Remember that dominant participants often have a need to show their experience and knowledge to the group. Your task is to encourage and channel that energy.
- Be prepared to clarify things when the discussion becomes confused. Be careful not to sneak in your own answers!
- Encourage participants to contribute and to help them make comments that respond to their classmates' observations.
- Don't fear silence. It's absolutely essential. When you are responsible for facilitating a discussion, you may feel that a lack of response within one or two beats is stretching into an eternity. However, even if you have posed a very interesting question or situation, the participants will need some time to think and formulate a response.

"Unless you try to do something beyond what you have already mastered, you will never grow.
" Ronald E. Osborn

Field Trip/Exercise

Description and Purpose:

- Structured opportunity for participants to practice the course or lesson skills within a workplace context. Participants are expected to work on tasks or projects relevant to their learning progress.
- Provide first-hand observation of a process, procedure, or event that could not be brought to the classroom in a better way.

Process:

1. Determine the learning outcome to be supported or assessed through the activity.
2. Make the arrangements well in advance.
   - Instructors responsible for the field exercise should visit the site and discuss the exercise with the course coordinator.
   - Be sure permissions have been granted by the land managers/owners.
   - Plan and document itinerary.
3. Prepare participants by telling them:
   - About the site (access difficulties, safety cautions, history if relevant to the lesson, land ownership, and other relevant information)
   - Outcome expectations ***(see next page for example).***
   - Requirements regarding dress and material (such as tools, lunch, water, etc.) to bring.
4. If needed, do a demonstration in the field.
5. Conduct field exercise.
6. Groups report results. There could be multiple steps requiring report outs at each step.
7. Debrief the activity to ensure key points are emphasized.

Set Up

- Group Size: The class should be divided into groups of 2 to 10 participants.
- Time: Variable. Include the time to travel to and from site(s). Allow for extra time if multiple vehicles are used. Having 2-way radios will help avoid losing small groups.

Variations and Additional Notes:

- The site must be applicable to the course goal and objectives.
- When selecting a site, consider:
  - Is the site accessible at the time you will be taking the participants
  - Do you need to prepare the site?
  - How will participants get to the site (and is there room to park all the vehicles)
  - What is the itinerary?
  - What needs to be done to maximize the comfort and safety of the participants?
  - Is the weather suitable to do the field site exercise?
- A field site visit can be used as just a teaching site (instead of including an exercise) if the experience is structured to include accountability to answer questions during the event and/or during the debrief.

"The important thing is not to stop questioning." Albert Einstein

Field Trip/Exercise Outcome Expectations – Example 1

Grazing Management for Riparian-Wetland Areas
Course XXXX-XX

Field Exercise
Guidelines for Team Presentations of Results and Recommendations

On the last day of the course your team will present a report on your recommendations based on the field exercise results.

Team presentations will include the following:

- Ten copies of your team's written report (limited to five pages) that addresses the following management components:
    1. Issues
    2. Goals
    3. Objectives
    4. Strategies including both time lines and rationale for:
        - The least that needs to be done to reach objectives
        - The optimum that could be done to reach objectives
    5. Monitoring
    6. Evaluation

- All major recommendations or findings from your report summarized on flip charts.

- A fifteen minute presentation on your team's report and recommendations to the class and the five member instructor panel. Please use a different presenter for each part of the presentation. Presentations will be given from the front of the room. The presentation should involve as many team members as possible.

- Objectives that conform to the six "Characteristics of a Good Objective."
    1. State the component
    2. State what is to be accomplished
    3. State the amount of change
    4. State the location
    5. Establish a time frame
    6. Ensure the objective is compatible with the land use plan

- A scheduled time for questions. All team members should be available to respond to questions from the class and the five member instructor panel. All team members should be prepared to defend their team's report and recommendations.

