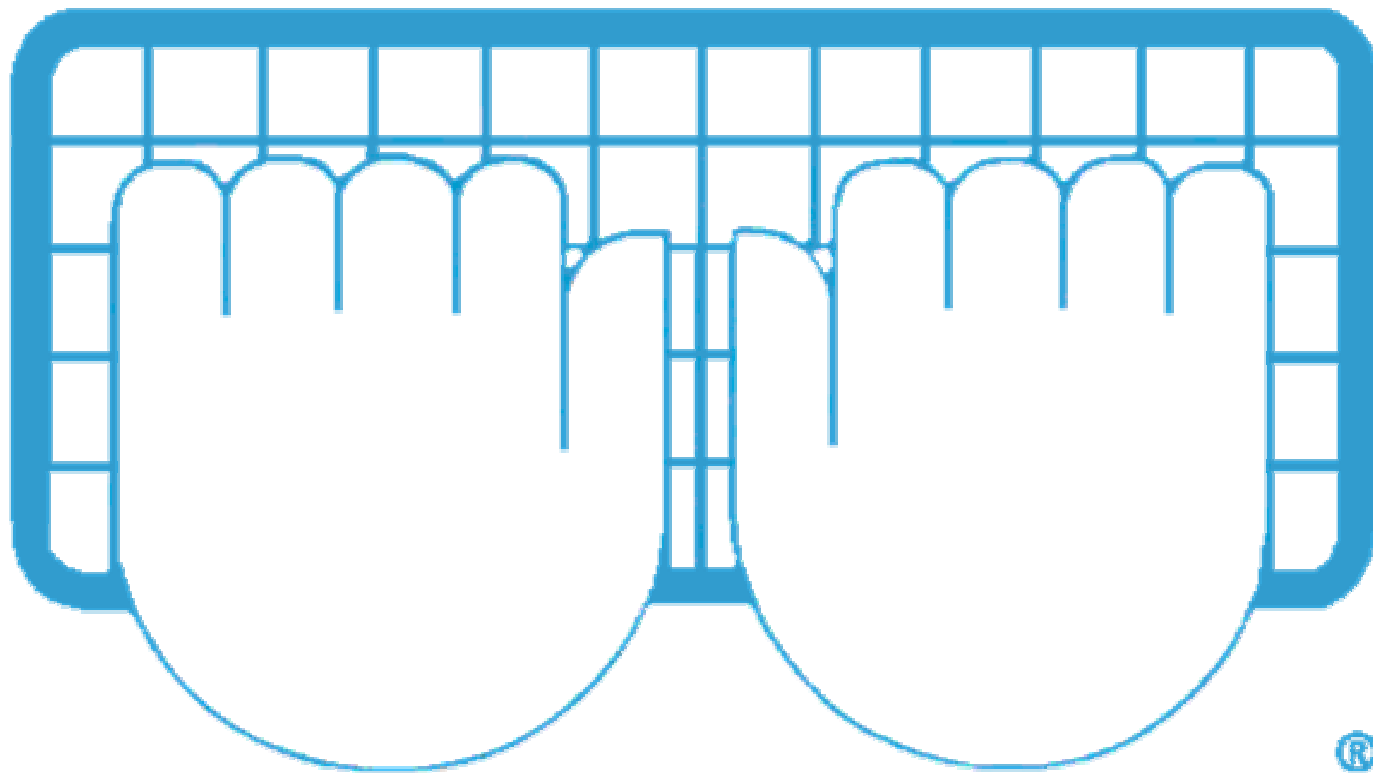


Why Web-based Training



Web-based Training: Purpose and Value



- Web-based training:
 - Minimizes instructor and student travel time and related expenses.
 - Reaches geographically dispersed employees.
 - Provides a convenient learning environment.
 - Provides real-time interaction with the instructor.
 - Presents opportunities for employees to advance their skills while gaining access to colleagues and experts from other locations.

Live Web-based Training: Featureset



- Live web-based training utilizes:
 - Interactive lessons.
 - Application sharing.
 - A virtual whiteboard.
 - Break out sessions.
 - Private text chat.
 - Assessments, testing, and polling.
 - SYS-ED websites.

