

Selecting Learning Strategies

After you have made decisions about the learning formality and delivery mode, you can begin to focus more on the activities of learning—what learners will do during the training to help them achieve the learning outcomes you decided were necessary. This resource examines some of the criteria you can use to help decide which strategies to use.

The decisions you make about learning strategies have a lot of overlap with those related to learning formality and delivery mode. But the emphasis will be different, and you will have to consider two additional categories.

Recall the strategies we discussed, including **Discussion** strategies, **Inquiry** strategies, **Experiential Learning** strategies, **Case-based Learning** strategies, **Project-based Learning** strategies, **Guided Practice and Feedback**, and **Lectures and Readings**.

Now let's look at the list of selection criteria. First, those in common with learning formality and delivery modes.

- **Practical criteria:** Those related to factors not about what needs to be learned, but related to the nature of the organization and the capabilities of those responsible for training. Practical criteria come into play, but because the strategies can be used in so many different ways, these are not such a great limitation. Discussion strategies can be used in the classroom or online. Cases and simulations are also flexible. Experiential learning and Project-based learning require more time to deliver and to develop, and practical constraints may limit their use to longer courses or informal learning.
- **Learning needs criteria:** As you might guess, these play a critical role in selecting learning strategies. Learning complex skills and knowledge, like problem solving and decision making, which most jobs demand, requires active practice with authentic tasks, tools and constraints. While Lectures, Readings and Discussions may be important to prepare learners help them to reflect, Experiential, Case-based, Project-based, and Guided Practice are likely necessary.
- **Pedagogical Values criteria:** Those that are based on beliefs about the nature of learning and the capabilities of the various delivery modes. Like all training decisions, your values as a teacher, and the learners' values as well, may suggest that you emphasize some strategies over others. You and the learners might feel challenged with strategies that are too learner-centered, or, on the other hand, you and they might strongly avoid the opposite, teacher-centered strategies. You may also believe that the delivery mode prevents you from using a certain strategy—you might think discussions or feedback about more complex activities are poorer online because you have little experience or training in how to conduct them. In this course on Blended Learning, we hope you will be open-minded about the possibilities that all learning solutions and delivery modes have to offer in relation to the learning strategies they can accommodate.

Now let's add two additional selection criteria.

- **Flexibility criteria:** While flexibility is useful in choosing a blend of learning solutions and delivery modes, it is critical in choosing learning strategies. The strategies you choose should be designed to stimulate the kind of thinking processes you want your learners to master, and these are likely to be diverse, and to require flexibility. Lectures and Readings might provide good background knowledge, but only through Case-based learning, perhaps using simulations, will a weather forecaster be able to practice the skills required to make an actual forecast under many conditions. Only through Discussion-based learning will learners become better at expressing themselves, communicating to a variety of others, and becoming better critical thinkers. Moreover, learners need many of skills to be well-rounded professionals, with the flexibility to work in a variety of conditions in complex and changing environments. They need “cognitive flexibility,” not rote responses, or they will not be prepared for either today’s complexities nor tomorrow’s new requirements. Selecting a variety of strategies will help in preparing them.
- **Variety:** Finally, learners and trainers need variety. Variety helps us stay engaged, stay focused, and give our best during a learning opportunity. Learning anything requires a lot of practice and reflection. It is not a one-time event. No one becomes competent after one lecture or one simulation. Using a variety of solutions provides more opportunities to think and practice in more ways. “Mixing it up” will not only make learning more engaging, it will make it more effective. It will also allow learners to interact with their peers, and you the teacher, in more ways.

Recall our analogy that blending learning strategies is similar to creating a nutritious and tasty meal—it is both healthier and more enjoyable to eat a variety of foods in all the food groups. It is also very likely more effective to blend learning strategies.

Review the resource, “Learning Strategies”, particularly paying attention to the Rationale sections and the Content Suggestions for each strategy. These will provide more guidance for selecting the strategies that will benefit your specific training project. The example below will demonstrate how you might approach the selection of learning strategies.

An Example: Marine Meteorological Services

Training Goal

Develop a full-service, impacts-based marine meteorological forecast team that meets international regulatory requirements.

Context

- Your country has recently decided to expand and improve its marine meteorological service at the request of industry customers, and to meet international Safety of Life and Property at Sea conventions. You do not have a large budget, so you must train from within to provide the service.

WMO Resources for Trainers

- You have an existing staff that is large enough to take on additional tasks, but they may be reluctant.

Assumptions

- Learning needs will include communicating with respect to:
 - Marine customers and their forecast information needs
 - International regulations regarding provision of forecast information
 - Marine weather phenomenon, variables, and parameters
 - Wave properties and generation
 - Storm surge and other coastal phenomenon
- You have three years to complete the effort, but need to show immediate improvements.
- You have decided that a combination of formal and informal learning is required due to time and budget available, and that you should use both classroom and online delivery to reduce time away from job and reach forecasters in distant cities.

Initial ideas for Learning Strategies

- Online interviews with representative customers will help with understanding customer needs. (Lecture and Readings)
- Some local field trips are needed to meet and talk with local customers and to document the interview results for the others in the office. (Project-based learning)
- The forecast team will need to share their knowledge about customers, consider the most significant threats in their forecast areas, and discuss the gaps in knowledge they feel must be addressed. (Discussion-based learning)
- Existing online resources will help fill some of the gaps in scientific knowledge and knowledge of hazards (Lectures and Readings).
- Scientific and forecast process knowledge will need to be reinforced through classroom training. (Lectures and Readings, Discussions-based learning, Guided Practice Exercises)
- Forecasters will require practice in issuing impacts-based forecasts through cases and simulations. (Case-based learning)
- Meetings and debriefings with customers following significant events will help to improve services, especially as the service begins its expansion. (Discussion-based learning, Experiential learning)
- Those with the most marine forecasting experience will need to monitor and mentor those with less experience on the job. (Experiential learning)