Field Trip/Exercise Outcome Expectations – Example 2

Dams/Reservoirs/Stockponds - Field Exercise

Purpose:

This module provides you with the framework for doing the qualitative and quantitative measurements for Dams, Reservoirs, & Stockponds as needed for agency databases and filing for water rights.

<u>Exercise Site: Grove Creek Reservoir</u>

Background information to complete this exercise:

- *livestock use = 50 cattle from May 15 to November 15 (or 185 days)*
- *deer range (25 deer yearlong, heavier use during winter)*
- *antelope herd management area (45 antelope yearlong)*
- *horse use (10 horses for occasional day use for recreational riding and game retrieval from block management area; assume 5 days/month)*
- *water usage rates allowed by DNRC:*
    - *15 GPD (or 0.017 AFA) for 1 beef cow*
    - *22.5 GPD (or 0.225 AFA) for 1 horse*
    - *15 GPD (or 0.017 AFA) per 5 deer or 5 antelope*

1. Complete circled portions of the reservoir inventory form.

2. What is the capacity of this reservoir? (Reminder: Note shape of the pond.)

3. Assume that this reservoir is the only source of water for this allotment, that it is full as of May 1 annually and receives no more inflow. Is the capacity sufficient to supply the number of livestock and other uses in this allotment during the time period cattle are in the allotment (from mid-May through mid-November)?

4. If you were to apply for water rights for this reservoir, which form you would need to complete and why?

5. Taking into consideration summer inflows from thunderstorms and evaporation losses, what is the TOTAL ANNUAL AMOUNT would you claim when filing for water rights for this reservoir?

Lecture

Description and Purpose:

- Presents a subject or gives oral directions that will lead to interactive learning strategies (involve the participants actively).
- Provides opportunity for subject matter to share knowledge and experience.
- Stimulates thinking to open discussion.

Process:

- Determine the learning outcome to be supported or assessed.
- Design the 3 sections - introduction, during, and debrief/summary.
- Deliver the lecture ending with an interactive debrief/summary.
  (usually should also have some interactivity in the introduction and during section)

Set Up:

- Group Size: Any.
- Time Required: 10 to 30 minutes. At that point use a learning strategy that requires the participant to change from passive to active behavior, from listening to doing, from instructor doing most of the work to the participant doing most of it. There is no reason why the instructor could not have a one or even two-hour lecture -- as long as it is broken up with interactive learning strategies...***keep participants involved.***
- Physical Setting: Each participant should have a full view of the lecturer at all times.

Variations and Additional Notes:

- Effective Lecturing: A Few Tricks of the Trade
  - Do not present too many points – generally one to four major points for half an hour.
  - Present summaries both at the beginning and the end.
  - Pause occasionally to give listeners a chance to catch up and summarize for themselves.
  - Allow time for participant questions!!
  - Use visual aids to support your points
  - ***Always leave time for the debrief/summary (if due to time constraints you need to shorten or leave out something – do not leave out this)***
- More techniques to keep your audience interested.
  - Change places: Move around; speak from the back of the room, the front, the left or the right of the room.
  - Use gestures - hand, head, and body movements.
  - Concentrate attention by saying: "Now listen carefully!!", or, "Look at this graph..."
  - Use silence for reflection, question formulation, concentration.
  - Change tone of voice - loud-mellow, fast-slow, happy-sad, technical-personal, etc.

To teach is to learn twice. - Joseph Joubert

Reading

Description and Purpose:

Reading has different roles based on when it in assigned. Consider these three possibilities:

- Pre-Course Assignments:
    - Provide knowledge to be used during training.
    - Bring participants up to speed on topics to be covered during training.
- In-Class Assignment:
    - Gives a starting point for discussion or other learning activity.
    - Can provide variety and change of pace.
- After Class Assignment:
    - Provide updates (most current information).
    - Extends the learning experience (increases retention).

Process:

1. Determine the learning outcome to be supported or assessed.
2. Plan the introduction and activities that will take place before and after the reading.
3. Have the participants read material.
4. Ask participants to reflect on what was read and sum up or discuss the key learning points.

