

# Learning Technologies Job Aid

## Job Aid: Learning Technologies

Technology is changing the way learning occurs in organizations. Understanding the different technologies available and their use is critical for WLP professionals. Management of a learning function requires developing a diverse network to understand the availability, use, and functionality of these technologies. Because technology can be a hindrance or an enhancement to learning, WLP professionals need to understand what technology can do and know its advantages and disadvantages.

## Computer-Based Training (CBT)

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• can be distributed quickly to numerous locations</li><li>• eliminates concerns about scheduling constraints</li><li>• allows self-paced training</li><li>• has low distribution costs</li><li>• has evaluation built into the instruction</li><li>• enables use of existing videos and visuals.</li></ul>	<ul style="list-style-type: none"><li>• requires a computer</li><li>• has high development costs</li><li>• requires lengthy development timelines</li><li>• requires moderate computer literacy of people using it</li><li>• may not be appropriate for learners with low self-directedness.</li></ul>

## Job Aids

A **job aid** (sometimes also called a cheat sheet) is a storage place for information performers use while performing a task. A job aid provides a signal—audio or visual—to a performer about when to carry out a task and steps, reducing the amount of recall that’s needed and minimizing error.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• are excellent for tasks performed with low frequency, highly complex tasks, tasks with a high consequence of error, and tasks likely to change in the future</li><li>• can be used as checklists when a series of tasks or checkpoints must be completed in a certain order every time, for example, a preflight checklist that must be done before takeoff.</li></ul>	<ul style="list-style-type: none"><li>• can’t be used for tasks that have strict time restrictions, such as tasks a pilot must perform midflight when immediate reaction times are crucial</li><li>• aren’t practical for use in some environments; for example, a scuba diver can’t handle a booklet in dark, wet conditions.</li></ul>

## Electronic Performance Support System (EPSS)

An **EPSS** is a software program that provides just-in-time, on-demand information, guidance, examples, and step-by-step dialog boxes to improve job performance without the need for training or coaching by other people.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• allows self-paced training</li><li>• has low distribution costs</li><li>• can be used to address a performance problem caused by a knowledge or skill deficiency.</li></ul>	<ul style="list-style-type: none"><li>• requires a computer</li><li>• may not be an appropriate training intervention for psychomotor tasks</li><li>• may need extensive employee and organizational commitment to keep procedures and other information up to date in the system.</li></ul>

## The Internet and Intranets

The Internet and intranets enable organizations to create an electronic campus that a learner can navigate to interact with other learners, instructors, reference materials, and training sessions. Some tools that the Internet and intranets have made available to trainers include bulletin boards, email communication, online courses and reference manuals, and live computer conferencing.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• enable content owners to readily update materials</li><li>• have low distribution costs</li><li>• enable learners to access multiple courses on a single piece of web software</li><li>• allow self-paced training.</li></ul>	<ul style="list-style-type: none"><li>• require a computer</li><li>• require a moderate to high degree of computer literacy to create WBT sites</li><li>• may have bandwidth issues, especially when content includes sound and streaming video</li><li>• offer limited video and sound transmission</li><li>• require security measures to prevent unwanted viewing.</li></ul>

## E-Learning

**E-learning** refers to anything delivered, enabled, or mediated by electronic technology for the explicit purpose of learning. The term includes online learning, WBT, and CBT. E-learning can be placed in one of two categories—learning that occurs with a live instructor (synchronous learning) and learning that does not (asynchronous).

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• gives the learner control</li><li>• is outstanding for teaching rote skills because slower learners receive more remediation</li><li>• is excellent for teaching prerequisite materials</li><li>• allows ease of updating content in one place on the web as opposed to hundreds of CDs</li><li>• offers flexibility in scheduling</li><li>• is delivered quickly</li><li>• requires no travel.</li></ul>	<ul style="list-style-type: none"><li>• requires a computer</li><li>• requires a moderate to high degree of computer literacy</li><li>• may have steep startup costs if no technical infrastructure is in place or the infrastructure is outdated</li><li>• may be resisted by employees</li><li>• decreases human contact.</li></ul>

## Video Teleconferencing

Businesspeople have used video teleconferencing for several years in lieu of face-to-face meetings, primarily in a small number of sites. However, it has become one of the most common methods of training at a distance. Learners can see and hear the instructor, and the instructor can see and hear learners. Video teleconferencing is sometimes referred to as “two way, two way,” referring to the two-way transmission of both audio and video signals. With video teleconferencing, the equipment is often the same at both the instructor, or source, site and the learner, or remote, site.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• allows instructors to see learners (and vice versa)</li><li>• offers the flexibility of multiple “instructor” sites</li><li>• enables learners to interact with each other visually.</li></ul>	<ul style="list-style-type: none"><li>• has high transmission costs</li><li>• has high costs for establishing sites</li><li>• presents difficulties in managing visual interaction with several sites.</li></ul>