

HP Case Study

Flexible solutions for multi-cultural learners

Karen O'Leonard
Bersin & Associates
November 2004

(C) Bersin & Associates



Table of Contents

Table of Contents.....	2
Table of Figures.....	2
In this Case Study.....	3
Case Study.....	3
About HP.....	3
The Business Challenge.....	3
Multi-Cultural Learning Programs.....	3
Multi-Product Training Programs.....	4
The Solution.....	5
Innovative Course Design.....	5
A Flexible Approach.....	9
Program Results.....	10
About Us.....	12
About This Research.....	12

Table of Figures

Figure 1: Design Document Sample.....	5
Figure 2: HP's Global Content Model for Printer Technical Training.....	6
Figure 3: Media 1's CompareIt! Tool.....	7
Figure 4: Role-Playing Scenario.....	8
Figure 5: Printer Training Assessment.....	9

In this Case Study

HP has found that when it comes to training a global, multi-cultural audience, one size does not fit all. HP's learners are located in all regions of the world and require a blended learning approach to accommodate their individual styles and preferences. The course design must be flexible enough to accommodate multiple audiences, allowing regional trainers to decide on the best delivery approach for their learners.

This case study describes how HP used Media 1's design expertise to create modular learning programs with multiple modalities. The innovative and flexible course design has reduced the redundancy in training by combining like products into one, for an estimated savings of \$1,800 per learner. On-going cost savings are even greater, estimated at one-quarter the total cost required to update the previous individual courses.

Case Study

About HP

HP is a technology solutions provider to consumers, businesses and institutions globally. The company's offerings span IT infrastructure, personal computing and access devices, global services and imaging and printing. For the four fiscal quarters ended July 31, 2004, HP revenue totaled \$78.4 billion.

The Business Challenge

Multi-Cultural Learning Programs

HP's Worldwide Content Development group creates materials for use in training programs in all regions of the world. While the group's goal is to leverage content across products and regions, its main challenge is to create training programs acceptable to a worldwide, multi-cultural learner group. U.S. learners, for example, have greater access to online resources and are generally more accustomed to online training delivery.

European audiences prefer more face-to-face time in a classroom setting, but recent travel restrictions have made it difficult for HP business units to send learners to classroom training. Some blend of training delivery modes was needed to satisfy differing learning styles and departmental budgets.

HP's Production Flow Sales course was a prime candidate for a blended training program. HP introduced this solution in the spring of 2001 to complement its digital publishing product portfolio and needed an entry-level training program for its worldwide sales team to generate awareness and basic understanding of the product. Following the product introduction, the only training programs delivered were live events conducted on an ad-hoc basis; there was no consistent or permanent training accessible to sales reps. Consequently, the sales force was not properly selling the product, leading to dissatisfied customers. Sales people across all regions needed training in order to sell the proper configuration to their customers.

Multi-Product Training Programs

HP also found that both the type of training and product characteristics drive decisions on training delivery mode. For example, this year the Imaging and Printing division embarked on a project to revamp the technical training on its LaserJet printer lines. The training was designed for field support and call center personnel in all regions across the world. The current training was not well coordinated and was delivered either as a purely online or purely classroom method. HP found it ineffective to use a single delivery method for all products in the product line. Online delivery might be adequate for the low-end printers, but high-end printers required hands-on training so that learners could disassemble the more complex systems with instructor supervision.

HP decided on a blended learning approach for both the Production Flow and printer product training. The main objectives of the blended format were as follows:

- Multiple delivery modes to accommodate learner preferences and product characteristics;
- Flexibility to enable the instructor to choose the materials or modules appropriate for the audience;
- Availability of online material, so that learners and new hires had ready access to the training;
- Longevity of materials, so that the training could be used long-term and would not quickly become obsolete.

HP engaged Media 1 for both projects. Media 1 had a solid track record with HP's business units, which were impressed with its quality instructional design and timely delivery.

HP found it ineffective to use a single delivery method for all products.

Online delivery is adequate for low-end printer training, but high-end printers require hands-on training.