Set Up:

- Group Size: Any
- Time required: 2 to 15 minutes: allow adequate time for reading.

Variations and Additional Notes:

- Material should be well-matched to lesson and course objectives.
- Reading level of the group should be considered.
- Used as a learning strategy alone to teach a topic or concept, it results in a very low percentage of retention. Any reading assignment should be followed up with a discussion (verbal, written and/or computer/web) of the material.
- Using reading adds variety and adults want more than one medium for learning.
- Allows for individual thinking that can then be shared in large group.
- Can be used to foster critical thinking which is "learning to evaluate, draw inferences, and arrive at conclusions based on evidence".
- Can be used at anytime during a lesson.

The basic idea behind teaching is to teach people what they need to know. - Carl Rogers

Role-Playing / Simulation

Description and Purpose:

- Focuses attention on the interaction of people with one another. It emphasizes the functions performed by different people under various circumstances.
- Allows the role players to practice particular behaviors or skills while the other participants practice observing and then critiquing the performance and the outcome.
- Controlled, partial replication of the actual world in which participants assume roles and then work their way through an open-ended "script."

Process:

1. **Setting the Scene** - Provide a valid reason for its use based on the course objectives.
2. **Role-Play** – Be very specific in your instructions:
   a. Assign specific roles to people.
      - Role Player(s)
      - Observers – given clear instructions on what to look for and write down. They will be asked to report their observations after the role-play.

   b. Describe time frames, and any other process rules or guidelines.
3. **Debrief/Summary (such as this typical debrief/summary):**
   - Ask the role-players to report how what went well and then what could be improved
   - Ask observers to report what they saw and heard.
   - Summarize the key points to meet the purpose of the role play

Set Up:

- Group Size: 2 to the whole class:
  - Whole class – used to demonstrate a behavior for the whole class to discuss. In this case, the role is usually (but not always) scripted for the role players.
  - Two or Three – used to allow each person to practice a behavior (one person practices, one responds to the behavior, and if there are three people, the third is the observer. In this case, the role is usually free form (not scripted). Roles rotate until everyone in the group has practiced. All groups participant simultaneously.
- Time Required: 5 to 30 minutes depending on the complexity of the scenario and the detail to which you want the observers to discuss the role play.

Variations and Additional Notes:

- Keep real; avoid appearance of being “faked”.
- Participants may resist role playing – particularly if it seems “faked” or not useful.
- Don’t forget Virtual Reality--You need a computer...or computers... but these simulations can be amazing!
- Capitalizes on participants' interests and areas of expertise.
- Variations:
  - Free form – participant given general scenario and asked to fill in the details themselves using the skills and/or information taught in class.
  - Scripted – participant is given facts about the roles and how to handle the situation.
  - Replay – participants reenact an actual situation they have faced.

You cannot teach anyone anything. You can only help them to discover it within themselves.
Galileo Galilei

Training Games

Description and Purpose:

- Games can be useful for both fun and learning. They are especially helpful as lead-ins to other activities.
- Games aid in the transfer of learning by using them as:
  1) an introduction to new material, or
  2) a summary or,
  3) a synthesis for more complex topics, or
  4) more ways
- Games accelerate a learner's ability to understand and retain complex principles, procedures, and other critical information.
- Participants are involved in an exercise in which competition, cooperation or both are used to learn or practice previously learned material.
- There are many types of games available. There are thinking games, action games, board games, simulations, and many more.

Process:

1. Determine the learning outcome to be supported or assessed.
2. Select a game/simulation that is relevant to the learning content and the participants' context.
3. Develop game content and directions.
4. Play game.
5. Debrief - Ask participants what were the key learning points.

Set Up:

- Group Size: 2 to the whole class
- Time: Usually 10 -15 minutes but will vary.
  - Some management board games last all day or even all week.
  - Some like wuzzles (word puzzles) last only 2 to 3 minutes
- Physical Setting: Each game has own set up.