Synchronous Delivery of Content



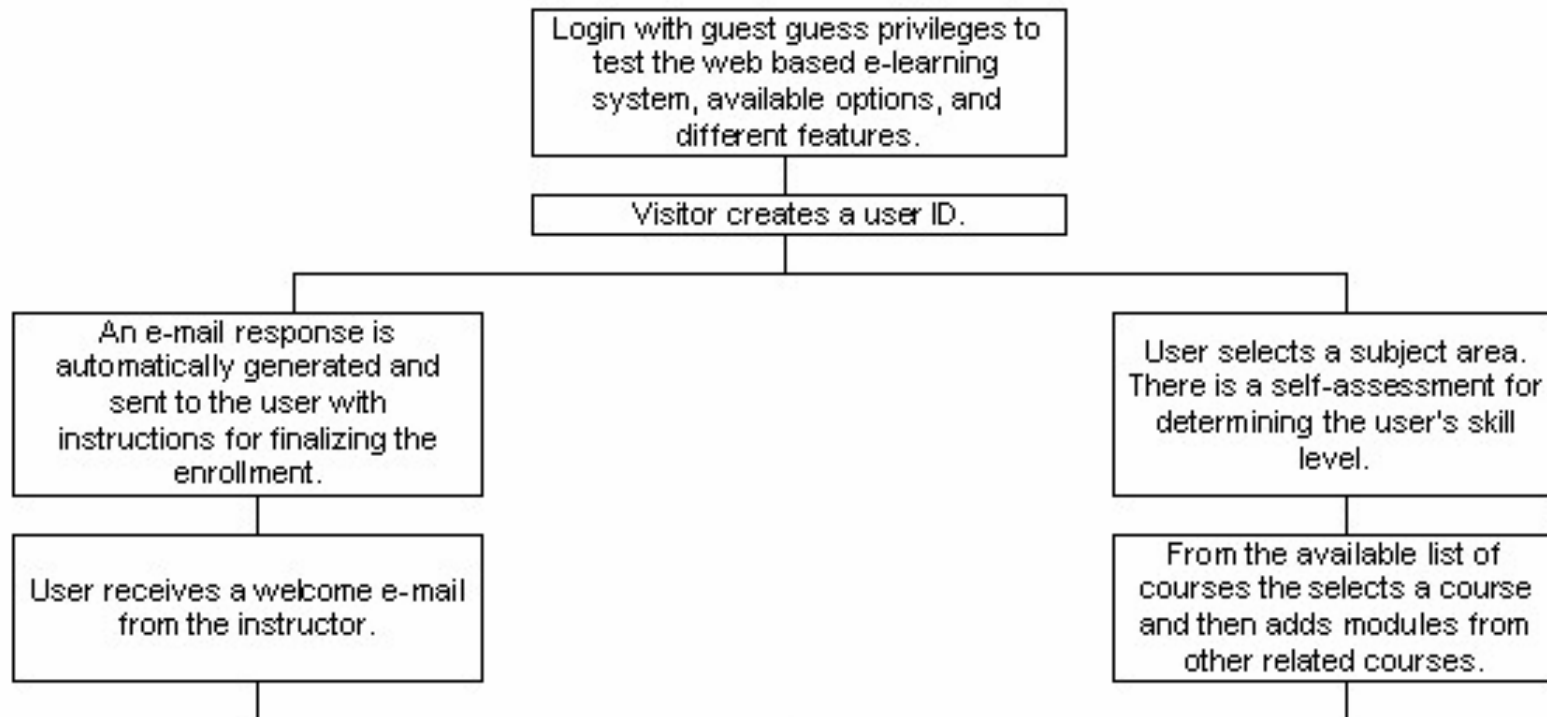
- Training is done in real-time by a subject matter expert presenting and facilitating the instruction.
 - Everyone in the group logs in at a set time and can communicate directly with the teacher and with each other.
 - A trainee can raise a cyber hand and view the cyber whiteboard.
 - This type of training takes place via Internet web sites, audio- or video-conferencing, Internet telephony, or two-way live broadcasts.