The Solution

Innovative Course Design

After a discovery and outline phase, the first major step in course design is the design document. After doing some research and collaborating with HP's content experts, Media 1 created a design document detailing the sources and information flow of the content. Figure 1 shows a portion of a design document like the one used for the Production Flow Sales course.

Module	Learning objectives	Topics	Pages/Content	Source of content	WBT Treatment
1	Module 1: Introduction to DPS				
1.1	<ul style="list-style-type: none"> Identify the progression of digital publishing/history Identify the printers and presses within the DPS Family Identify the markets served by the DPS printers and presses Identify the components of the DPS sales package: partner products, managed services contracts, and financing options 	Welcome and Module SPOs (Student performance objectives)	List of Module SPOs	N/A	Text
1.2	Identify the progression of digital publishing.	History	HP and the digital publishing industry: <ul style="list-style-type: none"> Introduction of digital press into graphics arts industry commercial market background industrial market background 	<ul style="list-style-type: none"> Graphics arts industry: Portfolio 2-10-04.pdf (intro paragraph) Commercial market info Industrial market info Provide timeline/basic history 	Text and Images

Figure 1: Design Document Sample

The second step in course design involves creation of storyboards, showing at a more detailed level what the course will look like. The storyboards build off the previously created design document, adding much more detail on what will be displayed to learners on each page or screen. Sharon Etchemendy, HP's Worldwide Content Developer,

commented, "This is the most important step in the development cycle. If we skimp here, our production is going to take a lot longer and cost more money." It's not unusual for this step to take three to four weeks.

Once the storyboards are approved, the production phase starts. Media 1 hosts the course on its site for development and HP reviewers can add comments or request edits online

For the printer line training, HP recently adopted a global content model for all printer technical training. All portfolio courses now generally follow this model, as outlined below.

Module	Lesson(s)
Portfolio orientation	<ul style="list-style-type: none"> ■ Portfolio introduction ■ Product specs ■ Portfolio walk-around ■ Accessories and consumables ■ Service and support
Setup and configure	<ul style="list-style-type: none"> ■ Hardware setup
Use and maintain	<ul style="list-style-type: none"> ■ Control panel ■ Paper path ■ User replaceable parts ■ Cleaning ■ Troubleshooting use and maintain
Support (WBT portion)	<ul style="list-style-type: none"> ■ Image formation ■ Paper pickup and feed ■ Engine control system ■ Calibration
Support (Classroom portion)	<ul style="list-style-type: none"> ■ Image formation review ■ Theory of operation ■ Paper path review ■ User replaceable parts
Service and repair	<ul style="list-style-type: none"> ■ Troubleshooting ■ Product removal and replacement

Figure 2: HP's Global Content Model for Printer Technical Training

In a typical product portfolio, much of the learning material outlined above is the same for all products. Previously HP had separate courses for each product, leading to a great deal of redundant training. For the new printer training, HP and Media 1 created a "universal" course for each portfolio covering all products. This approach eliminated the redundancies caused by having separate courses for each product. In addition, the universal courses are modularized, so that if a particular region or audience only needs training on some, but not all, products in the portfolio, the instructor can easily select the necessary material.

Products across portfolios can also be combined using Media 1's online "CompareIt!" tool. Using this tool, users can compare features and attributes of products within and across portfolios, a capability previously not afforded by the single-product training programs. The tool has allowed HP to condense multiple hours of course material to a fraction of their original time, with the added benefit of allowing learners to review and compare multiple products within the context of a single topic at a time.

The following is a screen shot of the CompareIt! tool for the printer training. The sales support information displayed changes depending on the products chosen on the tabs. Students can compare features of any two products listed in the tool.