Variations and Additional Notes:

- Be creative and combine ideas or even invent your own.
- To be effective a good learning game has defined, yet subtle, balance of fun (game play) and skill (content) that provides a dynamic learning environment.
- The best games promote immediate player involvement and continued interest through an intriguing working format. After beginning, the game continues to promote involvement through a balance of chance and challenge.
- Game benefits are learner-centered activity, using random elements, building teams and it's a change of pace!
- Some commonly used types of games are:
  - Wuzzles
  - Bingo
  - Definition match (contest)
  - Truth or Lies
  - Brainteasers
  - Hangman
  - Board games
  - "TV" quiz contests (Jeopardy, Family Feud, etc.)
  - Sequence shuffle
  - Jigsaw puzzles
  - Crossword puzzles
  - Scavenger hunts
  - Ad Campaign (like selling key learning points)
  - Tic-Tac
  - Word Searches

"To learn anything fast and effectively, you have to see it, hear it, and feel it." Tony Stockwell

Selecting a Learning Strategy

Does the learning strategy allow the participants the opportunity to:

1. Interact with other participants?
2. Reflect on the content and determine how it applies to their job?
3. See the task being performed?
4. Be physically active and perform the task?
5. Hear the instructions spoken?
6. Read the material and take notes?
7. Reason through real life situation?
8. Have fun while learning?

Note: The method should get at least 2 "yes" responses. However, few methods will receive all "yes" responses to all questions. The key is to use a wide enough variety of learning strategies that all these opportunities are given to the participants regardless of their learning style/modality.

Is the learning strategy appropriate for the situation?

	Is the learning strategy suitable for:												
Learning Strategy	Task	Training time	Participants	Instructors	Space	Equipment	Group Size	Realism	Learner Motivation	Budget			
Brainstorming													
Case Studies													
Panel													
Demonstration													
Discussion													
Field Trip/ Exercise													
Lecture													
Reading Material													
Role Play													
Game													

It's okay to make mistakes. Mistakes are our teachers, they help us to learn. - John Bradshaw

LEARNING STRATEGIES II: BREAKING THE ICE

Want to melt the ice of your training course? Icebreakers make the climate of your class more comfortable and more conducive to effective--and--enjoyable--learning.

As the name implies, icebreakers are designed to start the process of warming up a group of people. Because icebreakers usually initiate the official contact between trainer and participants, they should be chosen and used carefully.

Icebreakers serve several important functions. They help create the climate within which the group will work. They can be used to establish a learning environment; icebreakers serve as a lead-in to the workshop topic.

Icebreakers also give a trainer a feel for the group. Because icebreakers are the first activity, they provide the trainer with an opportunity to see how a particular group functions together. Another group may react differently to the same icebreaker, signaling the trainer to use more group-building activities before introducing the central workshop exercises.

ALL DIFFERENT KINDS

Icebreakers can be classified according to the kind of information they provide a trainer and the way that information is revealed.

The Personality Report icebreaker asks group members to volunteer specific information about themselves. It enables participants to define needs and fears that relate to the workshop. For example, in a stress management course, a trainer might introduce the topic by dividing the group into pairs and asking participants to share with their partners five routine experiences that "make their blood boil," rating these experiences from most trivial to most serious. Participants in this icebreaker would identify, evaluate and report on types of activities that cause stress in their lives.

The Personality Clue icebreaker indirectly elicits information about group members that they might not otherwise articulate. By describing favorite childhood toys, for example, participants may reveal significant aspects of their personalities, and actually describe themselves.

The Attitude Report asks participants to verbalize their attitudes toward the topic at hand. Once, in a course on interviewing and selection, a trainer began by passing around blank cards on which participants anonymously listed three "do's" and three "don'ts" of interviewing. He collected the cards and used their information as a springboard into the topic of interviewing as well as cues to the kinds of material to focus on in the remainder of the session.