Asynchronous Delivery of Content



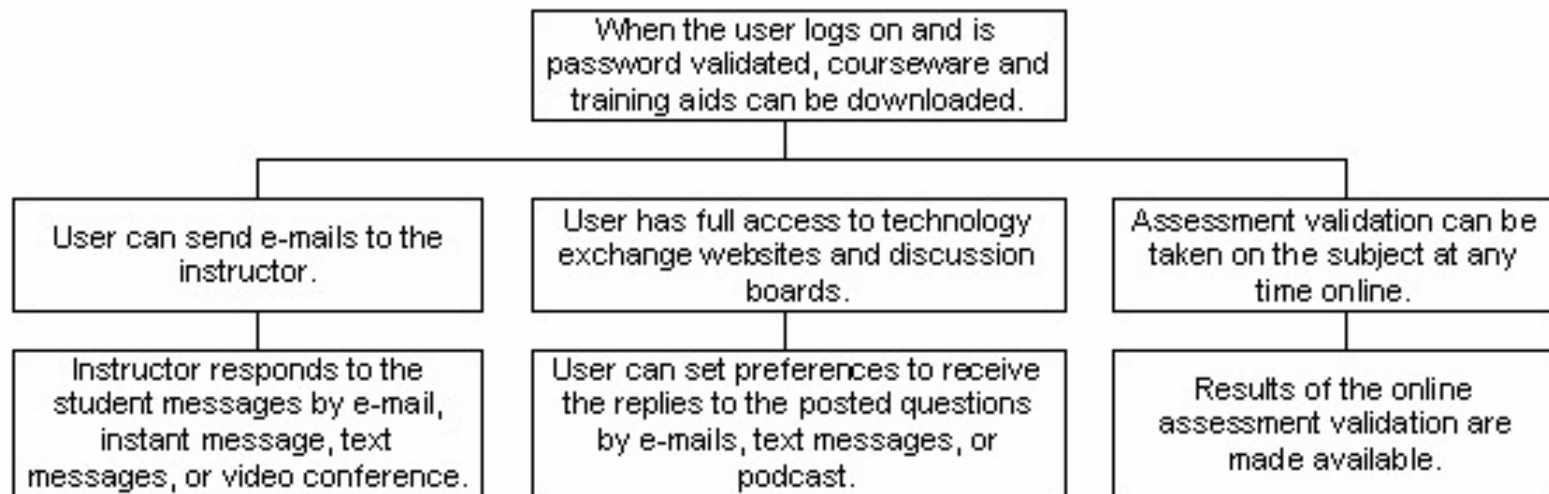
- Training is self-paced in one of three forms:
 - Network-based.
 - Intranet- or Internet-based.
 - CD-ROM-based.
- Access to the instructor can be initiated through online bulletin boards, online discussion groups, telephonic conversation, instant messaging, and e-mail.

Infrastructure for Content Delivery - Part 1



An infrastructure is provided for administration, content delivery, and selection of subject matter.

Infrastructure for Content Delivery - Part 2



An infrastructure also is provided for corresponding with the subject matter expert, utilizing web-based support services, and assessing mastery of subject matter.

Effective Web-based Training



- Effective web-based training:
 - Melds the qualities of instructor-led training with a virtual, online classroom.
 - Is comprised of a presentation outline, lecture, demonstration, examples, sample programs, exercises, and assessment questions.
 - Provides for a modality of instruction which allows for the utilization of different training methods in conjunction with a personalized presentation of subject matter.
 - Can be delivered in the form of a web application.

Web-based Training: Lesson Plan



- A lesson plan is the foundation for the web-based delivery of content.
- The lesson plan provides:
 - Intended audience.
 - Course duration.
 - Timing for course modules.
 - A presentation outline.
 - Performance objectives.
 - Examples and sample programs.
 - Case studies and exercises.
 - Assessment validation.

Web-based Training: Performance Objectives



- Information technology subject matter is translated to performance objectives.
- Performance objectives are mapped to examples and exercises.
- For training programs, educational consultancy and guidelines are incorporated into the performance objectives, examples, and exercises.

Web-based Training: Examples and Exercises



- Based upon the background of the audience and operational objectives of the client organization:
 - Integrated exercises are selected, created, and adjusted to the operating system and system software being utilized.
- A log is kept of the exercises that have been completed.
 - Modular and pre and post course validation assessment is utilized to verify mastery of the subject matter.

Web-based Training: Courseware - 1



- Courseware is an important component in the delivery of web-based content:
 - Courseware is derived from a lesson plan and provides a framework for a sequential and logical presentation of subject matter.
- Courseware integrates and facilitates the mastery of the performance objectives and exercises:
 - As a vehicle to teach and learn from.
 - By explaining and reinforcing the subject matter.
 - As a reference source.

Web-based Training: Courseware - 2



- Courseware includes:
 - Narrative descriptions.
 - Diagrams which explain.
 - Code snippets.
 - Skeleton programs.
 - Case studies.
 - Exercises.
 - Technology updates.
 - Training aids.
 - Modular validation assessment.
 - Review questions.
 - Pre and post course validation assessment.

Web-based Training: Investment in IT Infrastructure



- Quality web-based training:
 - Is an investment in information technology infrastructure.
 - Is available in multiple delivery medium.
 - Provides documentation which delivers ancillary value to the organization.
 - Results in subsequent utilization being less expensive in terms of incremental cost and cost per trainee.