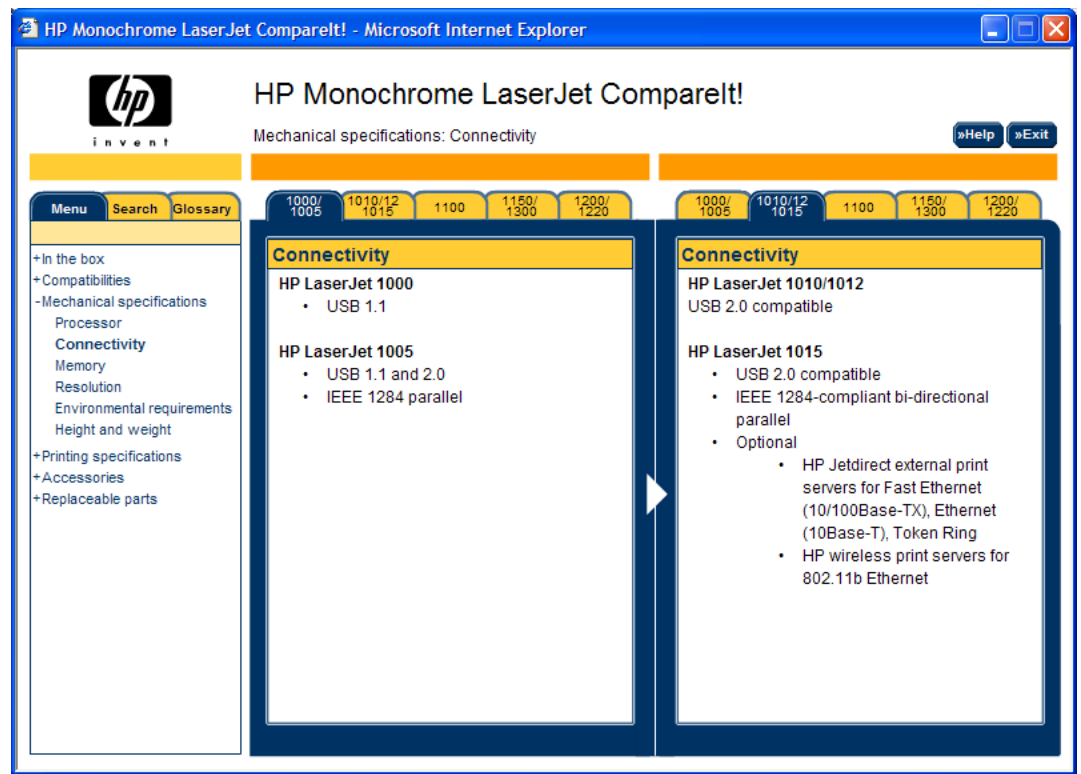


Figure 3: Media 1's CompareIt! Tool

At the end of each learning module, review sessions reinforce the training and assessments check learning achieved. Review sessions for online material are interactive and engaging, including simulations, scenarios, or role-playing exercises based on the material covered in the module. An example is shown in Figure 4. In this review exercise, a hypothetical customer is presented with a brief description of his company's needs. The hypothetical HP sales rep asks appropriate questions to further identify the customer's particular requirements. The learner is asked to consider what questions he or she would ask the customer to determine the right

product for the company. After considering these questions, the learner then advances to the next screen.

exit ShowMe!: HP Production Flow - Assessing the opportunity Page 2 of 6 | exit << back | replay next >>

COLOR-IT

James Gilmore
Sales rep

To review, Color-It's print jobs are high-quality color materials requiring small print runs and fast turnaround. The company has five presses, an IT resource, and annual revenue of \$5 million.

James, the sales rep, wants Color-It to do increase throughput and grow business volume and profit margin. James has said, "I need to be able to decrease the amount of time it takes my presses to get jobs in and out of production."

Lisa
HP sales

- "What type of documents are you printing, and from which applications?"
- "What does your sales force look like, and which segments do you focus on?"
- "Who are your major competitors?"
- "What are the most problematic issues you are dealing with today?"
- "How long does it take to turn a typical static job, and a personalized job?"
- "What are your plans and strategies to grow your business in the future?"
- "What impact would you expect on the business based on these plans and initiatives?"

Next, Lisa will ask James some questions about Color-It's need for shorter print runs and quicker turnaround times. But first, take a moment to consider the questions you would ask James about these issues. When you are ready, click the **next** button.

Click **next**.

