



# Design of Distance Learning

*This brief is one of a series that accompany the Distance Learning Planning and Implementation Guide. These resources are designed to help State/Territory decisionmakers increase the capacity of their professional development (PD) systems by providing additional access to distance learning. For more information visit <https://childcareta.acf.hhs.gov/resource/distance-learning-planning-and-implementation-guide-0>.*

This brief summarizes what learning management systems (LMS) are, tips for choosing a LMS, and typical distance learning (DL) technology requirements.

## LMS OVERVIEW

A LMS provides a platform for online teaching and learning, collaboration, content management, and assessment of learning outcomes. The DL platform facilitates creation, delivery, and management of courses and builds community around content and activities. Current technology provides a variety of options for LMSs. There are open source technologies that are free to educators, or proprietary platforms that may provide free trials or limited-function versions. Fees for accessing, leasing, or purchasing the systems vary by the number and type of functions needed, including the number of users, the degree of technical support needed, and whether hosting services are required. Fees may be one time for purchase or single use, or periodic for continued access and ongoing technical support. Many of the systems allow for customized options in course design, communication, submission, and scoring of assignments.

## CHOOSING A LMS

Institutions and organizations exploring LMS options can inform those decisions by doing a needs assessment, identifying technical requirements to meet those needs, learning from others' experiences, and thinking through implementation issues. The following information from the [U.S. Office of Personnel Management](#) includes eight basic steps to consider when selecting an LMS.

### Step 1: Conduct an LMS needs assessment

- Strategic analysis—Answers the question “What is it you want the LMS to do?”
- Information technology (IT) infrastructure assessments—Defines the connectivity that remote learners and those closer to the central IT hubs will experience.
- Cultural readiness assessments—Helps determine an organization's ability to embrace new learning strategies and any organizational change efforts needed.
- Administrative process analysis—Maps existing administrative efforts that govern the training function and identifies procedures that will change due to LMS implementation.

### Step 2: Determine your requirements and make sure they are specified in your contract

- Document your current state—How do you conduct your work today?
- Envision your future state—Where would you like to be?
- Document the requirements to get to your future state.

### Step 3: Talk candidly with people administering LMSs in similar organizations

- Discuss with similar organizations—Process, setup, and “lessons learned.”
- Develop a list of LMS providers—Include providers that would benefit your organization based on research reports, reviews of vendor Web sites, and talks with previous clients.

### Step 4: Conduct an initial evaluation of LMSs to create a short list for in-depth evaluation

- Identify candidates. Develop evaluation criteria like “fit for purpose” to include considerations such as, “Does the application deliver a feature set that aligns with my requirements?”

### Step 5: Seek leadership support

- Make a persuasive business case to senior management. It is important to identify and gain leadership support in the form of an internal “champion” for the LMS effort.

### Step 6: Focus on the process from the learner’s perspective

- Test your LMS from your learner’s perspective. Ask questions like, “How do you know what courses are assigned to you?”

### Step 7: Engage the user population in the selection process

- Request feedback from users early and often and use feedback to improve the LMS. Make users aware of the new system ahead of time—advertise and build some excitement.

### Step 8: Prepare your organization for change

- Employ change management “tactics.” Begin to sell the system long before its launch.

## TECHNOLOGY REQUIREMENTS

Participating in online coursework requires access to certain technology. The following is an overview of common hardware and software requirements for DL.

Hardware	Software
Disk space and memory available (usually 4 gigabytes)	Current or recent operating system and current or recent Internet browser
Internet connection (broadband or DSL preferred)	Adobe Acrobat Reader, text editing, spreadsheet, and slideshow viewer programs
Access to a printer	Up-to-date antivirus software; video player and multimedia/interactive plug-ins

Other technical equipment may be necessary based on the specific course requirements. For example, a microphone, headset, video recorder, or Webcam may be used to evaluate student teaching. Certain courses will also request that students share or store documents on a cloud computing storage resource.

Web conferencing platforms can augment an LMS to support meetings, training, and content sharing and review. Participants can access interactive course content via live sessions, self-paced learning modules, or on-demand training. Live chats and threaded online discussion support learning communities. Options sometimes include use of breakout rooms for discussion, tracking and assessment, and events management. The desired level of participant interaction determines the methods, technology, and supports to make it happen.