It is what we think we know already that often prevents us from learning. -Claude Bernard

Introduction of Participants: Participants may wonder about the other people: "Do they know more (or less) than I do?" "Is anyone here I should know?" "How will the others react to me?" Nevertheless, you should introduce participants to one another only when (1) people are meeting for the firs time; (2) the group has fewer than 50 people; (3) the session will last more than two hours; and (4) group discussion will be encouraged.

As a rule of thumb, introductions should not consume more than 5 percent of the total presentation time. You have two options for handling the introductions.

Each participant introduces himself or herself: With four or five areas that should cover listed on the board, ask participants to introduce themselves. Suggest that they make some notes on what they want to say, and ask for volunteers to go first. People usually prefer choosing their own time to speak. When you follow some systematic order, each participant becomes more and more tense as his or her turn approaches and often does not hear what is being said. Allow approximately thirty seconds per participant.

Participants introduce one another: Provide four or five areas to explore and ask each participant to interview the person to the right or left (provided he or she does not already know that person). You may have to help the group divide into pairs. Allow five or ten minutes for one person to "interview" the other, and then ask them to switch roles. Ask for volunteers to introduce the people they got to know. When twenty to forty people are involved, allow thirty to sixty minutes for the exercise.

Allowing participants to introduce one another has the advantage of "breaking the ice" by getting people involved and speaking out. (Many may already have decided that their role will be just to sit back and listen.) Participants may also learn interesting things about each other, because people are often shy about relating their own attributes but will let others do it for them. The procedure also helps each participant develop a rapport with other participants; when mutual interests and backgrounds are revealed, each participant gets to know at least one other person very well. The value of this technique diminishes as group size increases and duration of the course decreases.

Before selecting an icebreaker, a trainer must examine the underlying goal of the session and determine ways to make participants aware of that goal. An icebreaker can introduce the goal at the beginning of a session and continue to emphasize it throughout the workshop.

Several cautions should be observed in selecting an icebreaker:

- ☐ Don't use icebreakers in which participants could fail or be embarrassed. Remember, the objective is to establish a climate of trust.
- ☐ Relate the activity to the course goal and objectives.

The person who graduates today and stops learning tomorrow is uneducated the day after. – Anonymous

LEARNING STRATEGY TIPS FOR WARMING UP TO THE TOPIC

Warm ups are used at the beginning of a unit, session, or lesson or for starting up a class again after a long lunch break or in the morning. They are often a fun way to introduce or begin a topic. They can help you build rapport with the participants and get them involved in the material you will be presenting.

CHARACTERISTICS OF WARM UPS

1	BRIEF	They can range from a one-minute visual illustration or verbal vignette up to a 15-minute group discussion exercise. However, since they are used for supplementing other material, the time devoted to them should be minimized.
2	PARTICIPATIVE	Effective warm ups usually involve the participants physically (through movement) or psychologically (through visual and mental stimulus). Warm ups draw the participants' attention, and make them think or react.
3	USE PROPS	Warm ups often involve the use of a simple prop to add realism to the activity. The prop may be a picture, piece of equipment, or even the instructor.
4	LOW RISK	In order to ensure success, present the activity in a positive and professional manner and in the right context.
5	SINGLE FOCUS	Warm ups are often used to focus students on the lesson topic.

Don't let warm ups drag on. Once the point is made, move directly into the main part of the session.

EXAMPLES OF WARM UPS

Concerns about the session can be raised and recorded on flip charts. This can be done individually or in groups.

Tell a story from experience. The instructor can share an important story that is relevant to the lesson topic. Stories should be kept short but told with a purpose in mind---to entertain, persuade, or inform.

A Demonstration that makes a point about why they should learn the lesson could be done. For example, having two people come to the front of the class to perform a “customer service” skit for a customer service lesson.

A Question and Answer warm up relaxes participants and makes them more receptive to the topic. You will need to prepare four or five open ended questions to hook them in to your topic.