Figure 4: Role-Playing Scenario

Following the review sessions, assessments are used to gauge knowledge acquired. For the printer training, online assessments included various interactive components, such as drag and drop, matching exercises, and board games. Figure 5 is a screen shot from an exercise using a software simulation, where the learner must complete the required steps using the software. The exercise provides prescriptive feedback to help reinforce the procedure when the learner tries it on his own.

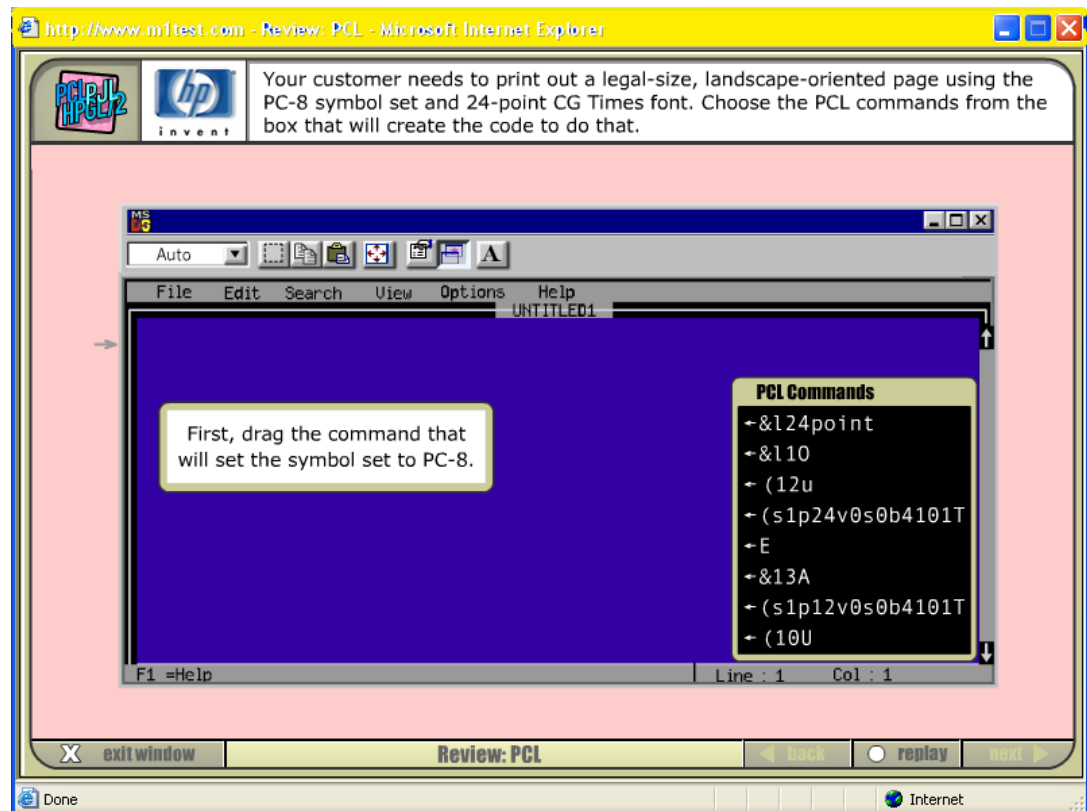


Figure 5: Printer Training Assessment

For classroom training, instructors cover each question following the assessment if time allows, or discuss those that generated the most questions and reinforce frequently missed questions.

The Media 1 and HP project team also ensured the courses were well integrated with the WBT framework. This enabled HP to track and bookmark student progress through the courses and record the results of the assessments for reporting purposes.

A Flexible Approach

Breaking the courses into discrete, self-contained modules allowed HP to deliver some training online and some in-classroom. Instructors could choose which method was most appropriate for the material and for their audience. For the printer courses, students could complete this course in several ways, including:

- 1. Self-paced**

Students complete the course online, in a self-paced format according to their own schedules.

2. Instructor-facilitated

Students complete the course online, but in a classroom setting, with the instructor present to answer questions and guide them through the material.

3. Instructor-presented

Students complete the entire course in a classroom, led by an instructor, who uses the online training as the basis for lectures and labs.

4. Blended solution

Students complete one portion of the course as a self-paced, online program, and the other portion in an instructor-led classroom.

