

## Worksheet for Determining Learning Solutions

Recall that *Learning Solutions*, the term used in the WMO Guidelines for Education and Training Providers (WMO-No. 1114) to describe several key, early decisions that must be made in designing learning opportunities, includes three key decisions—Formality Level, Delivery Mode, and Learning Strategy. This worksheet helps to analyze the criteria to consider in making each of these decisions. First, let's review the three key decisions:

### 1. Formality levels to consider

1. **Formal learning** : (guided by a teacher or trainer, specified learning, and some form of assessment and certificate) Classroom or online courses, or on-the-job training programmes.
2. **Semi-formal** : (more individualized, fewer specified learning outcomes) On-the-job learning, coaching and mentoring, secondments.
3. **Informal learning** : (self-directed or opportunistic) Self-study, communities of practice, conferences, job experience.

### 2. Delivery modes to consider:

1. **Classroom learning** : (also called face-to-face or presential learning) Workshops, lectures, and seminars may offer many types of interactions.
2. **Online learning** : Without face-to-face interactions, online learning can still take many forms and lengths, from length courses granting diplomas to brief workshops.
3. **Informal and semi-formal learning** : This deliver mode includes learning that takes place on-the-job, in-the-field, or self-directed learning at home. May be based on interactions only with content resources, but also with professional colleagues, work colleagues, and managers.

### 3. Learning strategies to consider:

Generally, these may include the following:

- Lectures and readings
- Guided practice exercises with feedback
- Discussions (structured or open-ended)
- Inquiry strategies (exploring problems and issues larger than exercises)
- Case-based learning strategies (learning by studying events and problematic situations; including simulations and role plays)
- Project-based learning (large-scope assignments such as research, many types of reports, and developing artifacts)
- Experiential learning (for example, on the job or in the field)

Blended learning: How can the above decisions be combined to strengthen the learning solution?

Possible criteria for the decision steps are found at the end of this worksheet.

1. What practical criteria or constraints limit or increase your options for learning solutions?  
Eliminate solutions that do not fit the practical criteria.

2. What solutions are suggested by the learning needs and intended outcomes?

3. What pedagogical values of stakeholders, including participants, do you need to consider?

4. Write a justification for a learning solution (or blend of solutions) based on the above, considering the criteria that follow.



## Some possible criteria that help determine learning solutions

### ***Practical Criteria***

*What constraints and opportunities exist?*

- Time available to plan and develop
- Budget available to plan and develop
- Geographic distribution of students
- Training staff availability
- Skills of training staff
- Content expertise availability
- Student audience size

### ***Learning Needs Criteria***

*What do the intended learning outcomes suggest in terms of practice and required interaction?*

- Learning goals (professional mastery, basic skills, prerequisite knowledge, continuing development)
- Frequency of application of learning
- Time available for learners to reach learning goals
- Longevity of instructional content (how long will it remain current?)
- Formality of assessment (certification, demonstration of improvement, proof of completion, no formal assessment)
- Complexity of the task or content to be learned
- Nature of task (manual skills, decision making, group or team processes, ...)
- Desire to build an ongoing community of learners
- Preparation of learners (background knowledge)
- Diversity of students (e.g., in level of preparation or organizational contexts)
- How well the desired level of expertise can be defined.

### ***Pedagogical Values Criteria***

*How strongly do stakeholders and students prefer the following?*

- Collaborative learning versus independent learning
- Constructivist (student-directed) versus instructivist (trainer-directed) learning
- Learner-centred versus teacher-centred (individual learning plans versus standardized plans)
- Natural learning environments versus constructed environments (on-the-job versus the classroom or online learning experiences)