Show a short video clip that relates to the lesson topic. When the video is finished, ask some open-ended questions about what the students saw, how they felt, and what they would have done differently. There is no right or wrong answer at this point---that’s what the lesson is for!

LEARNING STRATEGY TIPS FOR BEFORE AND AFTER

BEFORE you start delivering content, remember your lesson introduction should include:

- Warm-up - Do something creative to get the participants' attention; then spend a short time introducing yourself. Use the "warm up" to build rapport and get them involved in the topic.
- Hook – Give the students a dose of WIIFM (What's in it for me?). Explain why learning the information or skills in your session should be important to them.
- Objectives - State the performance objective used as the basis to develop your session.
- Route - Give an overview of the topics and key points to be presented.

AFTER delivery of content and assessment exercise

- Summarize - With just a few word changes, repeat what you said before you delivered the content in "What to look for" and "Importance to the job." State the performance objective used as the basis to develop your session. State how learning the information or skills in your session will help them on the job. Give an overview of the topics and key points to be remembered.
- Q/A for clarification - Ask if anyone has any questions that are still unanswered or areas of confusion. Responding to questions is an important element in facilitating the learning process. Additional handouts have been included to cover this technique in detail.
- Transfer new skill to job – Have some activity that promotes thinking and planning how to use this skill on the job. This can be done through questions, action planning sheets, “tell your neighbor,” etc.
- Transition - It helps maintain the flow of a course if you make a statement that links the material you have presented to the upcoming session.

Learning anything worthwhile is difficult. -Gilbert Highet

LEARNING STRATEGIES III: Asking Effective Questions

What questions target different levels of thinking?

(From Bloom's Taxonomy)

Ask questions that make people think at more than one level of thinking. Try these or similar action words in your questions. You can influence how people think! Many action words can cause thinking at more than one level. Notice also that not all questions need to be written in question form.

Level 6: **Evaluation** Example: Was that an effective lesson? Why or why not?
What are you recommendations for improvement?
What is your justification?

Appraise	Conclude	Decide	Justify
Argue	Criticize	Defend	Rate
Assess	Critique	Dispute	Recommend
Choose	Debate	Judge	Weigh

Level 5: **Synthesis** Example: What would you do differently?

Combine	Devise	Imagine	Organize
Compose	Develop	Invent	Plan
Create	Expand	Make up	
Design	Hypothesize	Modify	

Level 4: **Analysis** Example: Was that an effective introduction? Why or why not?

Analyze	Contrast	Investigate	Separate
Break down	Diagram	Map	Simplify
Categorize	Dissect	Scrutinize	Take apart
Compare	Examine		

Level 3: **Application** Example: What would be an effective introduction for a lesson on stress?

Apply	Compute	Dramatize	Solve
Assemble	Construct	Draw	Test
Develop	Demonstrate	Illustrate	Work Out

Level 2: **Comprehension** Example: Why is it necessary to have a route in the introduction?
What might be an example route for a lesson on stress?
What is the likely result of not having a route?

Classify	Generalize	Paraphrase	Reproduce
Describe	Give an example	Recap	Sort
Discuss	Outline	Rephrase	Translate
Explain			Predict

Level 1: **Knowledge** Example: What are the required elements in an NTC introduction?
Which element in an introduction serves to motivate?

Find	List	Name	State
Identify	Locate	Select	Tell
Label	Match		

Higher Levels of Thinking

Try this: Read each of the sample questions starting with Level 1 and going up. Notice that each question causes you to do something different in your brain. The question you ask determines the kind of thinking your brain uses.

