

Selecting learning solutions

WMO Resources for Trainers

Once you know what learning needs must be addressed, the next step in planning is to make a decision about which **learning solutions** you will apply. You should resist the temptation to jump to a quick solution, and instead examine your needs and constraints to come up with the best solution or solutions possible. This resource can guide you in the process.

What do we mean by Learning Solutions?

Professionals learn their skills in a wide variety of ways, including

- taking courses in classrooms and online,
- accessing information and learning resources on their own,
- working in teams with more experienced professionals,
- working directly with an assigned coach or mentor,
- sharing experiences in work processes and job challenges with their colleagues to get new ideas,
- and simply doing their jobs and trying to improve the outcomes of their work.

In fact, professionals learn in all these ways, and trainers should not overlook the varieties of opportunities to learn. *Learning solutions* is a term we use to describe the modes of training delivery available to us (e.g., online learning or classroom) and the environments we create that provide opportunities to learn (e.g., a course, self-directed study, on-the-job mentoring or coaching). Choosing a learning solution requires that we consider logistical constraints, pedagogical needs, and audience requirements.

While that sounds complicated (and at times it **can** be complicated), it is not that different from other decisions we make in our daily lives. For example, imagine making a decision about a “place to live.” Now, we could have said “finding a house,” but that pre-supposes that I want a house and that a house is the only type of living situation that will suffice. But maybe I would benefit more from something that is not a house – an apartment, for example, or a tent, or maybe even a boat. My circumstances and preferences will play a big part in my choice.

In making the core choice of the type of structure to live in I will need to consider many criteria, such as my budget, how long I plan to live in the area, whether I live alone or with my family, which possessions I need with me, how much time I have to maintain the living place, the options available to me, etc. All of these will then contribute to my decisions about cost, renting versus buying, size of living space, numbers of bedrooms, location, etc. It is usually only later, when I have narrowed it down to one or two solutions, that I will begin to choose between the details like style and furnishings and how I might organize my possessions there. You can see how the decision is multi-faceted, and while a logical process to the decision is useful, flexibility is also required. What is most important is not to jump to a single conclusion without consider a variety of criteria and a variety of options that might meet them.

Finding a learning solution occurs in a similar way. We examine needs, constraints, and desires and narrow down our choices before deciding. Sometimes we are told to plan “a course” before any other options are considered. But maybe a course is not the only option, and not the best option. This is an ill-advised but very common practice—to identify a learning need and then start immediately planning a course by writing down a list of teachers who can participate. This approach misses out on many of the choices available to us as trainers and may make many wrong assumptions about helpful ways of meeting the learning needs. It is understandable why this happens—a course is a very traditional approach, and many organisations will find it easier to say “yes” to. Sometimes we even go so far as to begin with an assumption that the course will be one filled with lectures. But this already leaps into the choice of learning activities—which is the topic of a later step in the instructional planning process. A course with lectures is comfortable, and we

know how to plan it, but ignores a lot of other opportunities and is likely not the best choice for teaching practical skills.

We should always begin a training project by considering many factors and choosing a learning solution—that is, a general approach to addressing learning needs. Usually we begin by narrowing the choice down to informal or formal solutions, which are explained in the next section below. What exactly is going to occur during the learning opportunity involves another set of decisions. These additional decisions involve choosing learning activities that utilize particular instructional methods (e.g., a simulation or practical exercise, a discussion, a presentation), and choices about what media to use (e.g. websites, videos, texts, and face-to-face presentations). But in the beginning, in the step that concerns choosing a learning solution, we should put off planning these details to a large degree and first deal with the bigger picture.

Level of Formality in Learning Solutions

As discussed in WMO “Guidelines for Trainers,” it can be useful to view learning solutions as falling into 3 broad categories of formality: formal learning, semi-formal learning, and informal learning. This is likely the first decision that you will make, but remember that you can also combine different solutions.

1. **Formal learning** includes those solutions that include a defined role of teacher or trainer, have specified learning outcomes to be achieved, and usually include some form of assessment or certification of achievement. Formal learning can happen in the classroom or online, or even on-the-job.
2. **Semi-formal** learning includes those solutions that are more individualized, and therefore have fewer specified learning outcomes. The goal is improvement on-the-job, and the person in the role of trainer (if present at all) provides more guidance than direct instruction. Two common forms of semi-formal learning solutions are coaching and mentoring.
3. **Informal learning** solutions take on many forms, and include those solutions that offer opportunities for improvement, but do not include defined roles for trainers or teachers. These can include self-study, learning from peers (e.g., in communities of practice), and learning from job experience.

The choice of how formal a learning solution should be depends on a variety of factors, including how fast skills must be learned, how formal assessment must be, and the complexity of the skills to be learned.

Making Decisions and Plans for Learning Solutions

Making decisions about learning solutions requires trainers to consider a variety of criteria. Below these are organized into 3 general categories. In the next section, these categories are elaborated and possible criteria are listed.

- **Practical** criteria are those related to factors that are not related to the nature of the learning needs, but which are related to the nature of the target organization and the capabilities of the organization responsible for the learning solutions. These include things like budget, numbers of learners, deadlines, etc. Practical constraints may override all other criteria unless there is some flexibility to bow to the importance of the other criteria. Practical criteria may be the criteria most obvious to managers not familiar with the content to be learned.
- **Learning Needs** criteria will ideally drive most decisions on learning solutions, since the likelihood of achieving learning outcomes should be the primary basis of the decisions. Learning Needs criteria might include complexity of the skills to be learned, how often learners need to use the skills, how formally learners must be assessed, and whether tasks

to be learned are cognitive, manual, or social. Learning needs can be overridden if practical criteria are inflexible, and they can sometimes be in conflict with one another.

- **Pedagogical Values** criteria are those that lead us to make decisions based on beliefs about the nature of learning. These might include preferences for collaborative vs. independent learning, trainer-directed versus student directed learning, and preferences for experiential learning versus direct instruction. Pedagogical beliefs may be based on research evidence, based on personal experience, or based on philosophical preferences. These values, while ideally less important than the defined learning needs, will always come into play, and they can cause us to reject potentially good solutions if we see the values as essential and not as choices.

The relative weight of the criteria will depend on your degree of certainty about them and/or on how extreme they appear to be (e.g., if the complexity of the task to be learned is considered very high by all those involved in planning, it may outweigh practical criteria that suggest taking a simple learning solution). Rarely will all the potential criteria need to be considered. Instead, some criteria will rise in priority and quickly narrow down potential solutions. However, you need to be careful that all important criteria have been considered.

In most cases, blended learning solutions, those that combine learning solutions in complementary ways will offer the best option. Using blended solutions can help to meet multiple criteria that a single solution might be unable to address.

A very general and useful process that can be followed for making learning solutions might include the following steps:

1. Consider the **Practical Criteria** that appear fixed and non-negotiable. These will likely be raised to the top by stakeholders and managers, but if not, you can ask questions related to them. Eliminate solutions that do not fit the practical criteria.
2. Consider **Learning Needs** criteria to help refine your decisions. You may also decide that some of these might rise in importance even above the Practical Criteria, suggesting that you should alter your list of initial choices.
3. Reflect and consider whether **Pedagogical Values** are coming into play too much or not enough. How important are these for learners and trainers involved?
4. Justify your decision about the learning solution (or better, blend of solutions) to stakeholders, stating which criteria led you to the decision.

Some Possible Criteria for Choosing Learning Solutions

Practical Criteria

- 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

- 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
- 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 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. Some knowledge is difficult to articulate (explicit versus tacit knowledge).

Pedagogical Values Criteria

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