This flexible approach allows instructors to choose the right method for their learner audiences. Instructor and Student Guides provide instructions and materials for both online and classroom delivery. In the U.S., learners have tended to gravitate to the online, self-paced approach. In Europe, learners prefer a more personal touch and have primarily selected the instructor-presented approach. Asia-Pacific learners have preferred the instructor-facilitated or blended option, with role playing and Q&A following the online modules.

For the high-end printer products, a mix of online and classroom training is required. For these, three modules are delivered online covering product features, control panels, and basic information. The remaining two modules, which are classroom-based, provide the student detailed printer mechanical information as well as hands-on disassembly and repair practice.

As mentioned previously, the modular nature of the courses gives instructors the flexibility to choose only the material they need. Some regions may not offer all printer products in the portfolio. With the modular “universal” courses, instructors can easily select the learning materials required for their regional audiences and omit the rest.

The flexible course design has reduced the redundancy in training. Now learners spend 50% less time in the classroom.

Program Results

The printer training was rolled out to all regions this summer and the digital press training was initiated in the fall. Both programs have been met with enthusiasm by learners and instructors. Instructors love the ability to choose the appropriate method for their audiences – it lets them adapt the training to different learning styles and get the most effective use of the training. Learners appreciate being taught according to their preferences and have enthusiastically embraced the new courses.

On the financial side, having one printer training solution for multiple audiences has saved HP time and money in course development. The innovative and flexible course design has reduced the redundancy in training by combining like products into one, resulting in six "universal" printer courses rather than 30+ individual product courses. Learners now spend 50% less time in classroom training, for an estimated savings of \$1,800 per learner. The modular approach also means that the courses are easily updated, saving HP from having to re-create courses each time a product is updated or a new product is introduced. HP estimates the cost to update the new, modular courses will be one-quarter of the costs required to update the previous individual courses.

Likewise, for the Production Flow product training, the return on investment is already apparent. Learners now spend 75% less time in classroom training, for an estimated savings of \$3,500 per learner. Most importantly, the training has increased the customer experience by helping sales reps provide the right solution to meet their business requirements. HP estimates that the reduced time required to resolve customer issues, the ability for a sales rep to accurately answer customers' questions rather than relying on a solution architect, plus the savings on classroom training time substantially exceeds the course development costs.

One of the keys to the success of both projects was Media 1's project management. HP was impressed with the rigor applied to the project and Media 1's continual communications to keep them abreast of the project status. Etchmندی commented, "Media 1 takes deadlines seriously. If something is broken, they raise a red flag and fix it." A Project Status Report (PSR) is updated weekly and available online so that HP knows exactly where they are in the project.

But the real key to success, says Mary Bartunek, Training Program Manager at HP, is Media 1's innovative content design. Media 1's graphics, games, and interactive content fit within HP's guidelines and promote learning. The engaging content makes students want to learn. Says Bartunek, "Media 1 *really* knows instructional design. Other companies say they do, but Media 1 does!"

About Us

Bersin & Associates is the only research and consulting firm solely focused on What Works™ e-learning research. With more than 20 years of experience in e-learning, training, and enterprise technology, Bersin & Associates provides a wide range of services including market research, best-practices, vendor and product analysis, corporate workshops, corporate implementation plans and sales and marketing programs. Some of Bersin & Associates innovations include a complete methodology for LMS selection and application usage, an end-to-end architecture and solution for training analytics, and one of the industry's largest research studies on blended learning implementations.

Bersin & Associates offers the industry's first e-learning research subscription, "The E-Learning Research Center," (<http://www.elearningresearch.com>) which offers up-to-date research, product selection guides, whitepapers, and access to other experts online. This service enables corporate training managers, vendors, and consultants make faster, better decisions about e-learning strategy, programs and technology.

Bersin & Associates can be reached at <http://www.bersin.com> or at (510) 654-8500.

About This Research

Copyright © 2004 Bersin & Associates. All rights reserved. *What Works™* and related names such as Rapid E-Learning: *What Works™* is registered trademarks of Bersin & Associates. No materials from this study can be duplicated, copied, republished, or re-used without written permission from Bersin & Associates.