Asking Questions

I. Effective Questions

a. Lead-off questions. A lead off question is designed to stimulate thinking and generate discussion, and is phrased so *students are aware of the main point.* These types of questions are particularly useful during the guided discussion method where you *want* student input and discussion of the main point. For example, during a lesson on "leadership enhances morale," you may have a main point such as, Leader's integrity enhances morale. You might lead off with the question: "How does a leader's integrity enhance morale?" This focuses students on the topic and gets them thinking. This is how lead-off questions promote learning.

b. Follow-up questions. Once you've gotten the discussion rolling with your lead-off question, you want to *guide* the discussion. You do this with *follow-up* questions. You should plan follow-up questions that will guide the lesson progression by supplying sub-ideas that will promote student reasoning. For example, after our lead-off question of "How does a leader's integrity enhance morale," you might follow-up with a sub-idea of leadership integrity -- and how it relates to morale, such as "How does your boss' integrity enhance morale?" Well-planned follow-up questions promote learning by guiding the lesson's progression and promoting student reasoning.

c. Spontaneous questions.
(1) As your lesson progresses, you may notice students are getting off track. Instead of focusing on leadership and morale, they may be discussing followership and morale, or leadership and mission accomplishment. In either case, you need to get them back to the point under discussion. You do this by using a *spontaneous question.* By the very nature of the term, you've probably already guessed you *can't plan* these! You have no way of knowing ahead of time someone is going to get off of the subject. What you need to do when it happens, though, is to ask a question that will bring the discussion back to the lesson, such as: "That's a very interesting point about the follower's integrity and morale, but let's focus on the leader's role for the moment. How does your boss' integrity enhance morale?" You've given the student positive feedback ("interesting point") to ensure you don't shut him or her off, and then repeated the follow-up question to get him or her back on the subject.
(2) Another time you may need to use a spontaneous question is if the students aren't discussing the whole relationship of the lesson objective -- for example, leadership and morale. If they focus on only one aspect of the lesson, such as leadership, then you need to ask a spontaneous question to focus them on the rest of the point: "How does that [whatever leadership example he or she has given] enhance morale?" You've focused the student on the whole relationship and gotten him or her to think through how one affects the other.
(3) Another example of when you would use a spontaneous question is if you need to seek clarification of a student's response. Let's say during the discussion, a student gives an answer that isn't really clear to you. Chances are, if it's not clear to you, it's probably not clear to the other students. At that point, you could say to the student, "Would you restate that in another way?" or "Could you explain your answer in more detail?" This allows the student the chance to make himself (or herself) clear.
Q: How would asking spontaneous questions promote learning?
AR: - Keeps the discussion on track.
- Ensures the inputs relate to the entire lesson.
- Ensures clarity of responses.

(4) Sure! Spontaneous questions promote learning by keeping students on the subject, ensuring their responses focus on the whole relationship of the lesson objective and ensuring student responses are clarified for everyone's benefit.

d. Overhead Questions. Any type of question that is directed to the group rather than to a specific individual and to which you expect an answer is considered an overhead question. Overhead questions promote learning by stimulating thinking and getting participation started.

e. Rhetorical questions.
(1) When an instructor asks a question for which no response is required, it is a *rhetorical* question. Either the question goes unanswered or the instructor answers it himself (herself). In this sense, rhetorical questions are *self-directed* since they are not directed to the students.
(2) (Rhetorical question) Why would an instructor ask questions for which no answer is expected? Rhetorical questions are useful throughout the lesson, from the attention step that asks "Have you ever wondered why . . ?" to the hook that asks "How can you use this information?" to the summary that asks "What have we covered today?" Rhetorical questions promote learning by focusing students on a new angle or by getting them ready for a new direction in the lesson.

f. Direct questions. *Direct* questions are the ones most of us as students dreaded! These are the ones the teacher asked us -- *by name!* -to answer. But now that you're on the other side of the classroom, direct questions can help you in many ways. Direct questions promote learning by getting a quiet student involved in the discussion, by seeking an opinion or by drawing support from a student. For example, if a student in your class has expertise in the area under discussion, you might ask, "Mr. Johnson, you've taught for a while. How have you seen evaluation handled in the past?" Notice this questioning technique *begins with the student's name.* You do this to ensure the student is paying attention to the question you're about to ask. If you tack the student's name onto the *end* of the question, the student may respond with, "Would you repeat the question?" That's embarrassing for both of you and wastes time.

