



W203 – On-the-Fly: Fill Skill Gaps with Customized E-Learning



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Learning Objectives:

- Use on-the-fly skill gap analysis to reach learning objectives.
- Develop a strategy to implement a customized e-learning system in your workplace.
- Determine development of customized e-learning based on facilitator skill and available technology.

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Introduction

Session Description

You can have the confidence that your staff is getting everything they need with an individual performance plan, implemented behind the scenes in a customized e-learning system. Learners start with a pre-test and progress through a system that either moves them back to basics or on to higher knowledge according to their skill level. Using a variety of tools, you will learn how to create e-learning systems that customize tracks for individual learners. Whether you are using Captivate, Flash, ASP, or PHP, you can easily design a system that progressively moves your learners through the system on a seamless one-way course to success.

Expectations



What are your expectations?



What are our goals and expectations?



How is this session different?

- Limited budget
- Limited resources
- Limited technical expertise



Background

Two Approaches

1. Pretest
2. Learning Path

Why Pretest?

- Student benefits

- Instructor benefits



- Training Department benefits

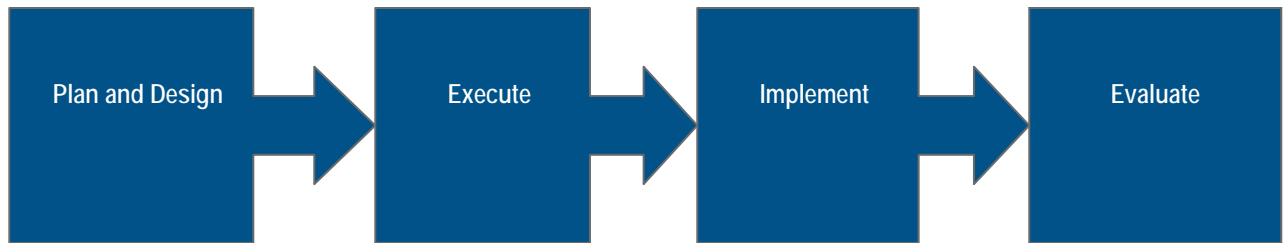


Why did we do it?



Strategy for Implementing a Customized E-Learning System

Systemized Approach





Plan and Design

A large, dark grey arrow pointing downwards, with the text 'Stakeholder Review' written vertically inside it in white.

Stakeholder Review

- Understand your goals and your audience.
- Identify programming constraints.
- Determine your content.
- Divide the content into topics and lessons
 - Basic information, content that supports understanding and task and skill information
 - Learning tasks and skills hierarchy
 - Job-related practice
 - Resources (job aids, etc needed just before or during the learning a task or skill)
- Determine the approach, pretest or learning path for each topic and lesson and the content, learning tasks and skills hierarchy related practice, resources, etc that are needed for each approach.
- Visually sketch out the plan; identify the passing criteria; the time spent determining these paths/plans at the beginning will save a great deal of time later.
 - Storyboard
 - Content treatment
 - Mindmap
 - Flipchart
 - Flowchart
- Review programming requirements.



Execute

Choosing Your Tool





Tracking Requirements

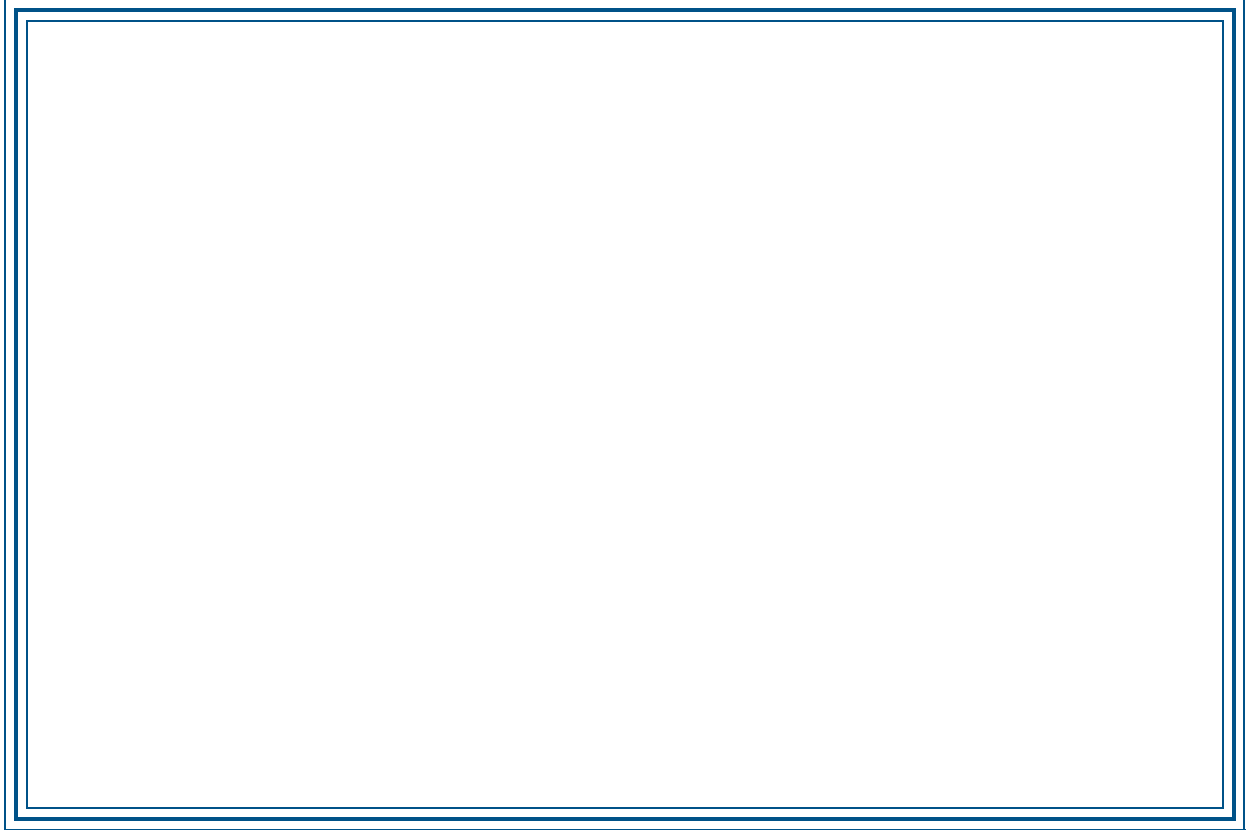
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Programming Tools