g. Reverse questions. Sometimes a student asks a question that you feel he/she could answer himself/herself if he/she thought about it. In that case, instead of answering the question yourself, you might want to turn it around and ask a *reverse* question. You ask the student the same question he/she asked you. For example, Mrs. Smith asks, "I don't see the point in doing the examples and non-examples in our lessons. Why do we have to do them?" You reverse it and ask, "Let's look at the objective of your lesson, Mrs. Smith. Why do you think you would want to have examples and non-examples in your lesson?" Chances are, she'll think about it and come to the conclusion that examples and non-examples help the instructor evaluate whether the students actually comprehends a particular concept. In this case, reverse questions promote learning by getting the students to think about the issues they've raised and see if they can come up with the answers themselves.

h. Relay questions. Another way to keep the students involved is by using a *relay* question. If a student asks you a question you may not want to answer, you can redirect the question to another student. Mr. Jones may ask, "But how do you incorporate the route into the introduction?" Your reply might be, "That's a good question. Mr. Anderson, how do you incorporate the route into the introduction?" Relay questions promote learning by keeping the discussion among the students and helping you, as the instructor, evaluate where there are weaknesses in student understanding of the material so you can clarify these areas.

II. Ineffective Questions

a. <u>Closed-ended questions</u>. These are questions that require no more than a yes or no answer, or maybe just a one word or short phrase response. If you asked students, "Is General Schwarzkopf an example of an effective leader?"-- what would they discuss? The answer is either yes or no. You could follow-up with 'Why?" to have the student expand on the answer, but a more effective question would be, "Why is General Schwarzkopf an example or non-example of an effective leader?" This requires student thought and discussion. The first question did *not* promote thought or discussion. It's not *always* possible to avoid dead-end questions, but don't *plan* these types of questions in your lesson plans. And, if you accidentally ask one, always follow-up with “why” or "how." Also remember that the answer to a question that begins with "Can anybody tell me . . . " or "Can anybody give me an example . . . " is YES or NO -- so watch your phrasing! Most students will respond to the question in a comprehension level manner, but you might have a smart aleck in class who will give you a yes/no response and put you on the spot a little.

b. <u>Foggy questions</u>. These are questions that are unclear; students aren't really sure what it is you're asking for. For example, "What happened in the United States in November 1994?" Lots of things! And depending on where your students were living, they might answer with a plane crash in their home state or floods or an earthquake -- the list is endless! The context of the classroom lesson might give them a clue, but why not just ask, "What significance is there to the congressional elections that took place in November 1994?" Give the students as much *specific* information as you can so they're providing thought-out responses versus trying to “guess" what you meant. An indefinite question like, "How do Ohio and Florida differ?" is also a foggy question and could get you answers covering geography, climate, economics, population, etc. Give the students focus in the questions you ask.

c. <u>Multiple questions</u>. Think about the presidential news conferences where a reporter -- let's say Helen Thomas of the Associated Press -- wants to ask as many questions as she can since she knows she'll only have one shot. So she asks, "Mr. President, how are you going to handle the deficit, and how are you going to deal with Bosnia, and how is the Department of Defense going to downsize?" Whew!! Which one of those is the president supposed to answer first? Multiple questions are confusing! So help your students by not asking multiple questions.

d. <u>Catch questions</u>.
(a) A *catch* question is one where you imply the answer in the question itself. For example, "The NTC is part of BLM, isn't it?" There isn't really a response required to this question, so the students will probably just nod their heads. You certainly won't generate any discussion with that question!
(b) A *loaded* question is a type of catch question. An example is: "Have you stopped bouncing checks at the mall?" No matter what the answers, it's bad! "Yes" means they *used* to bounce checks; "no" means they're *still* bouncing checks. Avoid these questions because they reflect bias!