Implement





Evaluate

Generic ROI

Assumptions for Instructor Led Three Day Lease Records Class

Employee Time

- Number of employees attending the class
- Cost per employee hour
- Facilitator delivery cost
- Facilitator preparation cost

Out of Pocket Expenses

- Facilitator travel
- Miscellaneous Expenses

Assumptions for Online Delivery

Employee Time

- Cost to take online course
- Employee cost to develop Lease Records and materials
- Cost to maintain modules after year 1
- Cost for SMEs review modules/develop materials/assist with LMS

Out of Pocket Expenses

- Cost to develop Lease Records online and materials



Intangible Benefits

- New Land hires can meet other new Land employees face to face. All employees can attend, even if they are in a remote location.
- Employees can attend right after they begin and not have to wait until there is a class.
- Employees can become integrated into company quickly.
- Online materials are a future resource.
- Less time is spent attending training which increases productivity.
- Brings consistency to training all employees.

Intangible Costs

- There is no access to training for new employees at remote locations.
- New employees have to wait for a face to face class to attend training, thereby delaying integration into the company.
- It takes time and effort for those who need to travel.
- It takes more time in the classroom, thereby reducing productivity. Online training is not as interactive as face to face training.
- Participants can't ask questions or get clarification.
- Additional current information cannot be added just in time.
- There are no peers to discuss information.



Conclusion

Resources

Books:

- The Online Learning Idea Book edited by Patti Shank
- E-Learning and the Science of Instruction by Ruth Clark and Richard Mayer
- *Learning Paths* by Jim Williams and Steve Rosenbaum

Websites:

- EPI: www.aboutepi.com
- Learning Paths: <http://www.learningpathconsultants.com/>



Planning Guide Job Aid

Instructional Design

Before you can make decisions about how you will create individual learning paths, it's extremely important that you follow a systematic instructional design approach to content development that ensures the organization, content structure, skill hierarchy, and instructional integrity of the course is sound.

Planning Learning Paths

- ☑ Examine the content structure and determine the content that is:
 - required for all learners
 - background content that supports building new knowledge and skills
 - a resource
 - prerequisite knowledge.
 - new knowledge and skills.
- ☑ Determine if a pretest can be created that will test if learners possess the prerequisite knowledge. Based on the learners' performance in the pretest, they can go directly to the start of the course or can be required to complete remedial work.
- ☑ Divide the content into topics and supporting lessons that provide the required information, background content, job-related practice, and resources learners need to acquire the skill(s) and sub-skills covered in the topic and supporting lessons.
- ☑ Use the results of your examination of the content structure to decide if learning paths are appropriate for the content in each topic/lesson.
 - If content is required, all learning paths need to include the required content.
 - If content includes basic information, learners may be able to test out of a lesson, or part of a lesson, by answering job-related questions. Individual learning paths through the topic/lessons can be created based on learners' answers. For example, learners might be able to skip certain content and/or be provided with additional content.
 - If new knowledge and skills are covered, all learning paths need to include the required content. The results of job-related practice activities could be used to enable learners to move on to the next topic/lesson or to provide additional practice, additional worked examples, etc.
 - If resources are needed, make them accessible to all learners, but do not require learners to access them.
- ☑ Use flowcharts, storyboards, or another method to detail the learning paths through each topic and supporting lessons. These should be reviewed with your SME(s) to be sure the learning paths are correct and reviewed with your programmer(s) to be sure they can be created with the tools you are using.
- ☑ Begin development. Be sure to obtain feedback from SMEs and other stakeholders during development and testing.



About EPI

EPI is a consulting firm that works with companies to strategically analyze all factors that drive organizational performance. EPI helps clients create a place where people want to come to work, are engaged, and are contributing to bottom line results. EPI provides expertise in assessment, hiring, onboarding, skill development, and learning through technological innovation and customized performance-driven initiatives. To learn more about EPI, go to www.aboutepi.com.



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